

Queen's contributions to the UN Sustainable Development Goals

Advancing social impact | 2021-2022



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Advancing social impact

Our mission is to solve the world's most pressing challenges.



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"At Queen's, we believe our community – our people – will help solve the world's most significant and urgent challenges through our intellectual curiosity, passion to achieve, and commitment to collaboration."

Patrick Deane

Principal and Vice-Chancellor

Universities are powerful engines of societal change. As one of Canada's leading research-intensive academic institutions, Queen's understands its role in helping to advance the United Nations' Sustainable Development Goals (UN SDGs). Through research, teaching, outreach, and stewardship activities, the Queen's community is contributing to the fight against climate change, helping to build inclusive societies, and ensuring equal access to health care and quality education to advance social impact. We also recognize that innovation, ingenuity, and collaboration are needed if we want to achieve these goals, which have united us all in a common global purpose.

In both 2022 and 2021 Queen's ranked in the global top 10 of the Times Higher Education (THE) Impact Rankings, an international ranking of universities that are advancing the UN SDGs within and beyond their local communities. The 2022 rankings measured more than 1,500 post-secondary institutions from 110 countries and Queen's placed in the top 100 of 12/17 SDGs, including third in the world for SDG 11: Sustainable Cities and Communities and second in the world for SDG 16: Peace, Justice and Strong Institutions and SDG 1: No Poverty.

UN SDGs: How we are meeting them

Across the Queen's community, much of our research, teaching, outreach, and stewardship activities are directly tied to the 17 SDGs and their targets. This report provides a snapshot of activity across our community, highlighting our efforts to advance social impact.

We hope it inspires further ideas, actions, and collaborative opportunities and partnerships so that, together, we can better support the United Nations in achieving these goals by 2030.





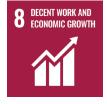






























The Times Higher Education
Impact Rankings are the
only global performance tables
that assess universities against
the United Nations' SDGs through
their research, teaching, outreach,
and stewardship efforts.



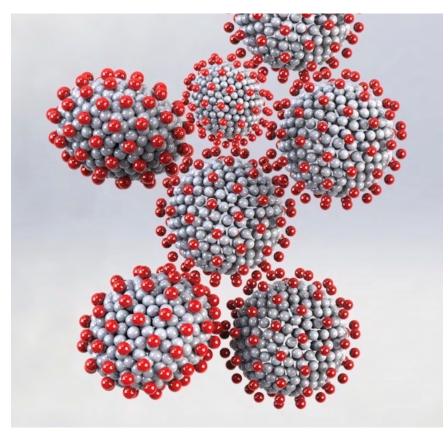
Confronting COVID-19

The 2021 academic year was unlike any other, and the resilience of our community was tested, and ultimately strengthened. While we saw change and interruptions to some of our regular programming and activities, we also saw our community pivot to support each other in creative and unexpected ways. Our researchers offered their expertise to help us understand, cope, and confront the virus. Our students came up with creative solutions to help address personal protective equipment (PPE) shortages and support small businesses affected by the pandemic. Our staff and faculty supported the movement of university activities online, while promoting the health and wellbeing of the entire community.

This report highlights some of the ways in which the Queen's community has shown remarkable drive, flexibility, and unity in the face of an unprecedented and unpredictable set of challenges.

175 Queen's medical students delivered over 10,000 COVID-19 vaccine doses to Kingstonians in 2021.

Economic and Community Impact Study, 2021



Queen's Art of Research Submission: SARS-CoV-2 Interlocking in Human Tissue - Geometric Model by Mona Kanso, PhD Student (Chemical Engineering), Queen's University

Our goals in action

SDG 1: No Poverty

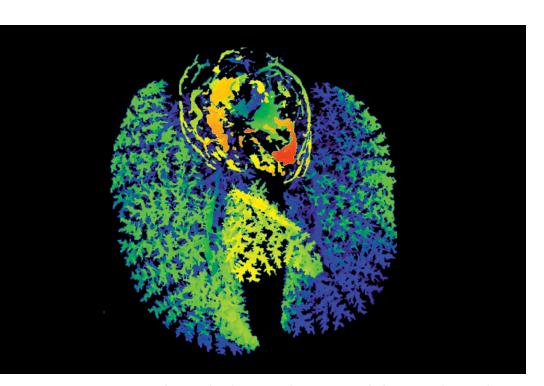
End poverty in all forms, everywhere



Research and innovation

Advancing research through partnership

Many Queen's researchers worked in partnership with governments, community groups, and NGOs to confront and mitigate the COVID-19 pandemic and plan for recovery. Some projects which focused on addressing poverty and employment included a <u>series of white papers</u> from the COVID-19 Working Groups in the School of Policy Studies and a <u>federal basic income plan</u> prepared through the Royal Society of Canada's Task Force on COVID-19.



Queen's Art of Research Submission: *The Tiniest Tree of Life - 3D Visualization of Vascular Networks in Lungs of a Mouse for COVID-19 Research* by Dr. Elahe Alizadeh, Staff (Medicine), Queen's CardioPulmonary Unit

Supporting community housing

The <u>PhD-Community Initiative</u> brings teams of PhD students from different programs of study to assist local community organizations in addressing a particular issue or challenge of importance to them. In 2021, the initiative pivoted to address key issues of <u>community</u> <u>resilience and economic and social recovery</u> in partnership with the Mayor's Kingston Economic Recovery Team. Past projects include proposals for community housing, addressing poverty, promoting arts and culture, and supporting equity-deserving communities.

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The Morning Show on CKWSQueen's PhD students help strengthen growing community initiatives

Click to Watch

Teaching and student life

Supporting women of all ages

The <u>Ban Righ Centre</u> assists women of all ages, especially those who are returning to university to continue formal or informal education. The Centre offers supports including student advising, workspaces, napping rooms, free meals, and financial assistance, as well as community-building events and programs.



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QuARMS program

"Queen's recognizes that Indigenous peoples and Black Canadians have been historically underrepresented in the medical profession, and that standard medical admissions practices have imposed barriers to these groups. With this new approach to the QuARMS Pathway, we are hoping to reach individuals who may not have considered Queen's or the medical profession otherwise. Our faculty aims to become a leader in Canada in cultural safety, anti-racism, anticolonialism, and anti-oppression in health professions education."

Dr. Jane Philpott

Dean, Queen's Health Sciences

Increasing access

Our <u>Indigenous Students Admission Pathway</u> offers Indigenous candidates an additional and alternative pathway for admission to the first year of a full-time, first-entry undergraduate degree program, known as the Indigenous Admission Policy. Students are also eligible for a need-based Indigenous Admission Award through the Admission Bursary Application.

We offer a First-Generation Student Admission Pathway to support students who are within the first-generation of their family to pursue post-secondary education. General application support is provided, as well as guidance on navigating student resources, education and career planning, financial assistance, and more.

The <u>Promise Scholars</u> program also aims to reduce financial barriers and increase access to Queen's for local, first-generation students with financial supports between \$60,000 – \$100,000 over four years.

Queen's <u>Commitment Scholars Award</u> celebrates and recognizes demonstrated leadership in, and commitment to, racial justice, social justice, or diversity initiatives by a student in their high school or in their community. The award provides dedicated financial, academic, and career support to help students complete their degree. First-year students are also eligible for the <u>Commitment Bursary</u> which provides support to students who self-identify as a member of an underserved or underrepresented group through the Admission Bursary application.

Ensuring bottom financial quintile student success

Through a range of anti-poverty programs, we seek to support and admit students who fall into the bottom 20% of household income group (or a more tightly defined target) in the country.

Programs include our <u>Admission Bursary</u>, the <u>Queen's Work Study</u> <u>Program</u>, and <u>Student Academic Success Services</u>.

Community impact

Giving back to those in our community who are in need

Our annual <u>United Way campaign</u> supports over 53,000 local citizens through the programs funded by United Way of Kingston, Frontenac, Lennox and Addington. Donations from Queen's staff, faculty, and retirees raise hundreds of thousands of dollars a year.



Kingston is Home
Partnering for a Strong
and Caring Community
Click to Watch

Students offering support

Bags of Promise, co-founded by a Queen's undergraduate student, works to address the challenges faced by youth in Kingston who may be transitioning or living in precarious housing situations. Their recent bag drive successfully distributed 30 bags of hygiene and non-perishable food products to a local youth shelter. Now consisting of volunteers from Queen's and the Royal Military College, the organization is focused on increasing awareness, education, and access to services for youth who are struggling with housing in the community.

As a student-athlete organization, the <u>Varsity Leadership Council</u> aims to build relationships within Kingston and Queen's communities through volunteering and outreach initiatives. In 2021, Queen's Gaels teams donated over 1,200 items to Martha's Table to create 60 baskets with enough food and hygiene products to support a family of four each.

Empowering regional innovation

The Dunin-Deshpande Queen's Innovation Centre <u>Summer Initiative</u> <u>Program</u> offers local post-secondary students and community members the opportunity to participate in a 16-week incubator program where they receive no-cost training, mentorship, and office space to launch their ventures.

Through our partnership with Ottawa's startup accelerator L-Spark, <u>Compass North</u> offers a five-month accelerator program for womenled tech-based startups in the greater Kingston region as part of the Women Entrepreneurs Can (WE-CAN) program at Queen's.

Global reach

Opportunities for international students

Queen's is committed to supporting students from across the globe in accessing quality education. We are proud of our long-term agreement with the <u>Karta Initiative</u>, which enables talented, low-income youth from rural India to study at Queen's. Our Queen's University chapter of World University Service of Canada (WUSC) also sponsors eligible students through the <u>WUSC Student Refugee</u> <u>Program</u>, which combines resettlement of young refugees with opportunities for higher education through a peer-to-peer model.

The <u>Principal Wallace Freedom of Opportunity Award</u>, established by Alfred and Isabel Bader in recognition of Queen's 11th Principal, Robert Charles Wallace, offers financial support for students from developing countries who demonstrate financial need. Preference is given to refugee students.

Partnerships with the Mastercard Foundation support a variety of initiatives that enable students to research and learn at Queen's. Through a partnership with the University of Gondar, the <u>UoG/Queen's Mastercard Foundation Scholars</u> program is designed to provide up to 60 of the Ethiopian university's students and faculty members the opportunity to pursue graduate training related to disability in Ethiopia and Africa at Queen's. The <u>Jim Leech Mastercard Foundation Fellowship on Entrepreneurship</u> provides students and recent graduates from African universities within the Mastercard Foundation Scholars Program the opportunity to apply to a free virtual entrepreneurship training program delivered by the Dunin-Deshpande Queen's Innovation Centre.



Queen's University International Centre (QUIC) supports Queen's students, staff, and faculty in the building of diverse and inclusive communities. Alongside campus partners, QUIC provides transition services that lead to a successful student experience.

Global impact

The Smith School of Business' <u>Centre for Social Impact</u> empowers current and future leaders to create a better world by providing them with services and programs that support research, foster education, and promote collaboration across sectors.

Our goals in action

SDG 2: Zero Hunger

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture



Teaching and student life

Eliminating hunger on campus

The goal of eliminating hunger begins on our campuses, where we have implemented several programs that support students who may be experiencing food insecurity.

The <u>Food Insecurity Advisory Committee</u> was formed by the Provost's Office to monitor current practices and trends and provide recommendations for responses to food insecurity at Queen's. The office also supports the Student Food Collective Coordinator who leads the Student Food Collective, supporting student-led organizations on campus that work to address food insecurity holistically.

Swipe It Forward Queen's gives students participating in the university meal plan the option to donate one meal per day (up to five per semester) to a peer in need. Eligible students can anonymously redeem up to 25 meals per term at Queen's dining halls. During the academic year 2021-2022, more than 2,800 meals were utilized by students in need.

The <u>AMS Food Bank</u> provides members of the Queen's community a confidential and non-judgmental food service, ensuring that students can stay healthy as they pursue academic achievements.

Sustainable Development Goals by the numbers:



Between May 2021 and April 2022, 67% of food purchased by Queen's Hospitality Services was produced in Canada with 42% coming from local suppliers within a 500 km radius.



Learn-to-grow

Queen's supports two <u>community gardens</u> on campus, including the <u>Employee Community Garden</u> designed to promote employee wellness and provide free, fresh produce for the community and local food insecurity organizations.

