

McMaster's Sustainability Strategy

FOCUSED ON A
**BRIGHTER
WORLD**

A Living Laboratory for Sustainability: 2022-**26**



Table of Contents:

Land Acknowledgement	3
Welcome from McMaster's President	4
Process	5
Survey Results	6
A Living Laboratory for Sustainability.....	7

STRATEGIC DRIVER 1:

Culture Focused on Sustainability

Leadership and Vision	10
Communications	10
Strategic Partnership and Continued Engagement	11
Learning and Development	11

A Message from McMaster's Provost and Vice-President, Academic	12
---	----

STRATEGIC DRIVER 2:

Teaching, Learning and Research

Sustainable Research	14
Interdisciplinary Learning	14
Campus as a Living Laboratory	15
Digital Environment	15

A Message from McMaster's Vice-President, Operations and Finance	16
---	----

STRATEGIC DRIVER 3:

Self-Sustaining Campus and Sites

Active and Alternative Transportation	18
Eco Parks and Greenspace	18
Health and Well-being	19

STRATEGIC DRIVER 4:

Operational Excellence

Sustainable Infrastructure, Energy and Water	21
Waste	21
Responsible Investing and Sustainable Procurement	22
Metrics	22

Sharing Progress and United Nations Sustainable Development Goals (UN SDGs)	23
--	----

This page: McMaster campus foliage in the summer.

Front cover: Adding bamboo to the one of the many solitary bee homes on campus. Solitary bees use the bamboo to lay their eggs.



Land Acknowledgement:

McMaster University recognizes and acknowledges that it is located on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the Dish With One Spoon wampum agreement.

President's Letter

Transforming McMaster's campus into a **living laboratory for sustainability, accessibility, and inclusion** is a university priority.

This was clear from the many discussions I engaged in to develop McMaster's institutional priorities and strategic framework in 2020.

To lead by example and respond to our community, McMaster is determined to address some of the most pressing challenges facing our planet, including those concerning sustainability in all its forms.

McMaster's first university-wide Sustainability Strategy aligns with our vision to advance human and societal health and well-being. To develop this strategy, we engaged our community, asking them to provide input and feedback on how we can become a living laboratory for sustainability.

The four strategic drivers in McMaster's Sustainability Strategy were developed via cross-campus collaboration in light of McMaster's responsibility to address the **United Nation's Sustainable Development Goals (UN SDGs)** across disciplines, faculties, and units. The strategy includes ways to build a culture of sustainability and create a more self-sustaining campus. This strategy focuses on carbon reduction, energy and waste management, with the ultimate goal of being a carbon-free campus. Sustainability-centred research and learning opportunities are integral to this strategy's success.

In the coming years, there will be lot of work to do together to ensure this strategy comes fully to life. Part of this involves strengthening existing ties and developing new relationships.

Listening to the voices of our community helped us develop principles to guide this strategy, and these include looking through a lens of Indigeneity, and focusing on equity, diversity, accessibility, and inclusion in our sustainability efforts. We must strive to collaborate across our university, continue to listen and seek feedback, and set ambitious, time-bound goals. We will measure our progress and share it with our community. This is our collective commitment.



David Farrar
President and Vice-Chancellor



David Farrar, President and Vice-Chancellor, McMaster University.

Sustainability Strategy Development Timeline

**Summer
2021**

Engagement begins

The Office of Sustainability holds interviews with 130 McMaster community members, conducted over 89 engagement meetings with student groups, faculty members and staff. In alignment with the President's Strategic Priorities Framework, they provide feedback on how McMaster can transform into a living laboratory for sustainability.

**Fall
2021**

Call to shape the sustainability strategy

A digital survey is shared with the McMaster community, including all students, faculty members and staff. The survey seeks to clarify potential elements of the strategy based on the feedback from the previously held interviews. Over 2,600 responses come in.

Test and reflect

All information collected is distilled into strategic drivers and themes. Students, faculty members and staff participate in focus groups to test, explore, and revise the strategy. Feedback is incorporated and the strategy takes shape.

**Winter
2022**

Stamp of approval

Review by McMaster University leadership and Board of Governors.

**Spring
2022**

Strategy Launch

McMaster's inaugural, university-wide Sustainability Strategy is shared with the community.

**2022 to
2026**

... and Beyond

Some of the strategic drivers will include themes where goals could be set and achieved in the time period of this strategy. Others will require continuous effort moving forward. Future timelines will be shaped and shared in upcoming annual sustainability reports.



McMaster's has 200-plus water stations on campus, diverting over 20 million plastic bottles from landfill.

