



# SUSTAINABILITY STRATEGY 2019-2023





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# TRADITIONAL TERRITORIES ACKNOWLEDGMENT

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation. The University of Manitoba is committed to a renewed relationship and dialogue with First Nations, Métis and Inuit peoples based on the principles of mutual trust, respect and reciprocity.

We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of Reconciliation and collaboration.

The University of Manitoba is committed to ensuring that First Nations, Metis and Inuit knowledge, cultures and traditions are embraced and reflected in the pursuit of its mission.



# FOREWORD

## PRESIDENT'S MESSAGE



I am pleased to introduce the University of Manitoba's *Sustainability Strategy 2019-2023*. This strategy is a critical and necessary step to continue to drive the University's commitment to being a sustainability leader while recognizing the urgent need to take action. By delivering world-class teaching, learning and research, we can take the steps to protect and rejuvenate our planet and ensure no one is left behind.

Working together, our campus community has successfully advanced sustainability in a number of key areas over the last three years:

- sustainable transportation options like carpooling and active transportation routes have increased
- energy and greenhouse gas demand has decreased
- the University has achieved a gold rating through the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment and Rating System (STARS)

Sustainability is continually integrated into the University through student and staff orientation and office programs, as well as initiatives related to Indigenous

achievement, mental health and active living. As well, the University's Strategic Research Plan includes research into building sustainable systems for resilient communities through Arctic system science and technology, human rights and social justice, and sustainable food systems that will continue our contribution to building global sustainability knowledge.

Looking ahead, the actions in the *Sustainability Strategy 2019-2023* will see the creation of new opportunities to deliver social benefits for our community, encourage and maintain our position as a school and an employer of choice, and contribute to the sustainable financial management of the University. Actions like implementing an organic waste management program, creating a student sustainability ambassador program, minimizing our greenhouse gas emissions and managing our campus lands will provide both short- and long-term benefits to the University and its sustainability journey.

I would like to thank University community members for the partnerships, cooperation, creativity and dedication that have carried us this far, and to empower you all to be part of the next steps we take together.

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**David T. Barnard, O.M., Ph.D., FRSC**  
President and Vice-Chancellor

MESSAGE FROM THE SUSTAINABILITY  
COMMITTEE CO-CHAIRS



Since the creation of the University of Manitoba's first sustainability strategy in 2012, the Campus Sustainability Committee has worked to transform how we work, engage, act and play. We are pleased to now update our vision and action with the University's third sustainability strategy. It is a pleasure to see the University continue to strengthen its commitment to sustainability and to truly become part of the sustainability movement that is happening in education, corporate boardrooms and governments around the world. At the U of M, this began with early student and staff efforts to reduce waste and energy use in the 1980s and 1990s, to now having an Office of Sustainability to help guide and support our collective action in many areas of sustainability. As a result, we continue to see gains in reducing our footprint, improving efficiencies and increasing awareness of the benefits of sustainability in our campus community.

Underscoring this community effort, the University recently achieved a STARS Gold rating, an improvement over our previous Silver rating. This rating demonstrates we have realized significant achievements in the areas of academics, engagement, operations, and planning and administration, through the concerted efforts of numerous offices on campus and staff and students alike. We have seen initiatives come to fruition

such as the campus waste audit, Sustainable Transportation Strategy, Pedestrian and Cycling Plan, Biodiversity Baseline Study and Assessment and tree inventory, all of which will help to guide us in integrating sustainability into future decision-making and action. We can also look to the incredible success of projects initiated by students and supported by faculty and staff on campus, such as the student composting initiatives, campus food gardens and green space assessment, as we build on success for the future.

The partnerships that have formed and catalyzed our successes are unique to the campus environment and make opportunities for advancement through research, study and leading-edge practices one of our greatest assets. We feel that our assets and continued efforts will be particularly important in the coming years. Many feel we are at a crossroads as a society and if we do not take intensified action on complex sustainability issues like climate change, we will relegate ourselves to observers, documenting the outcomes of the impacts on natural and human systems.

Continuing to move forward will require the efforts of many to ensure enlightened decision-making and great creativity. We look forward to working with all of you on these challenges and opportunities to help advance sustainability at the University of Manitoba.

**Kristina Hunter**

Environmental Science and Studies

**John Sinclair**

Natural Resources Institute

# EXECUTIVE SUMMARY



The University of Manitoba is committed to continuing our journey to a more sustainable future, for both our University and the world. Through our teaching and innovative research opportunities, we endeavour to take action to mitigate, reverse and adapt to the impacts of climate change, help achieve the global sustainable development goals (SDGs), and advance ecological and human well-being on campus and beyond.