Students at Queen's Urban Agriculture and Sustainability Hub

(SQUASH) are dedicated to providing experiences and sharing information with the Queen's community and beyond about urban agriculture and environmental sustainability.



Community impact

Eliminating hunger in our community

Queen's and its students are committed to reducing hunger in the Kingston community. **Soul Food** is a student-run organization that delivers extra food from campus cafeterias to four local shelters every night, as well as to the Kingston Street Truck Mission in the winter.



Kingston is Home

Partnering for a Strong and Caring Community

Click to Watch

Supporting local farmers and food producers

Queen's provides events and access to university facilities such as labs, technology, and plant stocks to local farmers and food producers. The programming aims to transfer food knowledge and improve sustainable farming practices. As part of the <u>We Love Local</u> initiative, Hospitality Services runs an annual "Field to Fork" event to raise awareness about local food used in residence dining halls.

The <u>Queen's Vertical Farming Team</u>, which is the first post-secondary design team of its kind in Canada, is developing a functional, software-automated aeroponic vertical farm in Kingston.

The <u>Tea Room</u>, North America's first zero-consumer-waste carbonneutral café, was established in 2006 as an environmentally friendly and socially conscious café. Located on campus in Beamish-Munro Hall, it sources environmentally responsible food and drinks from local vendors to serve to the Queen's and Kingston community.



Between May 2021 and April 2022, Queen's Hospitality Services, through campus partners Queen's Soul Food and Loving Spoonful, donated 8,611 pounds of food to community partners, including Kingston Food Bank – Partners in Mission.

Global reach

The Global Food Security, Agriculture and Environment (ENSC 315) course, offered through the School of Environmental Studies, provides a national and global review of current and projected adequacy of food supplies, as affected by soil and water resources, climate and climate change, and human population growth. Students also learn about different scenarios for meeting food needs over the next 50 years, including technological, social, economic, and political factors.



Queen's Art of Research Submission: Face-to-Face Interview with a Female Small-Scale Farmer in Tanzania by Evodius Waziri Rutta, PhD Student (School of Environmental Studies), IKOKOTO village, South East Tanzania

Administration and operations

Reducing Food Waste

Reducing food waste is an important aspect of food security. The Leanpath program at Queen's aims to drive behavioural change and actively reduce food waste in two of our three main dining halls, using public food scales and digital signage. In the kitchens, this technology allows the management team and staff to immediately see the impact of waste and act accordingly. In the dining halls, the program tracks post-consumer waste and educates diners through digital signage about the impact they can have by helping reduce food waste.



Queen's is a Fair Trade Campus with sustainable and ethical food choices

Our community has access to <u>sustainable and ethical food</u>
<u>choices on campus</u>. All our hospitality-run locations prioritize
ethical sourcing and are mandated to include <u>Fair Trade</u> options.
The Donald Gordon Centre received Fair Trade Workplace
Designation in 2020 and in 2021, Queen's was <u>designated a Fair</u>
<u>Trade Campus</u> as it works to support sustainable practices for agricultural workers and the environment.

Our goals in action

SDG 3: Good Health and Well-Being

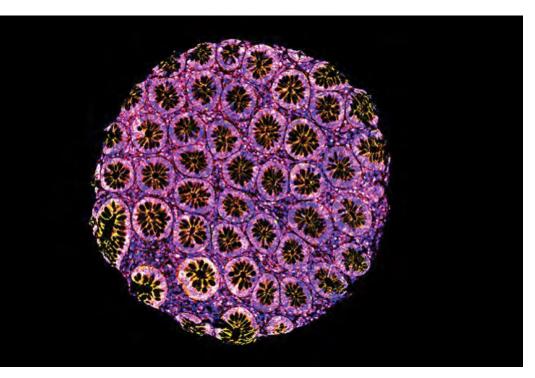
Ensure healthy lives and promote well-being for all at all ages



Research and innovation

Life-changing research

The <u>Canadian Cancer Trials Group</u> (CCTG) is the largest research group at Queen's, with over 140 Queen's faculty and staff, and 85 member hospitals and cancer centres across Canada working with a global network of 20,000 investigators and clinical trial staff. Since 1980, CCTG has supported more than 600 cancer trials to test anti-cancer and supportive therapies worldwide, enrolling 100,000 patients from 40 countries.



Queen's Art of Research Submission: *Immunofluorescence Stain* by Shakeel Virk and Lee Boudreau, Staff, CCTG Tissue Bank

Centre for Health Innovation

In 2022, Queen's and Kingston Health Sciences Centre partnered to launch the <u>Centre for Health Innovation</u> (CHI). An evolution of Queen's Human Mobility Research Centre, CHI brings together interdisciplinary researchers from health sciences, arts and science, and engineering to study the biggest challenges for human health, from digital health data to genomics and precision medicine.

Democratizing access

Queen's and Kingston Health Sciences Centre provide medical services to a predominantly Indigenous population in the Weeneebayko Area Health Authority (WAHA) – Moose Factory and surrounding communities – in northern Ontario. Queen's researcher Dr. Omar Islam and his team received Health Canada clearance and ethics approval from WAHA and Queen's to bring the first Hyperfine portable MRI scanner to Canada's north. Patients in these communities will have direct access to the device rather than travelling long distances for diagnoses in an effort to help democratize access to health care.

Teaching and student life

Mental health supports

Queen's Student Wellness Services provides confidential <u>Mental</u> <u>Health Services</u>, including one-on-one appointments with mental health professionals, groups, events, and training. Students can also use the online self-directed tool <u>Therapy Assistance Online</u> (TAO) to design a personal intervention plan or access free 24/7 mental health support through **Empower Me**.

<u>Thrive</u> is a week-long series of events at Queen's that focuses on building positive mental health and helping reduce mental health-related stigma among our students, staff, and faculty.

Sexual health

The Queen's <u>Sexual Health Resource Centre</u> is a confidential, non-judgmental, sex positive, pro-choice, queer positive, non-heterosexist, and feminist information and referral service that provides students with sexual and reproductive education and health care services.



Queen's Art of Research Submission: Democratizing Healthcare by Dr. Omar Islam, Faculty (Diagnostic Radiology), Weeneebayko Hospital, Moose Factory, Ontario



Community impact

Collaborating on research

Queen's collaborates closely with the Kingston General Hospital
Research Institute, the research arm of the Kingston Health Sciences
Centre, and Providence Care, a local health organization. More than
350 investigators at this not-for-profit academic institute are leading innovative research projects that are making a global impact on health and wellbeing.

Developed with a group of seniors living in a Kingston-area apartment building, Oasis Senior Supportive Living Program is a unique model of active aging-in-place. Professors Catherine Donnelly and Vince DePaul from the School of Rehabilitation Therapy at Queen's are leading a research project to evaluate and expand the Oasis model into seven new communities in four cities across Ontario.



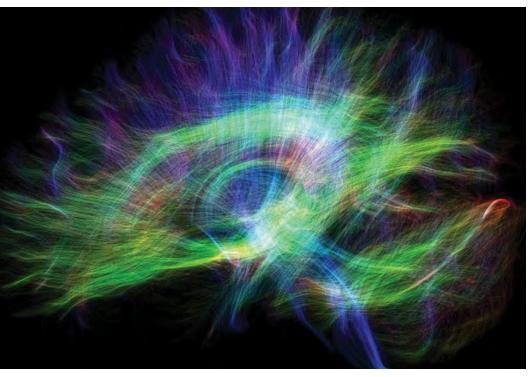
Partnering for Health and Wellbeing Click to Watch



Queen's Art of Research Submission: *Aging with Oasis* by Riley Malvern, Staff (Health Services and Policy Research Institute), Queen's University

Providing health services to the broader community

The Neuroscience Outreach Program, located at the Centre for Neuroscience Studies at Queen's University, strives to improve the Kingston community's awareness and understanding of neuroscience. Programmers lead lecture series, educate athletes about concussions and brain safety, perform hands-on experiments with local children, and provide companionship to elderly patients.



Queen's Art of Research Submission: *The Wiring of the Brain* by Donald Brien, Staff (Centre for Neuroscience Studies), Queen's University

Health Hub

In 2021, Queen's School of Rehabilitation Therapy, Maple Family Health Team, and Kingston Community Health Centre partnered to launch Rehabilitation Services at the Health Hub. Rehabilitation Therapy students have provided care for more than 80 patients in the Kingston community who would have been unable to access care elsewhere.

Inspiring young athletes

The <u>Junior Gaels</u> program aims to inspire young Kingston athletes to attend Queen's and, one day, play for the Queen's University Gaels. The program connects current student-athletes to young athletes in the community and offers opportunities for mentorship and community building.



Global reach

Advancing health beyond our borders

Queen's is committed to improving the health and wellness of individuals and communities across the globe. The university's International Centre for the Advancement of Community Based Rehabilitation works to mainstream disability and advance the concept of community-based rehabilitation (CBR) practice in collaboration with persons with disabilities. Initiatives aim to improve health care and social services for people with disabilities, their families, and their communities in Canada and 15 other countries around the world.

Queen's Health Outreach (QHO) is a student-run non-profit that promotes health through peer-to-peer discussions in classrooms in Canada and around the world. Each year QHO implements programs for students in Belize, Guyana, Kenya, and across Canada that aim to improve individual and community health.

Administration and operations

Health and wellness policies

Queen's prioritizes health and wellness in its operations. To protect our community's health and wellbeing, Queen's maintains a tobacco and **smoke-free environment** on all our campuses and properties.

Campus Wellness Project

In 2020, Queen's launched the <u>Campus Wellness Project</u> to develop a <u>Campus Wellbeing Framework</u>. Guided by the <u>Provost's Advisory Committee on Wellness</u> and aligning with the <u>Okanagan Charter</u>, the framework identified an interrelated set of principles and priority focus areas to help, support, and encourage a culture of wellbeing for all who live, learn, and work at Queen's and embed health in all aspects of campus culture.



Our goals in action

SDG 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Research and innovation

Evidence-based teaching and leadership

The <u>Centre for Teaching and Learning</u> promotes quality teaching and builds teaching and educational leadership capacity in direct support of Queen's students' learning experiences. They support evidence-based, innovative, and sustainable strategic program enhancement initiatives, and encourage and support emerging, grassroots investigations of novel approaches to teaching and learning.

The <u>Principal's Impact Courses</u> initiative is part of a longer-term commitment to transform curricula by enhancing already-existing undergraduate courses or developing new courses with the purpose of supporting inquiry-based 'wicked idea' experiences, community impact, and the integration of research into the student experience as emphasized in the <u>Queen's Strategy</u>. Selected programs receive a grant providing up to \$10,000 in one-time funding to develop their proposed course.



Commitment to research integrity and excellence

Our <u>Research Integrity Policy</u> is a foundational commitment to strive for research and scholarly practices that exemplify honesty, truthfulness, fairness, respect, responsibility, and the courage to adhere to these values, according to standards set by the International Centre for Academic Integrity.

Teaching and student life





Queen's University is committed to providing an educational experience that will build upon the principles of fairness and inclusiveness – the hallmarks of our Educational Equity Policy.

Accessible learning outside the classroom

Queen's offers learning opportunities outside our classrooms. Students and faculty also have access to **Open Educational Resources**, free digital teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license. These resources provide equal access to quality education by making lectures, books, and curricula widely accessible online for free.

The <u>Faculty of Arts and Science</u> is a trailblazer in distance education, offering online courses and programs that are distinguished by their exceptional quality. These courses offer students the best possible learning experience no matter where they are.

Professional, executive and continuing education at Queen's

Queen's offers numerous Professional, Executive, and Continuing
Education programs through the faculties of Arts and Science,
Education, Law, and Medicine, as well as the School of Nursing.
The School of Graduate Studies and Postdoctoral Affairs also runs
numerous Master's and Doctoral programs. Furthermore, the Smith
School of Business, the Industrial Relations Centre, and the School of Policy Studies offer executive education, digital learning, and open enrolment courses for professionals at all stages of their career.

Inspiring learning among Indigenous communities

The Indigenous Futures in Engineering at Queen's University program aims to encourage more Indigenous youth to become engineers by promoting math and science in elementary and high schools, offering culturally relevant educational materials for Indigenous youth and their teachers, and enabling access to post-secondary study.