Survey Results

A digital survey was developed by the Office of Sustainability and coordinated with the Office of Institutional Research and Analysis. The survey collected the experiences and opinions of the university community with respect to McMaster's sustainability efforts to help inform McMaster's inaugural Sustainability Strategy.

The survey was administered from October 14th, 2021 to November 8th, 2021 and it was directed to students, faculty members and staff at the university. The collective number of completed surveys was over 2,600.

The results showed that students, faculty and staff care strongly about sustainability issues, with most respondents indicating that they would like to be more involved with sustainability efforts and initiatives on campus. Students felt less aware of sustainability activities both on and off campus, as well as sustainability-focused research on campus.

The survey measured awareness about academic and non-academic sustainability activity at McMaster. Students indicated that they are more aware of sustainability-focused academic courses and less aware of non-academic sustainability activity on campus and sustainability-centred research. Faculty members and staff indicated that they are generally aware of sustainability activities that are academic, research or campus related.

A general theme for barriers to full participation in sustainability efforts at McMaster was not knowing enough about these activities, not having enough time or resources to participate, or being unsure who to contact to get involved.

Overall, the survey results indicated that the top drivers of sustainability are:

- ★ Sustainable infrastructure, energy, and water
- ★ Waste management
- ★ Community engagement
- ★ Biodiversity maintenance and protection
- ★ Responsible investing (such as decarbonization, divestment and alignment with UN SDGs)

Students, faculty, and staff members were aligned in their selection of top drivers for a sustainable campus.

The sustainability strategic drivers that survey respondents indicated are of most significance are indicated in this report with a star symbol.

A Living Laboratory for Sustainability

These guiding principles are the foundation of our strategy and will be interwoven throughout the strategic drivers. The icons on this page will act as a visual reminder of the guiding principles and appears on every page describing the drivers.

GUIDING PRINCIPLES

In the summer of 2021, engagement sessions took place with various student, faculty, and staff from across the campus community and from this a set of principles to help guide the strategy were developed.

In an open survey, the majority of students, faculty and staff who responded agreed with the proposed guiding principles.

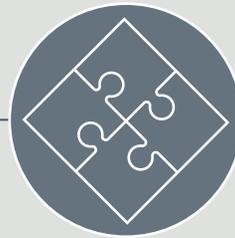
The following principles will guide us as we transform our campus into a living laboratory for sustainability:



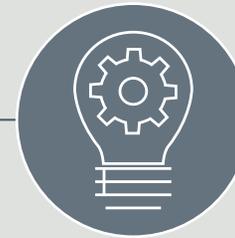
We look through a lens of Indigeneity in our sustainability efforts



We focus on equity, diversity, accessibility, and inclusion in our sustainability efforts



We see sustainability work as a collaborative, evolving effort



We strive for innovative solutions tailored to our community



We share and recognize our sustainability progress and achievements across our community

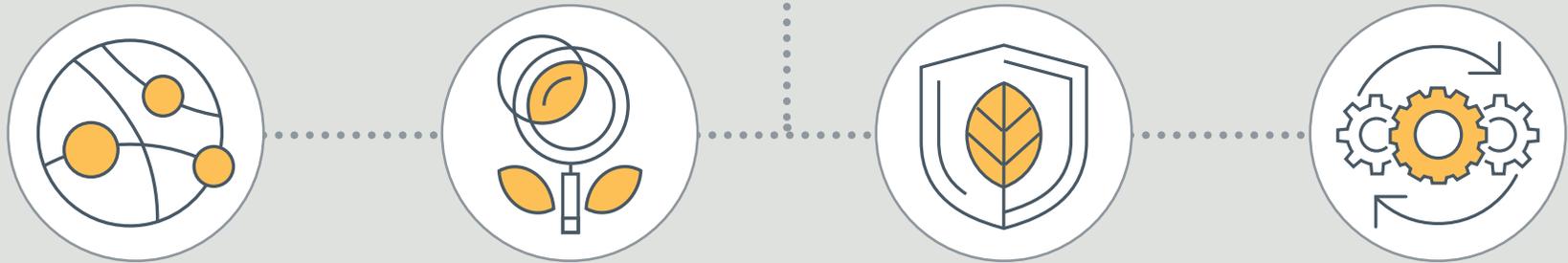
McMaster's Sustainability Strategy 2022-2026:

A LIVING LABORATORY FOR SUSTAINABILITY

GUIDING PRINCIPLES



SUSTAINABILITY STRATEGY



STRATEGIC DRIVER 1:
**Culture Focused on
Sustainability**

STRATEGIC DRIVER 2:
**Teaching, Learning
and Research**

STRATEGIC DRIVER 3:
**Self-Sustaining
Campus and Sites**

STRATEGIC DRIVER 4:
**Operational
Excellence**

STRATEGIC DRIVER 1:



Culture Focused on Sustainability

An abundance of initiatives are already occurring across McMaster by students, faculty members, and employees to promote sustainability. McMaster plans to grow its commitment to collaborating across the entire campus to promote a culture of sustainability. With feedback from the community, McMaster identified the following areas to focus our actions:

**Leadership and Vision
Communications**

**Strategic Partnership and
Continued Engagement**

Learning and Development



Culture Focused on Sustainability



President David Farrar giving remarks at the launch of the Indigenous Education Council and McMaster Indigenous Research Institute's Strategic Direction Plan on National Day for Truth and Reconciliation, September 30, 2021. From left to right: **Bernice Downey**, Associate Dean, Indigenous Health; **Tracy Bear**, Director of the McMaster Indigenous Research Institute; **David Farrar**, President; **Randy Jackson**, Assistant Professor, School of Social Work.

Leadership and Vision

McMaster's leaders have prioritized sustainability. Their vision, support, and partnership are a key element to this strategy's success. As part of this McMaster will:

- Create pan-university strategic alignment and develop clear action plans.
- Implement the strategy and recognize achievements.
- Be engaged in acting as sustainability stewards.
- Align sustainability efforts with the Indigenous Strategic Direction Plan.
- Encourage dialogue and action around sustainability, accessibility and inclusion.
- Empower its community, including teams and individuals, to advance sustainability efforts across the university.
- Provide the Office of Sustainability resources to facilitate this work.
- Establish and share qualitative metrics that align with this Sustainability Strategy.

Communications

McMaster's community identified that awareness impacts individual participation in sustainability efforts on campus. McMaster will increase awareness, promotion, and celebration of sustainability efforts by:

- Developing sustainability literacy and better defining what sustainability means to McMaster.
- Creating active communication networks focused on sustainability across the university.
- Sharing sustainability-related policies and standards across the university.
- Continuing to produce an annual sustainability report sharing this strategy's progress.

Culture Focused on Sustainability



CityLAB Semester in Residence (SIR) is a unique community engagement program for students to collaborate on strategic initiatives with staff from the City of Hamilton and community partners to achieve tangible, real-world results.

Strategic Partnership and Continued Engagement

To create a living laboratory for sustainability, the university's community members will need to collaborate in new and ongoing ways. As part of this, McMaster will:

- Expand and leverage partnerships in the community and across the university.
- Explore various models to engage our community and partners in our sustainability initiatives.
- Partner with students and include the student voice.
- Recognize Indigenous knowledge and the importance of Indigenous perspectives on sustainability efforts on campus.
- Continue to engage diverse communities in sustainability decision making.

Learning and Development

To create a culture of sustainability at the university, McMaster's community has asked for opportunities to learn more about adopting sustainability-minded practices. To provide this, McMaster will:

- Provide sustainability-focused professional development opportunities to staff and faculty members.
- Further develop McMaster Continuing Education offerings related to sustainability.
- Foster behavioural changes across the university that encourage a sustainability-minded lifestyle.



A MESSAGE FROM Susan Tighe, Provost & Vice-President (Academic)



McMaster is ranked among the top 80 universities globally because of our dedication to collaborative, impactful research and world-class teaching and learning.

McMaster's **Teaching and Learning Strategy** aligns with many aspects of our first university-wide Sustainability Strategy. Both reference the importance of partnering with students, interdisciplinary learning, leveraging digital environments, and inclusivity.

Transforming our campus into a living laboratory of sustainability is named explicitly in McMaster's strategic priorities. To take part in a living laboratory we must be open to new ideas, collaborative research, and experimentation. We must develop more meaningful connections between McMaster's academic community, researchers, and students with the university's operations, administration, and physical campus, as well as with neighbouring and surrounding communities.

This strategy is an opportunity for our research and learning communities to further collaborate and address challenges related to sustainability in all its forms, including climate change, the environment, societal health and well-being. Committing to this transformation will help position McMaster as a leader in sustainability and will make a real impact on our community and beyond.

STRATEGIC DRIVER 2:



Teaching, Learning and Research

McMaster researchers are working every day to tackle the most pressing challenges facing our communities and our planet. McMaster also depends on its students to be active partners in sustainability. McMaster will support sustainable research, teaching, and learning in the following areas:

- Sustainable Research**
- Interdisciplinary Learning**
- Campus as a Living Laboratory**
- Digital Learning and Environment**



Professor **Altaf Arain**, director of the McMaster Centre for Climate Change, established Turkey Point Observatory, with its flux tower stations to examine the impacts of climate change and extreme weather events on forest ecosystems.