As the largest university in Manitoba, we acknowledge the impact we have on our environment and communities, and embrace the unique opportunity to influence and foster more sustainable behaviours, both locally and globally.

The *Sustainability Strategy 2019-2023* outlines our commitment to significant large-scale actions that will advance our approach to sustainability at the University, pushing us to be innovators; continue the progress realized through current initiatives; and further integrate sustainable thinking into all areas of the University. Building upon elements of previous sustainability strategies, our journey continues on a path to increase and enhance sustainability efforts to conserve and protect our ecological environment while increasing

human well-being on our campus and beyond.

This strategy outlines the actions we plan to take in the next five years toward climate action, resource conservation and pollution prevention; ecological systems; Indigenous achievement and resurgence; wellness and accessibility; innovation and governance; teaching and learning; and community connection and engagement. Metrics to track our performance are included to inform our progress, challenges and opportunities over the next five years.

The goals and commitments defined in this strategy will foster new learning and research opportunities, deliver social and environmental benefits for our community and contribute to the sustainable financial management of the University. The strategy guides us on a path to achieve a Platinum rating under the STARS system, to be a leader in sustainability within post-secondary institutions worldwide and to do our part in helping achieve the global SDGs agreed to by all countries of the United Nations.

Partnership, engagement and commitment from our administration, students, staff and faculty, the community, the private sector and governments will be essential to achieving the University's vision for sustainability.

# INTRODUCTION

Since the industrial revolution, our interactions with the planet and each other have changed dramatically, resulting in both social and ecological benefits but at the cost of the Earth's vitality and growing inequality. Sustainability is internationally understood to mean "meeting the needs of the present without compromising the ability of future generations to meet their needs" and today is framed by 17 global sustainable development goals (SDGs) to be achieved by 2030, as agreed to by all countries of the United Nations, for addressing people, planet, prosperity, peace and partnership.

The 2015 United Nations SDGs recognize that ending poverty, protecting the planet and ensuring all people enjoy peace and prosperity must be supported by actions and initiatives to promote economic growth, enhance our environmental protection, and address social aspects such as health, education, human rights and employment. These documents are a global call to action for us to work together to achieve greatness and ensure the health and longevity of our planet. Importantly, the latest report by the Intergovernmental Panel on Climate Change (IPCC) has outlined the urgent need to keep global temperatures 1.5 degrees below pre-industrial levels. This urgency is born out of evidence showing that the impacts of climate change not only affect the physical environment in irreversible ways but also affect the poor and vulnerable at a disproportionate rate.

The University of Manitoba's *Sustainability Strategy 2019-2023* builds upon the goals outlined in the previous sustainability strategy, providing direction and guidance





to the current and future operations of the University. The new strategy reflects priorities and initiatives guided by the Sustainability Policy, and responds to wider-reaching programs such as the Sustainability Tracking, Assessment & Rating System (STARS), used to track and evaluate campus sustainability progress; commitments outlined in the Province of Manitoba's Climate and Green Plan; and the global SDGs. The strategy acts as a catalyst for sustainability at the University while addressing the global need to take urgent action.

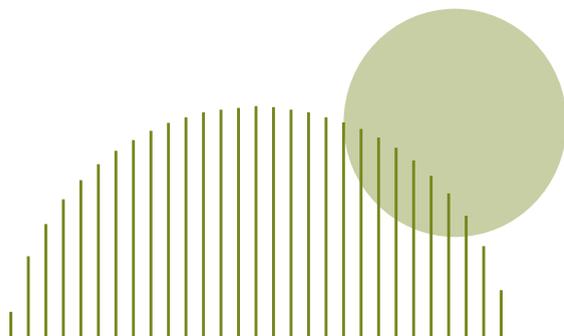
## OUR SUSTAINABILITY VISION

The U of M considers and actively pursues the ecological, social and economic aspects of sustainability through its programs and operations. Our vision for sustainability recognizes the interdependence of these three elements, understanding

the connections and effects of these relationships. Our holistic approach to the University's sustainability journey is highlighted through teaching and learning, research and community engagement that support regeneration, participation and effective use of resources. We aim to foster growth and provide opportunities in a way that our present actions will ensure future generations can achieve levels of well-being that are at least as great as those achieved now.