Community impact

Public resources for lifelong learning

Queen's is proud to provide access to educational resources for the community beyond our campus, including access to computers, online courses, and lectures. The University Library welcomes visitors from the community to visit our facilities, access our collections, and borrow books.



How STEM Outreach Creates Future Engineers Click to Watch



Public events for lifelong learning

Queen's hosts regular on-campus events including lectures and community educational sessions that are open to the public.

The **Queen's University Events Calendar** highlights events taking place online or in-person at the university.

Additionally, Queen's faculty, staff, and students participate in educational outreach activities in local schools and in the community. The Smith School of Business also offers regular free Business Insight webinars for the public on themes relating to business, finance, and leadership.



Science outreach in the community

Queen's faculty and students offer a variety of educational programs in the Kingston community. Science Rendezvous

Kingston is a family-friendly event that allows community members to meet and talk to Queen's researchers, conduct experiments, and learn about the possibilities of science, technology, engineering, and mathematics (STEM).

<u>Sistema Kingston</u>, run by the Queen's Faculty of Education, is a free after-school music program that focuses on positive social change through the pursuit of musical excellence. Sistema Kingston's group-centred music instruction emphasizes inclusivity and teamwork, builds personal persistence, and fosters creativity and personal responsibility.

The <u>Tech 'n' Tinker (TNT) Trailer</u> is a mobile classroom that travels to schools, community organizations, and public events in the greater Kingston area, providing hands-on learning that complements the Ontario Kindergarten to Grade 8 curriculum. The Trailer is part of Queen's Faculty of Engineering and Applied Science's outreach programming.

The Queen's Department of Physics, Engineering Physics, and Astronomy runs a free annual <u>IDEAS (Innovation, Diversity, Exploration & Advancement in STEM) Camp</u> for youth in Grades 7 to 9. Campers explore the cosmos and carry out science experiments with the guidance of leading female scientists.

The <u>Black Youth in STEM</u> program, delivered by current Queen's engineering students, is open to students in Grades 1 through 8 in the Kingston area and offers free lessons in coding and robotics.

Global reach

Partnerships to increase access

We are proud of our long-term agreement with the <u>Karta Initiative</u>, which enables talented, low-income youth from rural India to study at Queen's. In 2021, Queen's welcomed our first Karta Scholars.

Free learning beyond our borders

Queen's offers free online courses in a variety of subjects through the global non-profit <u>edX</u> organization. Students can enroll for select courses from anywhere in the world and can even choose to receive a verified certificate for a small fee.



Sistema Kingston
Paper to Wood Ceremony
Click to Watch

Our goals in action

SDG 5: Gender Equality

Achieve gender equality and empower all women and girls



Research and innovation

Promoting women in STEM

Queen's University's Women in Science and Engineering (WiSE) is a student-run organization that promotes female involvement in STEM disciplines through networking and mentorship opportunities for women in the Queen's and Kingston communities.



<u>Women in Science Queen's</u> (WiSQ) is an employee resource group for women looking to explore and build upon their careers at Queen's while at the same time helping foster equity within science. Their goals include promoting discussions about gender bias in science; incentivizing the active participation and leadership of women; and establishing a visible, equitable, diverse, and inclusive community promoting the development and retention of women across all scientific disciplines.

Sustainable Development Goals by the numbers:



In the 2021 academic year, 60% of students starting a degree at Queen's were women.



Additionally, 35% of our senior academic staff are women.

Teaching and student life

Educational equity at Queen's

The <u>Senate Educational Equity Committee</u> (SEEC) supports our institutional goal of achieving educational equity at Queen's. Additionally, the Senate's <u>Educational Equity Policy</u> outlines our commitment to and understanding of educational equity, as well as our implementation and accountability processes.

Queen's University recognizes that the values of equity and diversity are vital to and in harmony with its educational mission and standards of excellence.



Policies of non-discrimination against women and transgender people

Queen's has several policies that prohibit discrimination, including our Harassment and Discrimination Prevention and Response
Policy and our <a href="Policy on Sexual Violence Involving Queen's
University Students. Both programs outline our anti-discrimination measures as well as the processes for addressing harassment and/or discrimination on our campus.

Positive Space

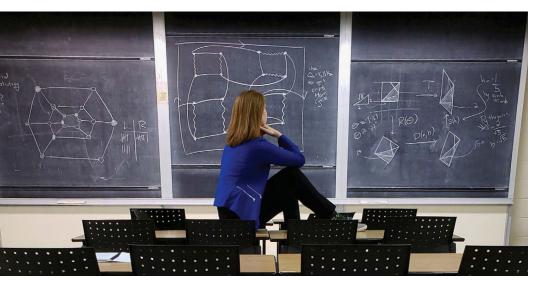
The <u>Positive Space</u> program offers visibility and support to 2SLGBTQI+ communities. Program participants help to create positive spaces at Queen's by avoiding making assumptions about anyone's sexual orientation or gender identity and by signaling that all are welcome. Positive Space stickers posted at the entrance to work, living, or study areas, and on personal belongings encourage the Queen's community to celebrate the gender and sexual diversity that exists on campus and to work to overcome subtle and overt forms of discrimination and harassment.



53% of STEM graduates are women.

Women's mentorship opportunities and educational supports

The Queen's Women's Network (QWN) Mentorship Program offers 10-month mentorship programs for women-identifying employees looking for mentorship from senior academic staff. The Smith School of Business provides MBA mentorship and coaching opportunities for female-identifying groups, which aim to enable more women to ascend to the senior ranks of management.



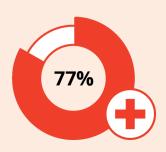
Queen's Art of Research Submission: *Women in Mathematics* by Stefanie Knebel, PhD Student (Mathematics and Statistics), Queen's University

Queen's is a family-friendly university

As a child-friendly campus, we have implemented initiatives through our **Queen's University Child Friendly Campus Initiative** that help parents and caregivers on campus to nurture their families while pursuing their scholarly and work responsibilities.

The Office of Support Services and Community Engagement offers supports to students with children by providing comprehensive information on resources available at Queen's and off-campus from education programs to private breastfeeding friendly spaces and change table locations.

The <u>Queen's Day Care Centre</u> provides affordable on-campus childcare. The <u>Queen's daycare financial assistance program</u> provides subsidized childcare and other financial assistance for students with dependents and/or families, while the <u>Childcare Support Plan</u> provides reimbursement for eligible expenses to faculty and staff.



77% of Medicine graduates are women.

Community impact

Empowering women in politics

The <u>Queen's Female Leadership in Politics Conference</u> is Canada's premier undergraduate conference which seeks to empower women in politics. The two-day event brings together more than 150 students from across the country and provides participants with the necessary skills and connections they need to succeed.

Making connections

Connections Engineering Outreach and the Faculty of Engineering and Applied Science at Queen's are committed to breaking down
barriers for girls and women in STEM. As part of this commitment, Connections Engineering Outreach has developed a series of programs to build confidence, and ignite the imagination of young women interested in STEM.

Supporting entrepreneurs

Queen's has received \$3.2 million in federal funding to <u>deliver Women</u> <u>Entrepreneurs Can</u> (WE-CAN), supporting 1,000 women entrepreneurs in the Kingston region with tools, resources, expert mentors, networks, and community building to expand existing businesses and to launch new ventures.

Administration and operations

Tracking enrolment and representation

To better understand our progress in ensuring equitable enrolment at Queen's, we compile an annual <u>Student Affairs Enrolment Report</u>, which provides information about incoming first-year undergraduate and graduate students, including enrolment information for international, self-identified Indigenous, and first-generation students, as well as retention and graduation rates.

Queen's also regularly tracks our efforts to increase the representation and engagement of students, faculty, and staff from equity-deserving groups through <u>Inclusive Queen's</u>. Through outreach programs and targeted recruitment, we also encourage applications by women in subjects in which they are underrepresented. Additionally, we track women's likelihood of graduating compared to men's, and develop plans to close any gap. Through these measurements, we are proactively building a campus that welcomes and reflects diverse identities, cultures, and perspectives.



WE-CAN Client Highlights Click to Watch



60% of Arts & Humanities/Social Sciences graduates are women.



Our goals in action

SDG 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all



Research and innovation

Tracking COVID-19

Queen's researchers are collaborating with universities and utility companies across Ontario to support the <u>Wastewater Surveillance</u> <u>Initiative</u>. The project, which is coordinated and funded by the Ontario Ministry of the Environment, Conservation and Parks, will determine how wastewater surveillance for COVID-19 can be used in combination with clinical data to help proactively inform public health decision-making and protect our communities.



Queen's actively promotes conscious water usage on campus, and in the wider community.



Queen's Art of Research Submission: *Art and Waste Project Pangnirtung, Nunavut* by micky renders (School of Environmental Studies), Pangnirtung, Nunavut

World-class research improving water quality

Queen's Professor John Smol, former Canada Research Chair in Environmental Change, specializes in water conservation.

Dr. Smol's award-winning work uses lake sediment samples to better understand the impact of natural and human activities on environmental change. Dr. Smol is one of 18 researchers in the Canadian Lake Pulse Network working together to examine the conditions of Canada's Great Lakes.

Professors Sarah Jane Payne and Yves Filion lead Queen's <u>Drinking Water Quality Group</u> focused on researching the factors and mechanisms that lead to poor water quality in drinking water systems and developing innovative technologies and best practices to protect drinking water in Canadian systems.

Teaching and student life



Queen's is a bottled water free campus

Queen's University has had a <u>campus-wide ban on bottled water</u> <u>sales and distribution</u> for almost a decade. Instead, we have more than 200 drinking fountains and free bottle-fill stations across our campus, which students can locate using an **online map**.

Growing research at Queen's

Students and researchers have access to the <u>Queen's University</u> <u>Phytotron</u> to conduct plant research and other biological applications. The Phytotron is comprised of six climate-controlled greenhouse compartments and 26 growth chambers housing more than 150 tropical, subtropical, and Mediterranean plant species.



Community impact

Water management educational opportunities

Understanding the need to engage communities in environmental strategies, Queen's runs ongoing outreach programs for local communities to learn about effective water management. The **Beaty Water Research Centre** (BWRC) is an interdisciplinary research and education centre that focuses on water governance, use, resources, and quality. The Centre hosts regular **outreach events** throughout Kingston, including the Great Lake Water Festival, the EngAGE Engineering Summer Academy, and the BWRC Research Symposium. These programs aim to motivate the community to become water stewards in their homes, classrooms, and communities.

The <u>Queen's University Biological Station</u> is home to a number of wetlands and conservation areas. The station runs regular events related to natural history, environmental management, and water conservation that are open to the community and international student researchers.

As a satellite facility of the Queen's University Biological Station, the <u>Elbow Lake Environmental Education Centre</u> offers curriculum-based programs year-round that encourage local high school students to explore and measure local biodiversity through field-based scientific investigation.



Global reach

Inspiring future leaders in water sustainability

Queen's was the proud host of the 2021 <u>Leaders in Water and</u>
<u>Watershed Sustainability Symposium</u>. This free annual public event, organized in conjunction with the Network on Persistent, Emerging, and Organic PoLlution in the Environment (PEOPLE Network) and LEaders in wAter anD watershed Sustainability (LEADERS-CREATE) research group, brings together students, researchers, and experts at the forefront of water research. Through workshops, roundtable discussions and career sessions, the symposium aims to inspire and develop future leaders in water-related science and policy.



Understanding sanitation inequalities

Safe water, sanitation, and hygiene (WASH) are critical for human development, yet women and girls are disproportionally affected by inadequate WASH services. The **Empowerment in WASH Index** (EWI) developed at Queen's by Dr. Elijah Bisung measures water, sanitation, and hygiene (WASH) -related interventions and aims to solve gender disparities in access to these basic needs. This pragmatic survey-based tool is currently being developed and piloted in different cultural settings around the globe.

Administration and operations

Water-conscious building standards and policies

The Queen's <u>Conservation and Demand Management Plan</u> applies building standards and policies to minimize water use, energy consumption and greenhouse gas emissions. Our <u>Building Design Standards</u> also include LEED® (Leadership in Energy and Environmental Design) water targets. Our Custodial Services have also gone green, and now exclusively use <u>certified green cleaning</u> products and reusable microfiber cloths.



Spearheading water conservation throughout campus

From 2014-2018, Queen's, through its <u>CAPit</u> program, completed significant energy conservation renewal projects throughout its campus, resulting in 185,000 m³ water use reduction.