Biology professor **Patricia Chow-Fraser** (front), a member of McMaster's Centre for Climate Change, conducts water quality research with a student at Long Point, Ontario.

Sustainable Research

Research at McMaster will play an important role in addressing global and local sustainability challenges. Here are some of the ways McMaster's community, including students and faculty members, identified that sustainable research can be supported to have a positive impact:

- Provide more sustainability-related research opportunities for students and faculty.
- Increase interdisciplinary networking and collaboration to tackle sustainability-related challenges.
- Strengthen partnerships between the university's administration and academy on sustainability-related research that informs operational decision-making.

Interdisciplinary Learning

McMaster is dedicated to enhancing its students' ability to drive real, sustainable change through experience-based and interdisciplinary learning. McMaster community members identified the following ways the university could provide the kind of learning opportunities that will inspire the sustainability leaders of tomorrow:

- Bolster and integrate curricular, co-curricular, and extra-curricular opportunities related to sustainability.
- Increase experiential learning that exists within the surrounding community.
- Build shared resources for experiential learning opportunities.

Teaching, Learning and Research



Academic Sustainability Program students from the Solitary Bee Project and Facility Services leaders with five of the 75 bee homes installed on campus. From left: **Samara Hasan**, Science student; **Callum Hales**, Business student; **Debbie Martin**, Assistant Vice-President and Chief Facilities Officer; **Abbie Little**, Community Relations Coordinator; **Waslat Waizi**, Science student; and **Craig MacDonald**, Director of Maintenance Services.

Campus as a Living Laboratory

McMaster is continuing its commitment to creating a living laboratory where students, faculty, and staff from across campus come together to solve problems, innovate and promote sustainability. To do so, McMaster will:

- Invite all university community members to think of campus as a place to pilot new sustainability-related ideas and projects.
- Explore opportunities to share research project concepts and streamline approvals.
- Support and resource more innovative, sustainability-related student-led ideas and collaborative projects.

Digital Learning and Environment

McMaster recognizes how online and virtual classrooms have changed the teaching and learning environment for everyone. In alignment with McMaster's Teaching and Learning Strategy, the university will:

- Integrate a lens of sustainability into digital learning tools and strategies.
- Support opportunities for sustainable learning and research through the use of digital tools and infrastructure.



A MESSAGE FROM Saher Fazilat, Vice-President, Operations and Finance



This is a pivotal moment to be a sustainability-focused leader at McMaster University.

By developing the first university-wide Sustainability Strategy at McMaster, we embarked on mapping and committing to improve the ways sustainability runs through every part of the institution, from innovative teaching and research, to the campus environment and operations. This strategy is building on a strong foundation.

McMaster's first campus-wide **Sustainability Report** provided many examples of how our university has shown commitment to the conservation of natural resources, creating sustainable food systems, and responsible investments. McMaster builds and operates its campus with sustainability in mind, including water, energy, greenhouse gas (GHG) emissions and waste reduction initiatives. This strategy will increase and evolve these efforts to achieve that next level of environmental, social and economic sustainability our community requires of us.

Our university's operations and administrative teams collaborate with McMaster students on experiential-learning projects that shape our sustainability-related decisions. The work of our researchers informs how leaders think about climate change, human health and well-being, locally and around the world. We will look to this world-class knowledge and collaborative opportunities with our students, researchers, and community to help bring our Sustainability Strategy to life.

I would like to thank those involved in the development of this inaugural strategy, including the team members from the Office of Sustainability in Facility Services, members of the McMaster Sustainability Advisory Council, and the many other students, faculty and staff members who provided input and feedback during this process.

McMaster campus
in the springtime.

STRATEGIC DRIVER 3:



Self-Sustaining Campus and Sites

McMaster is recognizing the interconnectedness between the health of the environment and the community's well-being. To create a self-sustaining campus, McMaster will focus on:

- Active and Alternative Transportation
- Eco Parks and Greenspace
- Health and Well-being



Self-Sustaining Campus and Sites



Bike repair station on McMaster campus.

Active and Alternative Transportation

McMaster intends to support students, faculty members and staff in choosing active and alternative modes of transportation:

- Further develop the multi-modal transportation systems that connect to campus.
- Gather data on work-related transportation behaviour.
- Promote inclusive, alternative and active modes of transportation.
- Keep inclusive, active and alternative modes of transportation top of mind when developing McMaster's next Campus Master Plan.