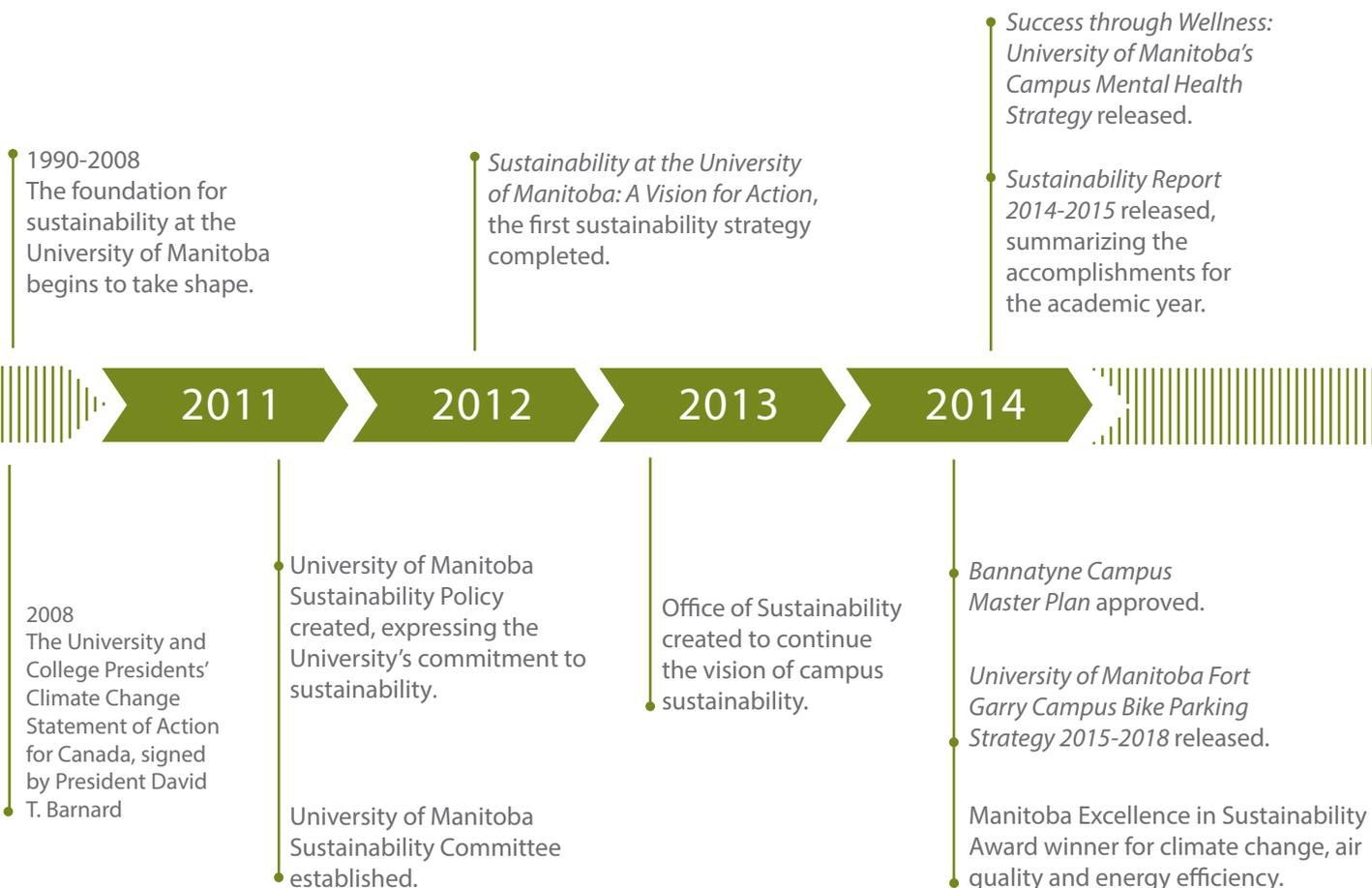
## PLANNING CONTEXT: THE UNIVERSITY AND BEYOND

This strategy supports a range of established University policies and planning initiatives, including the strategic plan and priorities for education and research, the Sustainability Policy, the Visionary (re)Generation Master Plan, the Bannatyne Campus Master Plan and the Indigenous Planning and Design Principles. In addition, this document is a continuation and renewal of previous sustainability strategies (2012 and 2016).