The CAPit completed 1147 toilet retrofits, 61 urinal retrofits, 353 shower head replacements, and installed 1,523 faucet moderators.

Our goals in action

SDG 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable, and modern energy for all

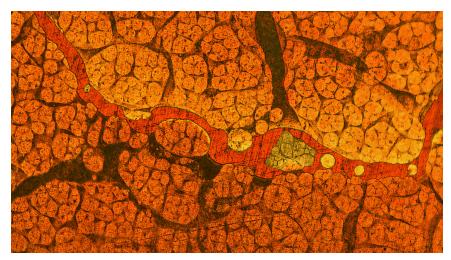


Research and innovation

Leadership in clean energy innovation

The <u>Centre for Energy and Power Electronics Research</u> (ePower), led by the Canada Research Chair in Power Electronics, <u>Dr. Praveen</u> <u>Jain</u>, brings together academic and industrial partners to develop new energy-efficient, cost-effective, and environmentally friendly power electronic technologies.

With the current push to reduce our collective carbon footprint, nuclear power is a viable low-carbon energy choice. Queen's **Reactor Materials Testing Laboratory** is a state-of-the-art research facility that uses a proton accelerator to introduce damage into materials at a microscopic scale. By studying the effects of this damage on how materials behave we can gain insight into, and draw parallels with, the way that materials are damaged within a nuclear reactor.



Queen's Art of Research Submission: *Copper Oxide Growth Patterns* by Jeffrey Wang, Graduate Student (Mechanical and Materials Engineering), Queen's University



Queen's draws upon the remarkable strengths and talents within our university to meet the modern challenge of achieving environmental sustainability.

Extending the lifespan of vital metals

With \$24 million in newly announced support from Canada's **New Frontiers in Research Fund**, Queen's chemistry researcher and Canada Research Chair Dr. Cathleen Crudden is poised to revolutionize industries worldwide with unique molecular coatings designed to significantly extend the lifespan of vital metals. These advances could not only improve our daily lives, but also save society billions in infrastructure and manufacturing costs.

Revolutionizing batteries at Queen's

Queen's professor Gregory Jerkiewicz and his team at Ni Electro Can (Engineered Nickel Catalysts for Electrochemical Clean Energy) received \$4 million in funding from the Natural Sciences and Engineering Research Council of Canada. The group of Canadian and international researchers is advancing research to replace inefficient batteries with clean fuel cell technology.



New Frontiers in Research Announcement Click to Watch

Teaching and student life

Incubating future sustainability innovations

The <u>Dunin-Deshpande Queen's Innovation Centre</u> provides incubation programs for startups working on technology that supports a low-carbon economy. The <u>Queen's Innovation Centre</u> <u>Summer Initiative</u> (QICSI) provides training, funding, and office space to early-stage startups.



The Foundry | Spectra Plasmonics Click to Watch



Queen's Art of Research Submission: *Combining Electric Fields and Metal Nanoparticles to Produce the Next-Generation of Sensors* by Joshua Raveendran, PhD Student (Chemical Engineering), QuSENS Lab, Queen's University

Community impact

Queen's climate commitment challenge

As a part of Queen's Climate Commitment Challenge, the <u>Sustainable</u> <u>Living Series</u> offers free public events and resources to provide education and awareness on sustainability topics, including measuring your carbon footprint and improving your home's energy efficiency.

Queen's Solar Design Team (QSDT) is a multidisciplinary team of Queen's students building an autonomous home on campus to function completely off the grid for research, education, and community events. QSDT hosts public events for all ages and offers educational resources to learn more about integrating sustainable living and the power of solar energy.

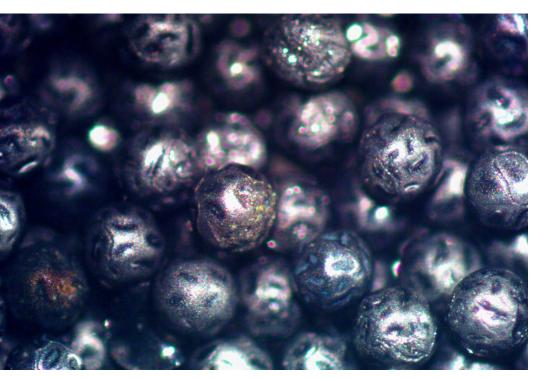


Queen's is working with the Kingston community to make our city and our planet more sustainable.

Global reach

Providing research that informs sustainable public policies

Queen's sustainability research is often used by the private and public sectors to inform sustainability initiatives. The <u>Institute for Energy</u> <u>and Environmental Policy</u> (QIEEP), at the School of Policy Studies, provides research that informs and supports governments in developing energy-efficient technology policies.



Queen's Art of Research Submission: *Sulfur-Loaded AF5* by Omid Marzoughi, PhD Student (Robert M. Buchan Department of Mining), Queen's University

The <u>Institute for Sustainable Finance</u> is a multidisciplinary network of researchers, private sector leaders, and government policy makers working together to shape Canada's innovations in sustainable finance. The Institute launched a refreshed <u>Capital Mobilization</u> <u>Plan for a Canadian Low Carbon Economy</u>. The landmark research highlights that cooperation between the public sector, private sector, and financial system is critical to securing investments needed to meet Canada's 2030 climate targets.

Promoting excellence in research-led education

We are a member of the Matariki Network of Universities (MNU), an international group of leading universities recognized as being premier institutions for advanced learning. Queen's is the lead partner in the organization's Sustainability, Environment and Resources pillar, which focuses on fostering healthy ecosystems.

Administration and operations

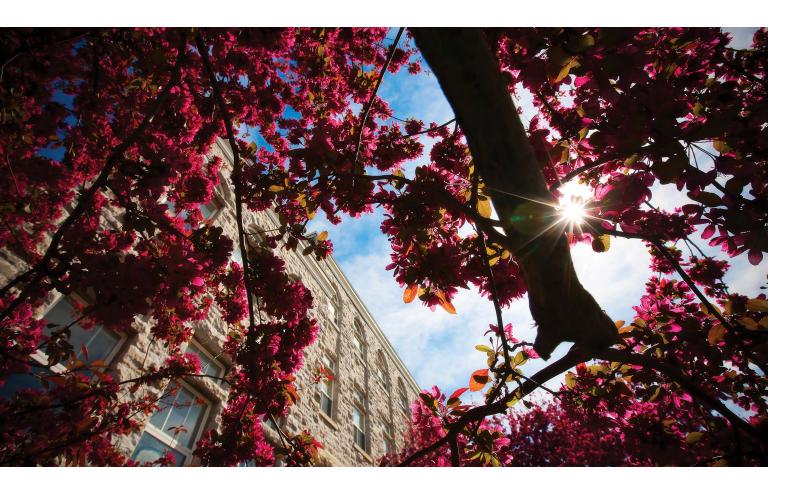
A green campus

As part of its commitment to sustainability, Queen's has a Policy on Environmental Management that aims to exceed its environmental legislation obligations. The Queen's Building Design Standards mandates that all building renovations or new builds are following energy efficiency standards. Meanwhile the Conservation and Demand Management Plan (2019-2024) outlines specific measures for upgrading buildings to higher energy efficiency and plans for renewable energy generation.

Our <u>West Campus District Conversion Project</u> has replaced existing underground steam lines with a new heating system that reduces greenhouse gas emissions by 1,500 metric tonnes of carbon dioxide per year.

Our pledge for carbon neutrality

Queen's has signed the University and College Presidents' Climate Change Statement of Action for Canada, pledging to reduce greenhouse gas emissions and enhance research and curriculum in the areas of climate change and sustainability. As part of this commitment, we developed our **Queen's Climate Action Plan** (CAP) which aims to reduce greenhouse gas (GHG) emissions by 70% from 2008 levels by 2030 and achieve carbon neutrality by 2040.



In signing on to the Climate Charter for Canadian Universities, Queen's also made a **Responsible Investing Commitment** that aligns with international standards including the UN-supported Principles of Responsible Investment.

Queen's pension plan, the University Pension Plan Ontario (UPP), announced a formal commitment and action plan to achieve net-zero portfolio emissions by 2040 or sooner, with an emphasis on decarbonizing the real economy through the UPP Climate Action Plan.

SDG 8: Decent Work and Economic Growth

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all



Community impact

Partnering for a prosperous economy

Queen's is Kingston's top employer with 1 in 10 jobs in the city found at the university. Additionally, Queen's has supported more than 700 startup companies and entrepreneurs, including 600 in Kingston. Our **economic activity** also makes up 11% of our community's local GDP from Belleville to Brockville.

Confronting COVID-19 challenges

From 2020 to 2021, Queen's Smith School of Business joined forces with the City of Kingston and Kingston Economic Development Corporation to provide student and faculty resources to help businesses, not-for-profits, and social enterprises navigating and surviving the impact of COVID-19. The Kingston Region Business Support Network offered free services, including student time and skills, and community classroom learning sessions with faculty on topics designed for local business needs.

Teaching and student life

Building experience

Queen's offers a wide-range of opportunities for undergraduate and graduate students to build their work experience and develop industry-ready skills from experiential learning to paid internships. In addition to faculty-specific initiatives, eligible students can take part in the **Queen's Undergraduate Internship Program** (QUIP), **Summer Work Experience Program** (SWEP), and **Work Study Program**. Queen's also works with our local partners to offer initiatives such as the **Queen's Career Apprenticeship: Kingston** that helps new graduates jumpstart their careers while helping small businesses attract and retain highly skilled talent in Kingston.



Partnering for a Prosperous EconomyClick to Watch



Queen's University was selected by Employment and Social Development Canada as a recipient of an Employment Equity Achievement Award in the category of Innovation for the Queen's Equity Appointments Process (QEAP) Application.



Queen's Career Apprenticeship Click to Watch

Administration and operations

Tracking and promoting employee diversity and inclusion

The Queen's Equity Office measures and tracks our <u>employment</u> <u>representation rates</u> to better ensure gender parity, as well as pay scale equity, among our staff.

Going beyond fair pay

<u>Total Compensation</u> for Queen's staff and faculty includes pay, benefits, pension, as well as a wide array of work/life wellness programs. The university strives to provide career enrichment as well as staff learning and development opportunities. Queen's also publishes the <u>salary grids and ranges</u> that are used for salary administration and pay-related decisions as part of its efforts to promote pay equity and transparency.

Supporting job satisfaction and personal growth

Understanding that employees need coaching and regular feedback to succeed, Queen's has implemented the Performance Dialogue Process (PDP) to allow staff at all levels to have regular opportunities for meaningful conversations with supervisors about their work and contributions.

Integrating employee wellness

In 2021, Queen's Human Resources launched the new Employee Wellness Services unit to respond to the growing need for employee-focused wellness services and resources and develop a year-round approach to employee wellness.

Respecting labour rights

Queen's recognizes unions and labour rights, including freedom of association and collective bargaining for all. Our Human Resources website features a list of the <u>University Unions and Associations</u> and their corresponding collective agreements. The agreements set the terms of employment at Queen's as well as conditions for salary negotiation and conflict resolution.



Working at Queen's Click to Watch



Queen's is committed to ending discrimination in the workplace, including discrimination based on religion, sexuality, gender, and age.

An equal and diverse workforce

Queen's recognizes and appreciates the value that diversity adds to its activities and initiatives. Through its **Employment Equity Policy**, the university acknowledges its responsibility to maintain an employment equity program that includes processes, plans, and procedures that address historic under-representation in the employment of marginalized groups. This includes women, members of visible minorities and racialized groups, Indigenous peoples, persons with disabilities, persons of any sexual orientation or gender identity, and other such groups designated by legislation or otherwise.

The Employee Resource Groups initiative was developed to promote career development and community building for equity-deserving groups on campus. Most recently, the **Queen's University Association for Queer Employees** (QUAQE) was announced in 2021 to create a more inclusive and supportive workplace for 2SLGBTQI+ employees.

Preventing harassment and discrimination in the workplace

Our <u>Harassment and Discrimination Prevention and Response</u>

<u>Policy</u> mandates education and other proactive measures to prevent harassment and discrimination in the workplace. It also establishes procedures that ensure that the university effectively addresses and responds to reports and complaints of harassment and/or discrimination in the workplace.