Eco Parks and Greenspace

McMaster's commitment to greenspace goes beyond our 300-acre campus. To preserve natural lands, McMaster will:

- Coordinate and partner with our neighbouring ecological stewards.
- Promote healthy ecosystems by planting native trees and plant species.
- Protect biodiverse ecosystems within the university's natural lands.
- Explore new opportunities to include greenspace in teaching, learning and research.



Self-Sustaining Campus and Sites



An Academic Sustainability Program student at a tree planting event.

Health and Well-being

McMaster recognizes the intersection between human health and sustainability. To support well-being, McMaster will:

- Explore how greenspace can promote mental well-being.
- Respond to the ways climate change and colonization impact well-being.
- Create a strategy for self-sustaining food systems on campus, including food production via community gardens and other mechanisms, while also addressing food insecurity.
- Develop more sustainability-minded food procurement processes at our sites.



STRATEGIC DRIVER 4:



Operational Excellence

McMaster is dedicated to transforming our administrative and operational practices to be more sustainable with a focus on the following areas:

**Sustainable Infrastructure, Energy,
and Water**

Waste

**Responsible Investing
and Sustainable Procurement**

Metrics

Alvin Baldovino, Assistant Director, Engineering Operations at McMaster University on the Ivor Wynne Centre roof top with solar thermal collectors. McMaster's 60 solar thermal collectors on campus provide pre-heating to a large swimming pool area.



Operational Excellence



The Choose to Reuse takeout container program at McMaster's Hospitality Services locations encourages students, staff and faculty to participate in closing the loop while dining on campus.

Sustainable Infrastructure, Energy and Water

McMaster is focusing on carbon and energy reduction, with the goal of being a carbon-free campus. To address this, McMaster will:

- Implement a Net Zero Carbon Roadmap with options for an accelerated timeline.
- Increase use of renewable energy systems.
- Re-evaluate the way McMaster builds sustainability into our infrastructure.
- Reduce water usage across our facilities.
- Manage storm water.

Waste

McMaster is committed to reducing, reusing, and recycling waste and continuing to increase the percentage of waste diverted from landfill. To do so, McMaster will:

- Improve and standardize recycling initiatives at our sites, including traditional streams like recyclables, as well as specialized streams like IT equipment and furniture reuse and recycling.
- Educate and promote reuse initiatives at our sites.
- Expand and encourage participation in composting at our sites.



Operational Excellence



The McMaster community diverted 780 kgs of used technology from landfill through donation at the ACCESS Tech Drive in 2021. Students helped prepare technology for donation to Hamiltonian families in need.

Responsible Investing and Sustainable Procurement

McMaster University's invested asset pools each use a responsible investment strategy. Responsible investing involves the incorporation of environmental, social, and governance (ESG) considerations. The university also recognizes its responsibility to consider the social, environmental and economic implications of the goods and services purchased. To address this, McMaster is committed to:

- Decarbonization and achieving net zero for the investment pool as soon as possible.
- Sustainable procurement practices and ensuring suppliers meet our standards.
- Aligning with UN Sustainable Development Goals throughout its financial affairs processes.

Metrics

Collaborating to develop metrics that indicate our progress will be a key part of delivering on this strategy. To develop quantitative metrics that support decision-making in pursuit of more sustainable operations, McMaster will:

- Collaborate across the institution to develop and integrate quantitative sustainability metrics into operations and administration.
- Develop time-bound goals using metrics as a benchmark.
- Review and update sustainability-related policies.



Sharing Progress

McMaster University will share the progress of its Sustainability Strategy in multiple ways. Most notably, the university will continue to produce an annual Sustainability Report.

The inaugural university-wide Sustainability Report developed in 2020 offered a glimpse into McMaster's collective ambition to create a more sustainable campus and world.

The next report will make connections to this strategy and every year provide more progress on how the strategy is being implemented.

Along the way, McMaster will share accomplishments and recognize milestones by telling the stories of those who are living the sustainability strategy.

If you are interested in learning more about this strategy, wondering how to get involved, or are aware of a sustainability related story you think should be told, please connect with the Office of Sustainability at McMaster by emailing sustainability@mcmaster.ca.

Connection to United Nations Sustainable Development Goals

McMaster's Sustainability Strategy is in alignment with multiple United Nations (UN) Sustainable Development Goals (SDG). The annual Sustainability Report will detail how this strategy's progress is connected to the UN SDGs, by topic area and initiatives.



**BRIGHTER
WORLD**