# OUR SUSTAINABILITY JOURNEY

The strategy represents the most recent step in our sustainability journey, building on years of work devoted to undertaking and furthering sustainability initiatives at the University. Sustainability is a journey and it is important to celebrate our accomplishments and continue to move forward.



The *2016-2018 Sustainability Strategy* saw several major sustainability-related planning initiatives undertaken and achieved, providing a strong foundation on which to improve during the time of the 2019-2023 strategy.

- *Sustainability Strategy 2016-2018* released.
- *Indigenous Planning and Design Principles* completed and adopted; implementation ongoing.
- *Visionary (re)Generation Master Plan* approved for Fort Garry campus.
- First Campus Commute Survey completed.

- *Biodiversity Baseline Study and Assessment* of the University's riparian forest completed.
- *Pedestrian and Cycling Plan* completed.
- Second Campus Commute Survey completed.
- Received Sustainability Tracking, Assessment & Rating System (STARS) Gold rating from the Advancement of Sustainability in Higher Education.
- Discussions and planning initiated for University *Green Building Strategy*.

2015

2016

2017

2018

2019

- Received Sustainability Tracking, Assessment & Rating System (STARS) Silver rating from the Advancement of Sustainability in Higher Education.
- *University of Manitoba - Strategic Research Plan 2015-2020* released.
- *Food at the University of Manitoba* report completed.

- *Campus Waste Audit* completed.
- *Sustainable Transportation Strategy 2017-2022* released.
- *Emission Inventory Report* completed.
- Updated tree inventory completed for the Fort Garry campus.

*Sustainability Strategy 2019-2023.*

# ENGAGEMENT & IMPLEMENTATION

## ENGAGEMENT

This strategy would not be possible without the valuable input from people both within and outside the University community. From informal discussions over coffee to public open-house events, the iterative and collaborative process of engagement with students, staff, faculty, administration and the surrounding community informed the content of this document.

- Architectural and Engineering Services
- Campus Planning Office
- Champions for Mental Health Committee
- Clayton H. Riddell Faculty of Earth, Environment, and Resources in-class workshops with students
- Education for Sustainability student and faculty workshop participants
- Indigenous strategy review group
- Indigenous Business Education Partners
- Operations and Maintenance
- Purchasing and Procurement Services
- Sustainability Committee
- UMSU Sustainability Working Group

A more detailed engagement report can be found at [umanitoba.ca/sustainability](http://umanitoba.ca/sustainability).



2018 engagement events

## IMPLEMENTATION, GOVERNANCE & ACCOUNTABILITY

This strategy should be considered a living document. It articulates a University-wide commitment to sustainability through which we continue to explore innovative ideas along our sustainability journey. The strategy will evolve and change over time, just as our world and environment change around us. A formal process to review the strategy and set new goals will occur every five years.

Together, the Sustainability Committee and the Office of Sustainability are responsible for the development and implementation of this strategy. The committee, established by the Vice-President (Administration) and Provost & Vice-President (Academic), is responsible for providing guidance and assistance on the implementation of this strategy, supporting the Office of Sustainability's work through its multi-stakeholder expertise and analysis.

The Office of Sustainability is responsible for project-related work on initiatives to meet the strategy's goals and commitments. It undergoes ongoing reporting to its peers (STARS), to the University community (ongoing communications and regular reporting) and to external governmental stakeholders as needed.

Supported by the Sustainability Committee, the Office of Sustainability promotes and communicates this strategy to the University community, educating and consulting with stakeholders to promote its implementation through various events and communications.

The Vice-President (Administration) and the Provost & Vice-President (Academic) are the executive officers responsible for the University's Sustainability Policy and for progress achieved through the strategy.

Various University units are responsible for a range of tasks and initiatives, specific to those units' mandates and scopes of work, associated with the goals and commitments outlined in this strategy (appendix A).