Queen's protects its community members through the University Secretariat and Legal Counsel's <u>Harassment/Discrimination</u>
<u>Harassment/Discrimination</u>
<u>Harassment/Discrimination</u>
<u>Harassment and Equity Office</u>
<u>Harassment/Discrimination</u>
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An impartial resource for promoting fairness

The <u>Office of the University Ombudsperson</u> is an independent, confidential and impartial support for the Queen's community. It provides general advice to employees and students about their rights and responsibilities and helps ensure procedural fairness in decision-making.



Queen's University Human Rights and Equity Office Click to Watch

Our commitment to social procurement

Queen's encourages and supports <u>social sustainable procurement</u> focused on meeting our needs for good and services while achieving value for money and generating benefits to the organization, the community, and the economy and minimizing damage to the environment. Our <u>Procurement Policy</u> ensures accountable, efficient, transparent, and ethical practices are used to acquire projects and services for the university whether by purchase, rental, or lease. Queen's strict policies against forced labour, modern slavery, human trafficking, and child labour also extend to our <u>University Trademark and Licensing Code of Conduct</u>.



Outlining our commitment to employment equity

The Human Rights and Equity Office at Queen's University developed the **Employment Equity Action Plan 2021-2022**, outlining the university's goals to increase equity in the areas of recruitment, retention, and professional development for the 2021-2022 academic year.

SDG 9: Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Research and innovation



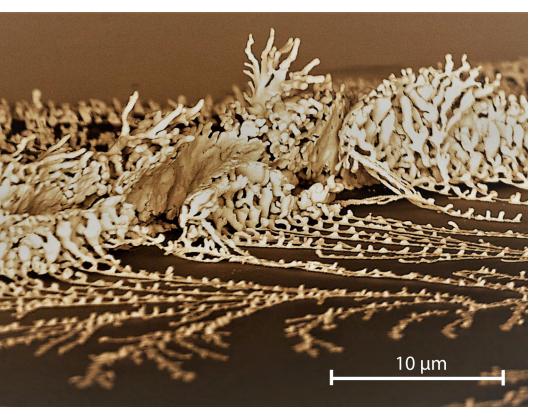
With \$24 million in support from Canada's New Frontiers in Research Fund,
Queen's researcher Dr. Cathleen Crudden, Canada Research Chair in Metal Organic
Chemistry, is poised to revolutionize industries worldwide and save billions in infrastructure
and manufacturing costs with unique molecular coatings designed to significantly extend
the lifespan of vital metals.

In 2021, Queen's received the
Deshpande Symposium Award for
The Entrepreneurial University,
recognizing our excellence in
entrepreneurship-related curriculum
innovation and student engagement.

Leading the way in research

We are proud to be one of <u>Canada's leading universities for</u> <u>research</u>. Queen's is a member of the U15 group of Canadian Research Universities, a collective of the country's most research-intensive post-secondary institutions, and we are ranked #3 in research awards among Canadian institutions. We are also honoured to have 37 <u>Canada Research Chairs</u> on our faculty.

Queen's has attracted nearly \$620 million in <u>research and</u> <u>development</u> to Kingston since 2013. Our research activities contribute to Kingston's ranking as a top-10 Canadian startup ecosystem by **StartupBlink**.



Queen's Art of Research Submission: Nano-dendrite Collision by Hannah Dies, MD/PhD Student (Chemical Engineering), QuSENS Lab, Queen's University

Teaching and student life

Innovative curriculum

Queen's supports student innovation through a variety of initiatives at both the undergraduate and graduate levels. The Certificate in Entrepreneurship, Innovation, and Creativity helps students gain a variety of skills in marketing, finance, communications, and business planning to develop an entrepreneurial mindset. Since in its inception six years ago, more than 400 students representing 25 countries have completed the Master of Management Innovation and Entrepreneurship. Those students have gone on to create 89 startups and scaleups employing 112 people.

Dunin-Deshpande Queen's Innovation Centre

The Dunin-Deshpande Queen's Innovation Centre is a panuniversity initiative that encourages and supports the innovation and entrepreneurship activities of students, professors, entrepreneurs, and community members. Programs are vast and include the QIC Summer Initiative Program, QyourVenture Accelerator Program, The Foundry, Regional Pitch Competition Series, Konnect, The Hive, Rose Innovation Hub, and SparQ Studios Makerspace.

Sustainable Development Goals by the numbers:



In 2020-2021, Queen's research income from industry and commerce totaled \$62 million. Additionally, more than 30 university spin-offs established at least 3 years ago are still active.



Start a Business While You Study at Queen's University Click to Watch

Community impact

Partners in innovation

Through Queen's Partnerships and Innovation (QPI), we offer services, resources, and programs to support entrepreneurs, including those from Queen's, to accelerate the growth of startups and small to medium-sized enterprises within Kingston and Eastern Ontario.

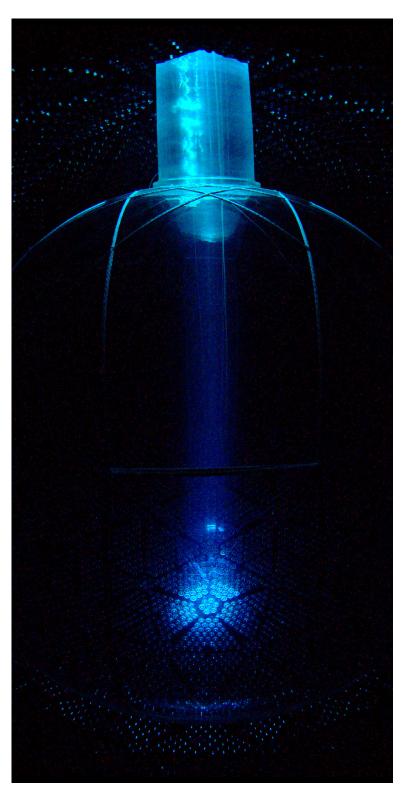
Empowering women entrepreneurs in our community

The WE-CAN project at Queen's works with local community partners in the Kingston area to inspire and empower existing and aspiring women-identifying entrepreneurs. The program, which has supported over 800 women in the community since it began in 2019, equips participants with resources, expert mentors, and networks to help them expand existing businesses and to launch new ventures in Kingston and the surrounding area.

Global reach

Empowering thousands of students

Students and recent graduates from African universities within the Mastercard Foundation Scholars Program are eligible for free virtual entrepreneurship training delivered by the Dunin-Deshpande Queen's Innovation Centre. Since 2020, the Jim Leech Mastercard Foundation Fellowship on Entrepreneurship has supported more than 1,200 students, many of them women, on their journey to start or scale their business.



Queen's Art of Research Submission: *The SNO+ Detector* by Dr. Alex Wright, Faculty (Physics, Engineering Physics, and Astronomy) for the SNO+ Collaboration, SNOLAB

Research addressing the world's most pressing issues

Queen's is home to 24 institutional and faculty-based <u>research</u> <u>centres and institutes</u> that support interdisciplinary networks. Through international collaboration, research, and comparative approaches, they develop international best practice around contributing to the United Nations' Sustainable Development Goals and ask critical questions related to issues ranging from dark matter, to divisive societies, and energy transition.

Administration and operations

Applying the gold standard of green buildings

The <u>Leadership in Energy and Environmental Design</u> (LEED®) certification program, administered by the Canadian Green Building Council, is the leading benchmark for the design and operation of high-performance green buildings. The School of Kinesiology and the Goodes Hall West Wing are LEED® certified. Additionally, the John Deutsch University Centre (JDUC) renovation project is registered and awaiting certification and the Duncan McArthur Hall project will also target LEED® Gold certification.

The master plan

Our <u>Campus Master Plan</u> requires new buildings be designed to minimize their environmental impacts, contribute to the campus' overall sustainability, and apply LEED® standards, with a focus on designing for flexibility, adaptability, and longevity.

Sprouting in the sky

Green roofs reduce greenhouse gas emissions and improve energy consumption. Queen's has installed **green roofs** on several buildings, including Goodes Hall, Jeffery Hall, the New Medical Building, Biosciences, and Botterell Hall.



SDG 10: Reduced Inequalities

Reduce inequality within and among countries



Research and innovation

Addressing discrimination in research

The <u>Wise Practices for Research</u> initiative launched in 2021 is a set of new online training modules for the research community aimed to eliminate discrimination in research by increasing awareness and developing practical skills related to the inclusion of equity, diversity, and inclusion throughout the full research cycle.

Teaching and student life

Fostering a climate of inclusion

The <u>Student Applicant Equity Census</u>, which is administered to all Queen's applicants, asks prospective students to voluntarily indicate their gender and whether they identify as an Indigenous person, a person with a disability, and/or a racialized person. It also seeks to determine the overall economic makeup of applicants. <u>Responses</u> are not used in the admission selection process, but rather, they support our efforts in the pursuit of educational equity.

In response to the <u>Queen's University Administration's Declaration</u> of Commitment to Address Systemic Racism, a campus climate survey of Queen's students identified initiatives for the university to support aimed at centering equity-deserving student experiences. The <u>Queen's Shift Project</u> and Student Advisory Group formed in 2021 place students' voices and experiences at the forefront in building a safe and more inclusive campus through events, initiatives, and opportunities for dialogue.



Queen's is committed to counteracting discrimination in this institution and developing a climate of educational equity that recognizes and respects the equal dignity and worth of all who seek to participate in the life, work, and mission of the university.

The <u>Graduate Inclusivity Fellows</u> initiative was launched in 2021 to advise the School of Graduate Studies and Postdoctoral Affairs on matters related to equity, diversity, inclusion, and Indigeneity, including the development of strategies and programs to improve learning experiences for graduate students and postdoctoral fellows.

Encouraging first-generation students

Queen's supports first-generation students attending university through our <u>First-Generation Admission Policy to First-Entry</u> <u>Undergraduate Programs</u>, which offers additional and alternative admission pathways to full-time undergraduate degree programs.

Supporting aspirations of Indigenous students

Indigenous students face unique challenges while pursuing post-secondary goals. Our <u>Admission Policy For Indigenous</u> <u>Candidates To First-Entry Undergraduate Programs</u> offers Indigenous candidates additional and alternative pathways for admission to full-time undergraduate degree programs.

Finding community

The <u>Four Directions Indigenous Student Centre</u> is a safe and welcoming gathering place for Indigenous students at Queen's. The Centre provides holistic support services including peer mentorship, academic assistance, financial aid, and cultural programming.

The <u>Yellow House</u> on Stuart Street is committed to creating a comfortable and accountable space for students who identify as QTBIPoC through programming and events where feelings of safety, empowerment, and community can be fostered and identity can be celebrated.





Welcome to Queen's Click to Watch



Supporting students with disabilities

Queen's Student Accessibility Services (QSAS), in collaboration with instructors and staff, is committed to supporting students with disabilities as they pursue their academic goals. Through encouraging the use of well-implemented Universal Design for Learning (UDL) in combination with individualized academic accommodations, QSAS seeks to remove disability-related academic barriers.

Understanding that students with disabilities face increased financial burdens, Queen's also offers Financial Assistance and Services For Students With Disabilities.

Community impact

Protecting and advancing human rights

The <u>Human Rights and Equity Office</u> (HREO) at Queen's aims to advance human rights, equity, and inclusion by developing and implementing employment and educational equity strategies. The office has four main service offerings: human rights advisory services; equity services; sexual violence prevention and response; and accessibility. Our <u>Human Rights Advisory Services</u> provide advice concerning human rights issues and advocate for practices and policies that address human rights in our community.

Members of the Queen's community who make good-faith disclosures of alleged Improper Acts, including discrimination and harassment, are protected from educational or employment repercussions through our Improper Acts Reporting Policy.

Empowering all our members to thrive at Queen's

Inclusive Queen's offers tailored services, programs, and resources to support individuals from a range of cultures, ethnicities, spiritual affiliations, socioeconomic backgrounds, gender identities, and sexual orientations. The program's website is a resource for students, faculty, and staff to learn about initiatives that are transforming Queen's into an institution that empowers all members of its community.

The Queen's Student Accessibility Services (QSAS) supports more than 2,000 Queen's students each year.



Welcome to Student Wellness Services Click to Watch

Administration and operations

Removing barriers to education

The <u>Queen's University Accessibility Policy</u> guides us in identifying, removing, and preventing barriers to persons with disabilities so we can ensure equal access to all that our university has to offer.

Creating an accessible and inclusive campus

Queen's has a vision to build an inclusive campus community with accessible spaces and services. The **Queen's University Accessibility Hub** is our central online resource for accessibility, providing supports as well as information on initiatives pertaining to disability and accessibility issues on campus. The Hub also includes **resources and services for prospective and current faculty and staff.**

Navigating accessibility on campus

Our online Accessibility Hub includes a searchable <u>Building</u>
Accessibility and Campus Map that highlights accessible facilities on campus, including accessible entrances, parking lots, places to eat and emergency phones. Students can also download the Queen's Equity Locator App for maps of all three Queen's University campuses, with crowd sourced, equity-related amenities such as accessible buildings, gender-neutral washrooms, elevators, and more.



Confronting racism and championing diversity

Queen's joined 40 universities and colleges across Canada as a signatory of the <u>Scarborough Charter</u> – a sector-wide agreement designed to move post-secondary institutions beyond rhetoric and to more meaningful, concrete actions to address anti-Black racism and to promote Black inclusion.



Signing the Scarborough Charter Click to Watch

SDG 11: Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient, and sustainable



Research and innovation

Gazing at the stars

The first <u>Queen's Observatory</u> was established in the mid-19th century, the beginning of a long and distinguished history of astronomical observing at Queen's University. The current observatory houses a 14-inch reflecting telescope in a dome on the roof of Ellis Hall, used primarily for research, student training, and public demonstrations.

Sustainable Development Goals by the numbers:



Approximately 8% of the university's expenditure was on arts and heritage in 2021.

Record and preserve cultural heritage

Queen's is committed to recording and preserving aspects of cultural heritage such as local folklore, traditions, language, and knowledge. Our <u>Office of Indigenous Initiatives</u> has installed plinths in outdoor locations around campus that identify the land the university sits on. There are also various artworks that have been installed around campus that have been produced by Indigenous artists and represent the languages, traditions, and knowledge systems of Anishinaabe, Haudenosaunee, and other Indigenous nations from Turtle Island (Canada).

Teaching and student life

Student safety

Two programs provide around the clock safety for the members of our community – <u>AMS Walkhome</u> is a service provided by the Alma Mater Society offering safe walks to students, both on the Queen's campus and within the Kingston community, and <u>Safe Walk</u> is run by Campus Security when Walkhome is off duty.

A home away from home

The Queen's <u>Off-Campus Living Advisor</u> has directly supported more than 900 students in evaluating off-campus housing, tenant rights and responsibilities, and moving resources.

Community impact

Partnering for a strong and caring community

Queen's students, staff, and faculty raise more than \$1,000,000 annually in support of underserved local populations. Our most recent campaign for the United Way of Kingston, Frontenac, Lennox and Addington set a new annual record with \$450,268 donated.

Working in partnership

The <u>PhD-Community Initiative</u> brings together PhD students from different programs of study to form interdisciplinary teams to assist local community organizations in addressing a particular issue or challenge of importance to them. In 2021, the initiative pivoted to address key issues of <u>community resilience and economic and social recovery</u> in partnership with the Mayor's Kingston Economic Recovery Team. Past projects include proposals for community housing, addressing poverty, promoting arts and culture, and supporting equity-deserving communities.



Partnering for a Prosperous Economy Click to Watch



Kingston is HomePartnering for a Strong and Caring Community

Click to Watch

All are welcome to Queen's campus

We have and will always welcome the public to use and enjoy many of the university's arts spaces, libraries, museums, and natural heritage lands, such as the Queen's University Library, Miller
Museum of Geology, Arthur B. McDonald Canadian Astroparticle
Physics Research Institute's Visitors Centre, and sports fields.

World renowned public art gallery on campus

More than a professional art centre and academic and research resource, the <u>Agnes Etherington Art Centre</u> is also a leading, internationally recognized public art gallery. One of its feature exhibits is its <u>Indigenous Art Collection</u> which is comprised of significant works by First Nations, Métis, and Inuit artists from Turtle Island as well as Indigenous artists and communities internationally.





"At Queen's we have a responsibility to understand our impact and to ensure that the road we choose for our future is one that benefits us all."

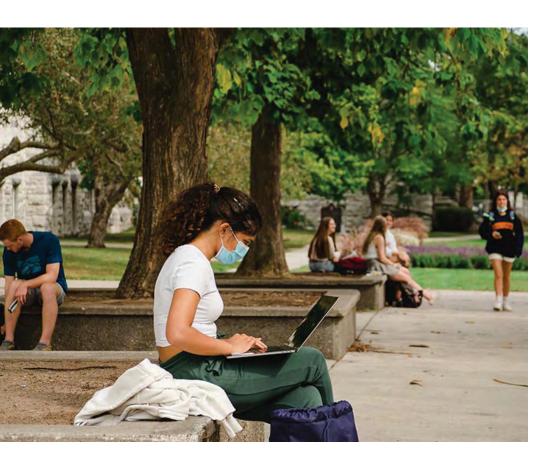
Patrick Deane

Principal and Vice-Chancellor

A campus built among the trees

Many rare trees exist on the Queen's campus, including those native to Canada and those that have been introduced from other parts of the world. The **Queen's University Snodgrass Arboretum** was established in 1999 to recognize these unique species.

A **campus map** also allows visitors to take self-guided tours and identify the more interesting specimens.



Performances by internationally acclaimed talent

The <u>Isabel Bader Centre for the Performing Arts</u>, or "The Isabel" as it is fondly known, hosts public performances, bringing local, national, and internationally renowned artists and performers of all genres to the local community, including musicians and performing artists.



Isabel Bader Centre for the Performing Arts Click to Watch

Administration and operations

Driving sustainable commuting

Queen's is committed to reducing our environmental footprint by encouraging positive behaviour change and alternatives.

Our Alternative Transportation Sub-Working Group is mandated to develop solutions for daily commuting in the Kingston area for employees and students with a focus on benefits for the environment, human health, as well as economically. Current initiatives include the Transpass Program which includes discounted monthly passes, unlimited monthly bus rides, and other incentives for using public transit. We also participate in the National Commuter Challenge – a week-long competition designed to encourage active and sustainable commuting.

The campus at the city scale

Decisions made by the university have an impact on the surrounding city and community. As such, it is important that there is coordinated planning to ensure mutual benefit between Kingston and the university. The **Queen's University Campus Master Plan** outlines Queen's commitment to ensuring our planning decisions complement the vision and policies of the City of Kingston.





Since 2014, over \$20 million has been spent on conservation efforts.

SDG 12: Responsible Consumption and Production

Ensure sustainable consumption and production patterns

RESPONSIBLE CONSUMPTION AND PRODUCTION

Research and innovation

Recovering value from waste plastic

The <u>Open Plastic</u> project led by Queen's researchers is working on the development of novel microbiological technology to support the breakdown of plastic waste into marketable recycled products. This work will support the diversion of plastics away from landfills, saving Canada over \$500 million a year and creating 40,000 future jobs in the clean technology industry.

Teaching and student life

It pays to dine sustainably

Sustainability is incorporated everywhere at Queen's, including in all Hospitality Services' food operations. The Housing and Ancillary
Service's Sustainability Framework
includes several initiatives that are effective in reducing waste while dining on campus, including the GOOD TO GO Reusable Container Initiative and Reusable Mug Program. Students, staff, and faculty members are incentivized to help combat single-use waste by saving money through participation in dining halls and retail food locations.



Sustainable Development Goals by the numbers:



In 2021, 30% of Queen's University waste was recycled.



Queen's has the country's first university-based Sustainability Chef, responsible for our environmentally friendly and always tasty food options.

Take less, waste less

Our <u>Waste Audit Report</u> prepared GFL Environmental identified opportunities to improve our overall waste diversion rate and expand our recycling program. It also recommended that Queen's continue to raise awareness and education about waste and recycling procedures on campus.

The university makes special efforts to promote the 3Rs. Queen's Hospitality Services supports initiatives to help students, staff, and employees Reduce, Reuse, and Recycle.

Community impact

Extending product life

<u>Mindful Move-out</u> is an initiative supported by Queen's and the City of Kingston which provides supports and resources to help students sustainably and responsibly donate, trade, and recycle items as they move out at the end of the academic year.



Queen's has helped to donate almost 3,000 pounds of items from 2020-2021 to the Canadian Diabetes Association to help them raise funds for diabetes research.

80% of unused toiletries from Queen's Event Services and the Donald Gordon Hotel & Conference Centre were donated from 2020-2021 to the Clean the World Foundation which provides at-risk populations around the world with the hygiene resources needed to stay healthy.





25,210 single-use containers were diverted from May 2021 through April 2022 through the GOOD TO GO reusable container initiative.

Moving toward zero plastic waste

Our efforts to reduce plastic use continue to pay off. As a **Bottled Water Free Campus** we have minimized plastic bottle waste.

Because we regularly track the amount of waste generated and recycled across our campus, we also know that our awareness and recycling programs have **reduced the amount of waste** produced at Queen's and diverted large amounts of plastic waste from our city's landfills.





Our Bottled Water Free Campus initiatives remove almost 100,000 water bottles from circulation every year.

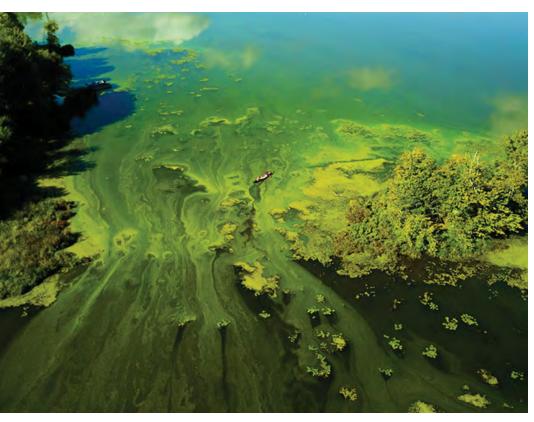
Administration and operations

Respecting the environment in all we do

We believe we have a responsibility for the safety of the environment as a shared resource. As such, our Policy Statement on Environmental Management commits to exceeding all legislation and formal obligations for protecting the environment. The policy also aims to educate the university community about actions they can take to have the smallest possible impact on the environment.

Sustainability at your fingertips

Sustainable Queen's is a dynamic community, bringing together campus and Kingston partners pursuing climate action and sustainability efforts in all their forms. The Sustainable Queen's website outlines our sustainability initiatives and includes various student resources, research, and reports.



Queen's Art of Research Submission: *Nature's van Gogh* by Hayden Wainwright, Graduate Student (Biology), South Frontenac County, Ontario

Sustainable sourcing

Queen's University strives to create a culture of sustainability on campus that influences the way we operate. Our <u>Sustainable</u> <u>Procurement Guidelines</u> highlight criteria for items that are routinely purchased on campus, within the context of existing purchasing agreements. It also recommends products that are currently available through existing Queen's suppliers.

Sustainable dining

Queen's Hospitality Services serve more than 3 million meals a year during regular operations to students, faculty, staff, and the broader community. They are committed to providing the highest quality, guest-centric food and experience while also meeting the needs of our diverse community in a sustainable and financially responsible way. Hospitality Services manages several initiatives across campus to integrate sustainability into their operations and make a positive impact on our university's consumption needs. In 2021, they announced that all seafood served at campus dining locations will come from suppliers with sustainable practices recognized by a third-party sustainable seafood certifier.

SDG 13: Climate Action

Take urgent action to combat climate change and its impacts



Research and innovation

Working with Inuit communities to develop sustainability and economic development

Queen's researchers, working with local communities in Nunavut, developed and led "Towards a Sustainable Fishery for Nunavummiut," an ambitious project that helped sustain healthy fish stocks in Nunavut. The project integrated traditional and local knowledge with leading edge genomic science to strengthen local fisheries, increase employment and economic development, and improve food security for Nunavummiut, the people of Nunavut.