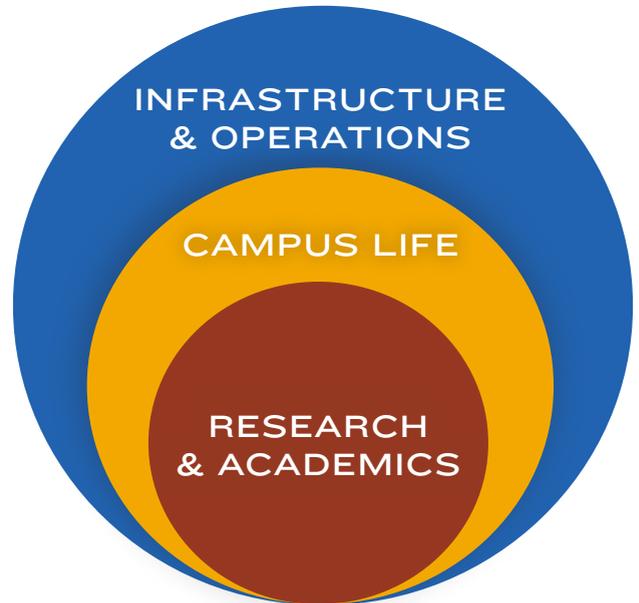
# OUR APPROACH

This strategy is sorted into Research and Academics, Campus Life and Infrastructure and Operations.

Research and Academics are at the core of the University. Campus Life activities support the student, staff, faculty and community experience on campus. Infrastructure and Operations initiatives ensure the physical structures and processes of the University are functioning to help support the campus community.

Each topic area includes goals and commitments, which represent both a continuation of priorities identified in the previous strategy, and new items identified through the engagement process.

Each commitment within the strategy also includes an icon. The icons listed below frame the timeline within which each commitment will take place. As this strategy is a living document, some of these timelines will shift as the University follows its sustainability journey.



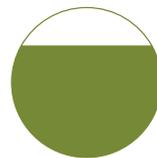
Ongoing



Complete by  
2021



Complete by  
2022



Complete by  
2023



Action taken by  
end of 2023

# RESEARCH & ACADEMICS



Reflects the central mandate of the University to preserve, communicate and apply knowledge that contributes to the well-being of our community and the world. Encompasses transformative, innovative research, and experiential learning.

## WHAT HAVE WE DONE SO FAR?

The University of Manitoba has a long and proud history of education and research for sustainable development. The University is continually working to integrate sustainability education into our teaching and research across campus.



*Sustainability Ambassadors working on disposable cup project*

- Twenty per cent of courses offered at the University of Manitoba are sustainability-related.
- Education for Sustainability Working Group created to continue integrating sustainability into teaching and learning across all faculties.
- Twenty-one Living Laboratory projects have been completed, with plans to integrate Sustainability Ambassadors into expanding the program.
- The University was named a United Nations Academic Impact Hub for its work and research related to Sustainable Development Goal (SDG) 6, clean water and sanitation.

## GOAL:

*Increase interdisciplinary, collaborative and experiential learning opportunities that address global sustainability issues such as social justice, health and well-being, sustainable food systems, agriculture and water management systems.*

## COMMITMENTS:

- ⊕ Increase staff and student engagement in research projects that address the United Nations SDGs and other sustainability projects.
- ⊕ Increase the number of living lab projects by promoting the program to the University community and encouraging new opportunities for an interdepartmental and interdisciplinary approach.

## COMMITMENTS:

- Promote and utilize the Fort Garry campus permaculture garden for experiential learning opportunities.
- Promote sustainability-related courses across all disciplines, including capstone courses, and seek to develop a specialized sustainability-themed capstone course.
- Develop and implement a strategic communication program to showcase the University's sustainability research and teaching achievements to engage the broader community in advancing sustainability locally and globally.
- Develop guidelines for University research project proposals that consider sustainability aspects such as emission reductions, green procurement and waste reduction within research activities.
- Explore the creation of a degree designation in Sustainability Studies for students in any program to be able to access.
- Create an institutional pathway for researchers and students to obtain approval where necessary and support for demonstrative research and beta testing sustainability concepts on campus.
- Investigate and create a collaborative digital platform and physical spaces to support interdisciplinary research and learning opportunities.

## GOAL:

*Explore and support the connection of Indigenous knowledges and pedagogies through research, teaching and learning.*

## COMMITMENTS:

- ⊕ Develop partnerships with Indigenous partners, faculty, staff and students, including the department of Native Studies, to highlight and increase experiential learning and research on sustainability issues.
- ⊕ Collaborate with Indigenous partners, Elders and communities in the development of course content and structure to reflect Indigenous practices and language.

## GOAL:

*Increase number of courses that collectively address sustainability as an integrated concept having social, economic and environmental dimensions.*

## COMMITMENTS:

- Create an award for sustainability teaching to celebrate the efforts and provide a cross-institutional learning framework.
- Provide resources and incentives for faculty in all disciplines to revise existing courses and create new projects that have sustainability as a core principle.