Towards a Sustainable Fishery for Nunavummiut: A Genomics Solution Click to Watch

Teaching and student life

Teaching sustainability for the real world

Queen's recognizes that learning has the power to impact the world around us. As a result, the university offers a range of undergraduate, graduate, and professional programs that incorporate interdisciplinary sustainability studies into the curriculum from courses to experiential learning. For example, students in Honours Project in Environmental Sustainability (ENSC 430), offered through the School of Environmental Studies in partnership with the City of Kingston, engage with expert researchers and community leaders to develop proposals to address climate change. The Collaborative Masters Program in Applied Sustainability offered by the Faculty of Engineering and Applied Science is an innovative program exposing students to the implementation of sustainable engineering solutions with a multidisciplinary focus on both technical education and public policy impacts.



Queen's Art of Research Submission: First Emergence by Ivana Schoepf, Postdoctoral Fellow (Biology), Queen's University Biological Station

Community impact

Promoting preservation in our campus and community

Queen's students, staff, and faculty participate in many events connecting with the Kingston community throughout the year on the importance of environmental sustainability, from student-led initiatives including the Queen's Sustainability Conference and the <a href=Queen's Conference on Ocean Sustainability, to sponsorship of the Kingston Climate Change Symposium.

Working in partnership

Queen's has formed a <u>Campus and Community Engagement</u> <u>Sustainability Sub-Working Group</u> to champion sustainability-focused innovation and create a unified sustainability culture. Members include local sustainability leaders, municipal representatives, and partner educational institutions, along with Queen's students, staff, and faculty. Goals include leading the development of collaborative sustainable practices that enable the exploration of opportunities and implementation of actions to foster transformative social change with local impact.

Queen's Art of Research Submission: *Research in the Rain* by Emily Mendelson, Alumni (Biology), Queen's University Biological Station

Sustainable Development Goals by the numbers:



30% of the university's electricity was from low carbon sources for the 2021 academic year.



Queen's was awarded the

2021 Greatest Overall Greenhouse

Gas Emissions Education Award

from Sustainable Kingston for
reducing the university's emissions
by 6,023 tonnes.

Global reach

Global cooperation on climate change

Queen's is a member of <u>several global networks</u> with common interests in advancing sustainability and the Sustainable Development Goals. From regional organizations such as the Council of the Great Lakes Region, to the national Sustainable Development Solutions Network Canada, and the global University Climate Change Coalition and the Matariki Network of Universities, Queen's collaborations will help further the impact of our research and innovation for sustainable development.



Queen's Art of Research Submission: *Shattered Planet* by Allen Tian, PhD Student (Biology), South Frontenac County, Ontario

Administration and operations

Fighting climate change through responsible investing

Queen's pension plan, the University Pension Plan Ontario (UPP), announced a formal commitment and action plan to achieve net-zero portfolio emissions by 2040 or sooner, with an emphasis on decarbonizing the real economy through the UPP Climate Action Plan.

In signing on to the Climate Charter for Canadian Universities, Queen's also made a Responsible Investing Commitment that aligns with international standards, including the UN-supported Principles of Responsible Investment. The university has also adopted recommendations by the Board of Trustees' Climate Change Action Task Force which mandates responsible investing for Queen's portfolios.



Queen's aims to become carbon neutral by 2040.



Our pledge for carbon neutrality

Queen's has signed the University and College Presidents' Climate Change Statement of Action for Canada, pledging to reduce greenhouse gas emissions and enhance research and curriculum in the areas of climate change and sustainability. As part of this commitment, we developed our **Queen's Climate Action Plan** (CAP), which aims to reduce GHG emissions by 70% from 2008 levels by 2030 and achieve carbon neutrality by 2040.

SDG 14: Life Below Water

Conserve and sustainably use the oceans, seas, and marine resources for sustainable development



Research and innovation

Understanding our rivers and lakes

Our state-of-the-art <u>Coastal Engineering Lab</u> is the largest hydraulics laboratory in Canada. It is also one of the premier facilities for fundamental and applied research and education on a broad range of water issues, and especially in the fields of river engineering, lake dynamics, coastal engineering, water supply systems, and landslides.

Maintain local ecosystems and their biodiversity

Located on the shore of scenic Lake Ontario and adjacent to the wetland-rich UNESCO world biosphere reserve of the Frontenac Arch, Queen's University is ideally situated for research into freshwater ecology. The members of our Freshwater Fisheries and Aquatic Sciences Research Group conduct exciting research on a wide array of topics including zooplankton ecology, population biology, ecotoxicology, paleolimnology, invasive species, fish physiology, and reproductive biology.

Our <u>Paleoecological Environmental Assessment and Research</u>
<u>Laboratory</u> (PEARL), co-led by Dr. John Smol, former Canada
Research Chair in Environmental Change, monitors inland aquatic
systems using paleolimnology – a multidisciplinary science that uses
physical, chemical, and biological information preserved in sediment
profiles – to reconstruct past environmental conditions.



Coastal Wave Pool at Queen's Click to Watch



Queen's Art of Research Submission: *Vulnerable* by Matthew Duda, PhD Student (Biology), Witless Bay Ecological Reserve, Newfoundland and Labrador

Cross-border collaborative research

A number of Queen's faculty members are part of the <u>Great Lakes</u> <u>Research Consortium</u>. The group, which includes 18 universities in New York and Ontario, are conducting research to improve the understanding of the Great Lakes ecosystem.

Teaching and student life

Developing future leaders

<u>LEADERS-CREATE</u> is an NSERC-funded graduate program at Queen's to educate future leaders in water and watershed sustainability. Students engage with leading experts and researchers with an interdisciplinary focus on knowledge mobilization and training related to policy, risk assessment, and integrated management of watersheds.

Field studies

The <u>Kennedy Field Station</u> (KFS) is a multi-use, watershed facility located in Eastern Ontario on the Salmon River, an important tributary to the Great Lakes. Managed by the Department of Civil Engineering, it serves as an important research centre for our students and as an outreach tool for the university and our partner organizations.



RBC Queen's University Water Initiative Click to Watch

Understanding how clean water affects human health

Water has a direct impact on the sustainability of communities. Our Graduate Diploma in Water and Human Health, offered through the Beaty Water Research Centre, teaches students to critically evaluate water issues, and identify key aspects of concern to human health. It also explores water regulations and policies around the globe.

0

Graduate Diploma in Water and Human Health Click to Watch

Community impact

Spreading the word about the importance of clean water

The Beaty Water Research Centre (BWRC) <u>Great Lakes Water Festival</u> is an annual awareness event that engages hundreds of grade four students from the community in activities that demonstrate the critical importance of water in their daily lives.

Public sustainable fishing programs

Queen's organizes various public events to promote the sustainable management of fisheries, aquaculture, and tourism. Our annual **Elbow Lake Centre Public Outreach Events** include Family Fishing Day in July and Family Ice Fishing in the winter, where participants can learn from fish biologists about fishing techniques and the importance of catch and release.

Our <u>Freshwater Fisheries Conservation Lab</u> also offers multimedia resources for the public and for anglers on everything from how to tell the age of a fish to keeping fish in good health.

Exploring local lakes

We encourage visitors to explore and discover the diverse ecology at our Elbow Lake facilities. The Elbow Lake Trail Guide App helps visitors learn about the wetlands' environmental features and identifies points of interest along the several kilometres of walking trails.

Global reach



Queen's Art of Research Submission: *Under the Glacier* by Dr. Alexander Braun, Faculty (Geological Science and Geological Engineering), Great Aletsch Glacier, Valais, Switzerland

Accelerating water innovations

Queen's is a proud member of the <u>Ontario Water Consortium</u>, which is dedicated to researching and advancing the commercialization of innovative water technologies across our province.

Partners in protecting Canada's oceans

As a member of <u>Canada's Ocean Supercluster</u>, Queen's is working with other leading industry and academic institutions across the country to solve our ocean challenges and to sustainably grow Canada's ocean economy.

Administration and operations

Sustainable seafood

Fish stocks around the world are plummeting. To help reduce global overfishing, all seafood sold or served on campus is sustainably harvested.

SDG 15: Life on Land

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Research and innovation

Canada's largest inland field station

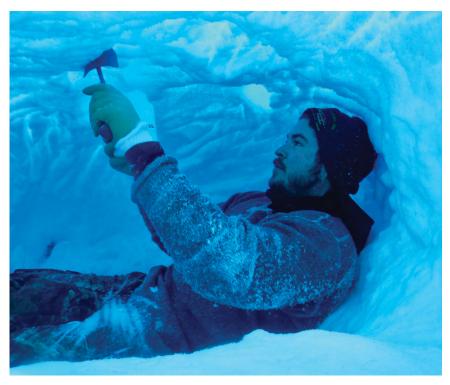
For almost 70 years, students have collaborated with international researchers at the **Queen's University Biological Station** (QUBS), one of the premier scientific field stations in Canada. Teams conduct leading-edge research and participate in courses spanning ecology, evolution, conservation, geography, and environmental science. For example, researchers have access through the **Fowler Herbarium** to more than 140,000 plant specimens from Kingston and surrounding areas, the Canadian Arctic, and Russia dating back to the mid-1800s.



The <u>QUBS Mandate</u> focuses on providing opportunities for teaching and research in biology and related sciences. It also promotes using active stewardship and best management practices to conserve local terrestrial and aquatic environments, and biodiversity. QUBS offers several different programs through the <u>Elbow Lake Environmental</u> <u>Education Centre</u> and <u>Eco-Adventure Camp</u> that complement the Ontario Kindergarten to Grade 12 curriculum and provide opportunities for students to explore and measure local biodiversity through field-based scientific investigation.

Tracking polar bears

Polar bears have seen their ecology markedly impacted by climate change. Queen's researchers Stephen C. Lougheed, Peter Van Coeverden de Groot and Graham Whitelaw received government funding to monitor the impacts of environmental change on these majestic creatures. Their project, **BearWatch**, combined cutting-edge genomics with Inuit traditional knowledge to develop a non-invasive biomarker toolkit and community-based monitoring program.



Queen's Art of Research Submission: *Polar Bear Denning* by Scott Arlidge, Graduate Student (School of Environmental Studies), Coral Harbour, Nunavut

Community impact

Consulting with Indigenous communities

Given Queen's historical connection to Anishinaabe and Haudenosaunee territories, the university is committed to strengthening connections with local Indigenous communities. Our partnerships with Indigenous communities and organizations are an essential asset in developing our Indigenous-focused academic programs, research, and policies at Queen's.

The <u>Indigenous Community Research Partnerships</u> (ICRP) is an online, open repository of educational resources authored by Queen's Group for Ethics and Engagement in Indigenous Community

Research Partnerships and designed to assist researchers who are new to research with Inuit, Métis, and First Nations communities, or who are researchers-in-training. The training resources will operationalize required regulatory policy requirements and research directives, ensure equitable inclusion of Indigenous and Western-oriented knowledge in research systems, and, in the case of Indigenous-specific enquiry, to privilege or give primacy to Indigenous ways of knowing and doing.

Partnering with the City of Kingston to promote sustainability

We are honoured to partner with <u>Sustainable Kingston</u>, one of seven Green Economy Hubs in Ontario. The collaboration allows Queen's to join a supportive network of local organizations that set and achieve sustainability goals on measuring, reducing, and setting targets on carbon footprints. Recently, Sustainable Kingston awarded Queen's with the <u>2021 Greatest Overall Greenhouse Gas Emissions Education</u> Award for reducing the university's emissions by 6,023 tonnes.

Celebrating sustainability in our community

Queen's hosts a series of events in the Kingston community as part of our <u>Sustainable Living Series</u>. The events include workshops, tips, and inspiration for going green, including sessions on sustainable cooking, reducing your home's carbon footprint, and more.

Global reach

Urban planning beyond our borders

The <u>School of Urban and Regional Planning</u> collaborates with public and private organizations across Canada and the world to exchange ideas and develop ongoing research and training programs that aim to meet the challenges of a rapidly evolving urban environment.

Across the ocean, into the forest

On the grounds of Queen's UK campus, <u>Bader College</u> at Herstmonceux Castle in East Sussex, England, sustainability and biodiversity are combined to help nurture and preserve the natural environment, while providing a living lab for students, staff, and members of the public. <u>Sustainability and biodiversity initiatives</u> have been incorporated into student programming, public events, and estate management as they implement strategies and practices to rewild the grounds.



Indigenous Community Research Partnerships Click to Watch



Master of Urban and Regional Planning Click to Watch



Administration and operations

Protecting birds on campus

When a Queen's student presented research on bird collisions on campus, the Office of Sustainability installed **collision reduction film** on campus windows. Combining research with sustainability, the installation has brought people from across the university together to protect the local environment.

Sustainable use of campus land

Development is a major threat to wildlife habitats. Our <u>Campus</u> <u>Master Plan</u> calls for the conservation, restoration, and sustainable use of terrestrial ecosystems associated with the university and identifies stringent conditions for new developments on campus.





Queen's loves local food! 42% of our campus food purchased between May 2021 and April 2022 came from producers and suppliers within 500 km. Our goals in action

SDG 16: Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels



Research and innovation

Research expertise

The <u>Institute of Intergovernmental Relations</u> is Canada's premier university-based centre for research on federalism and intergovernmental relations, both in Canada and in countries around the world.

Research that shapes public policy

The John Deutsch Institute for the Study of Economic Policy in the Department of Economics informs policymaking in Canada and abroad by focusing on policy-relevant research in economics and related fields.



Teaching and student life

Educating current and future leaders

The one-year, multidisciplinary Master of Public Administration (MPA) program has been preparing full-time students to enter leadership roles in public service and policymaking for more than 35 years.

<u>Queen's Model Parliament</u> (QMP) is the oldest and largest model parliament in Canada. A student-led event that attracts upwards of 300 Queen's students from across all faculties, QMP is held in Canada's House of Commons where students experience the legislative process by forming political parties, running for government, drafting bills, and debating these bills on the floor.

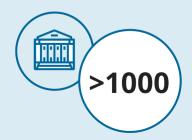


Queen's Master of Public Administration (MPA) Program Click to Watch





The Alma Mater Society of Queen's University (AMS), as our undergraduate student government is called, is one of our university's key distinguishing factors. AMS is responsible for many of the services and opportunities available on campus and represents the needs of the students to university administration.



More than 1000 alumni from the Professional Master of Public Administration (PMPA) have gone on to senior roles at all levels of government.



The Alma Mater Society of Queen's University (AMS) is Canada's oldest undergraduate student government.

Community impact

Forging a partnership

Queen's University is located on traditional Anishinaabe and Haudenosaunee Territory, in the heart of Kingston, Ontario. The university's impact in the local community and beyond is felt across a range of dimensions: economically, socially, and culturally. This impact happens when Queen's works intentionally with community partners to advance wellbeing, bring innovations to market, and build a stronger community. The **Economic and Community Impact Study of Queen's University** prepared by Deloitte reports on our impact to the region's economy, as well as the many tangible impacts to the quality of life in the community that cannot be expressed in strictly economic terms.

Serving our community

Queen's Legal Aid provides a wide range of free legal services, including attending courts and tribunals, to low-income residents of Kingston, Napanee, and surrounding areas, and to Queen's University students. From Criminal Court to Small Claims Court, and from hearings before the Social Benefits Tribunal, the Human Rights Tribunal of Ontario, and the Landlord and Tenant Board, Queen's Legal Aid is able to provide excellent representation to eligible clients.

Global reach

Supporting those affected by war, conflict, and political instability

The <u>Principal's Global Scholars and Fellows Program</u> offers support through sanctuary and assistance for students, postdoctoral fellows, and faculty members forcibly displaced by conflict, political instability, violence, and persecution.

Queen's is a member of <u>Scholars at Risk</u> (SAR), an international network of institutions and individuals working to protect scholars facing threats to their lives, liberty, and wellbeing. Our SAR Committee oversees the implementation of SAR activities with the purpose of ensuring consistency, transparency, and quality of its activities while fostering an environment of global cosmopolitanism, and global citizenship at Queen's that protects and encourages academic freedom. Initiatives include hosting our first <u>Artist</u> <u>Protection Fund Fellow in residence</u> in 2021 with support of the Artist Protection Fund and a generous donation from alumni.



Partnering for a Prosperous Economy Click to Watch

Administration and operations

University governance measures

The Queen's **Board of Trustees** is the university's highest governing body and is responsible for the overall operations of the university. It includes elected representation from undergraduate and graduate students, faculty, and staff.

Diversity at the university's highest levels

The Board of Trustees' <u>Diversity</u>, <u>Equity</u>, <u>Inclusion</u>, <u>and</u> <u>Indigenization Action Plan</u> instructs the Board to consider diversity and inclusion in its own composition and that of its working groups. It also requires the consideration of diversity in all its mandates and policies.

Commitment to free speech

Queen's <u>Free Expression Policy</u> protects free speech on campus. It includes the right of any person, group, or community to communicate opinions and ideas without interference, censorship, or sanction, including the right to engage in peaceful protest about the content of the free expression of others.





Our goals in action

SDG 17: Partnerships for the Goals

Strengthen the means of implementation and revitalize the global partnership for sustainable development



Research and innovation

International scope

Queen's is home to <u>internationally recognized researchers</u> exploring a range of environmental topics including climate change, renewable energy, and water. The <u>Queen's University</u> <u>research centres and institutes</u> work collaboratively with each other and with international organizations to develop best practice around contributing to the United Nations' Sustainable Development Goals.



Queen's Art of Research Submission: *Researchers at Offroad Robotics* by Heshan Fernando, PhD Student (Mechanical and Materials Engineering), Ingenuity Labs Research Institute

Sustainable Development Goals by the numbers:



Queen's has 24 institutional and faculty-based research centres pursuing research that addresses grand challenges and societal issues of national and international scope.

Capturing the Art of Research

From photos depicting the nanoscale to the freezing landscape of the Arctic, the annual <u>Art of Research photo contest</u> takes us behind the scenes of the everyday research experience at Queen's. The 2022 contest introduced five new categories inspired by the UN SDGs to shine a spotlight on the intrinsic connection between research and social impact.



Queen's Art of Research Submission: *George Konana Collecting Ice* by Saskia de Wildt, PhD Student (School of Environmental Studies), Gjoa Haven, Nunavut

Teaching and student life

Educating responsible leaders of tomorrow

The world needs leaders who are passionate about making a change and are ready to tackle challenging issues. The <u>Smith School</u> <u>of Business Certificate in Social Impact</u> integrates social impact approaches into core business strategies and business models to inform the next generation of change leaders. Students have the opportunity to engage with industry leaders who are advancing social impact and grow their network through events offered through the Centre for Social Impact.



Experiencing Queen's Global Summer

Launched in 2022 by the Faculty of Arts and Science,

Queen's Global Summer is a six-week program focused on the

UN SDGs, offering a selection of cross-disciplinary courses, events,
research showcases, and professional development opportunities.

Students also participate in the program's flagship course, Global
Goals: Introduction to the Sustainable Development Goals (QGSP
200), featuring guest lectures from Indigenous Elders and leading
experts across Arts and Science. The capstone group project
had students partner with community organizations to support
local initiatives related to sustainable living and commuting,
food security, and energy conservation.



Queen's Global Summer Click to Watch

Community impact

Strengthening the community around us

We are passionate about volunteering in the community to advance a more sustainable world. Principal Patrick Deane is a <u>Cabinet Member</u> <u>of the United Way</u> and also the Sector Chair for Education, working to strengthen our community and facilitate change. Annually, Queen's students, staff, and faculty <u>raise more than \$1,000,000</u> in support of underserved local populations.

Action and awareness

Along with other University Global Coalition members, Queen's participated in the <u>UN SDG Action and Awareness Week</u> through several events and activities that showcased student initiatives and highlighted collaborations between faculty, staff, alumni, and students in responding to these global challenges. The <u>Queen's SDG Student Hub</u> hosted a virtual speaker series led by Queen's faculty, staff, students, and Kingston community leaders on the topics of SDGs 1, 11, and 13 and demonstrated how participants can get involved in SDG action locally.



Kingston is Home
Partnering for a Strong
and Caring Community
Click to Watch

Global reach

Collaborating to advance UN Sustainable Development Goals (SDGs)

Queen's participates in cross-sectoral events with both government and non-governmental organizations (NGOs) to <u>tackle the UN SDGs</u>. We have direct involvement in national government SDG policy development, including identifying challenges, developing strategies, and enabling adaptive management.

Queen's students also participate in efforts to advance SDGs through educational initiatives, volunteering, research programs, and student-led clubs and associations.

Shaping the future of sustainable finance

The <u>Institute for Sustainable Finance</u> is a multidisciplinary network of researchers, private sector leaders, and government policymakers working together to shape Canada's innovations in sustainable finance.

The Institute has launched the refreshed <u>Capital Mobilization Plan</u> <u>for a Canadian Low Carbon Economy</u>. The landmark research highlights that cooperation between the public sector, private sector, and financial system is critical to securing investments needed to meet Canada's 2030 climate targets.

Shaping public policies that impact Canadians

Queen's faculty and students provide expert advice to local, regional, and national governments through committee participation and provision of evidence. Our support helps to ensure better-informed and more effective public policies.

The <u>Canadian Science Policy Conference</u> brings together over 900 research, industry, and government leaders to discuss how to bridge the gaps between their sectors. At the 2021 event, Queen's was a co-sponsor and hosted a panel on the role of Small Modular Reactors (SMRs) in Canada's energy transition with team leads from New Brunswick Power and Natural Resources Canada.



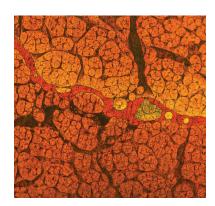
"[The SDGs] provide a shared language which helps universities in diverse geographical, political, and socio-economic locations understand and build upon the commonality of their work in both teaching and research."

Patrick Deane

Principal and Vice-Chancellor



Magna Charta Universitatum 2020 and Queen's University Click to Watch



Queen's Art of Research Submission: Copper Oxide Growth Patterns by Jeffrey Wang, Graduate Student (Mechanical and Materials Engineering), Queen's University

Administration and operations

Advancing our contributions to the SDGs

Brainstorming on future opportunities, nearly 300 members of the Queen's community participated in a <u>17 Rooms</u> event in June 2021 focused on how the university could mobilize the SDGs in significant and innovative ways. A fast-paced exercise used by institutions worldwide, the 17 Rooms event brought staff, faculty, and students together to raise awareness about the SDGs. The sessions highlighted potential avenues for SDG action, some of which have already inspired and will continue to shape university initiatives.

We are extremely proud to be <u>ranked in the top ten globally for the second straight year</u> for advancing the United Nations' Sustainable Development Goals, according to the Times Higher Education (THE) Impact Rankings. However, we are not content on resting on our laurels. We are committed to continuing to advance our work around each of the SDGs, to promote meaningful education on these goals across the university, as well as in our city and beyond our borders. This report complements over 15 annual reports produced by various units and departments across the university that provide evidence of our contributions to sustainability and social impact through efforts in research, teaching, and outreach.



Learning for Impact
Click to Watch



Our progress

The Times Higher Education Impact Rankings are the only global performance tables that assess a university's societal impact towards the United Nations' SDGs. In May 2022, THE revealed that Queen's had placed seventh in the world in the 2022 Impact Rankings. Learn more about the rankings and Queen's performance by visiting queensu.ca/social-impact





llustrating Queen's social impact

THE Impact Rankings submission measure Queen's overall contribution to global sustainability.



What are the United Nations' SDGs?

Universities draw upon global framework to boost social impact of learning, research, and outreach.



Transforming the global academy

Principal Patrick Deane on how the SDGs are helping break down silos, provoke dialogue, and unite us all in a common global purpose.

Our future

Our promise

We're committed to advancing outreach, research, teaching, and stewardship activities that align with the United Nations' Sustainable Development Goals and tackle some of the world's most urgent challenges – from climate change to hunger and poverty.

To track our continued progress, we'll continue to participate in the annual Times Higher Education Impact Rankings, a global ranking that captures the role of universities in delivering on social impact and sustainability.

We encourage you to visit and explore some of the resources showcasing Queen's actions and initiatives advancing these global goals:

Queen's actions and initiatives

Queen's Gazette

<u>News and updates</u> on our latest initiatives advancing sustainability and social impact.

Sustainable Queen's

<u>Sustainable Queen's</u> is a dynamic community, bringing together campus and Kingston partners pursuing climate action and sustainability efforts in all their forms.

17 Rooms at Queen's

The <u>17 Rooms</u> event at Queen's is a fast-paced, brainstorming approach to generating awareness of and action on the United Nations' Sustainable Development Goals (SDGs).

Sustainable U

<u>Queen's Housing and Ancillary Service</u> is committed to helping protect our community and environment.