# CAMPUS LIFE



Refers to strengthening connections and relationships in order to reinforce a sense of campus community for students, faculty and staff. Extends to everyday campus experiences such as food, access and well-being.

## WHAT HAVE WE DONE SO FAR?

The University of Manitoba works to integrate the approaches we teach and the innovations we research into the day-to-day experience of campus life for students, staff and faculty. Since the *Sustainability Strategy 2016-2018*, the following initiatives have been completed:



UMCycle Bike Kiosk at Fort Garry campus

- Forty-two per cent increase in childcare spaces on campus.
- Bannatyne campus received the Fair Trade Certification, the first campus to achieve this in Manitoba.
- 20+ Green Office Representatives (GO-Reps) help educate over 700 staff in green office practices.
- UMCycle Bike Kiosk, operated by the University of Manitoba Students' Union, is available to students, staff and faculty as a full-service bike shop on campus.

## GOAL:

*Weave Indigenous perspectives and cultures into our campuses.*

## COMMITMENTS:

- ⊕ Promote increased visibility of Indigenous cultures and perspectives throughout the Fort Garry and Bannatyne campuses by supporting placemaking initiatives and ensuring that stakeholders are meaningfully involved in the design of the built environment.

## GOAL:

*Improve sustainable and active transportation modes, and advocate to support well-being, community connections and reduce environmental impact.*

## COMMITMENTS:

- ⊕ Engage City of Winnipeg, city councillors and other stakeholders on improved, strategic, transportation routes and services to enhance and support connectivity with surrounding community.

- Improve shuttle accessibility and efficiency through refined routing and scheduling.
- Create a campus bike share program.
- Continue to implement the *Sustainable Transportation Strategy*, including integrating active transportation infrastructure in existing infrastructure renewal projects.

#### GOAL:

*Enhance a sense of a sustainable campus community that supports University-wide pride, belonging, exploration, lifelong learning and sustainability ethic.*

#### COMMITMENTS:

- ⊕ Increase the number of volunteers in the Sustainability Ambassador Program, including student research projects through the Living Lab Program relative to the 2018 baseline year.
- ⊕ Build community connections through sustainable activities and events that promote engagement and action throughout the year.
- ⊕ Coordinate with campus student groups to support peer-to-peer sustainability mentoring.
- Develop a strategy for including sustainability-related information in orientation sessions and materials.
- Establish sustainability award program for staff, faculty and students.
- Conduct sustainability literacy surveys to gauge level of understanding to guide sustainability initiatives and resourcing.
- Establish 'Building Stewards' to champion localized sustainability initiatives on waste reduction and resource conservation.

- Promote the use of the Green Events Guide throughout all University events.

#### GOAL:

*Continue to enhance campus well-being by evaluating the community's needs, providing safe and accessible programs and resources to encourage self-care.*

#### COMMITMENTS:

- ⊕ Review and renew the University of Manitoba's Success Through Wellness mental health strategy by providing accessible resources for all students, faculty and staff.
- ⊕ Increase the number, quality and awareness of restorative spaces to encourage mental well-being.

#### GOAL:

*Provide healthy, nutritious and affordable food options that consider environmental and social impacts while providing culturally inclusive dietary choices.*

#### COMMITMENTS:

- ⊕ Increase the number of events, workshops and learning opportunities focused on sustainable food systems.
- Expand resources for students on campus, including extended hours for campus services such as food services, grocery and amenities.
- Pursue Fairtrade Campus Certification for Fort Garry campus.
- Increase local and sustainable food provider contracts to encourage the Food Services Committee to promote and enable access to healthy, affordable food through reporting and transparent public communications.

# ADMINISTRATION & OPERATIONS



Operational and administrative activities that support the ongoing functioning of the University through strategic planning, policy and the coordination of processes. Extends to governance, finance, buildings, transportation and use of campus lands.

## WHAT HAVE WE DONE SO FAR?

The University of Manitoba has worked to increase new green practices in many aspects of building design, infrastructure, operations and governance in efforts to reduce resource demand and improve efficiency. Since the *Sustainability Strategy 2016-2018*, the following initiatives have been completed:



*Upgraded pedestrian and cycling infrastructure*

- Indigenous Planning and Design Principles considered for all new buildings and renovations on campus.
- Biodiversity Baseline Assessment and Study to determine the health of the University's riparian forests.
- University Emissions Inventory to track greenhouse gas emissions.
- *Sustainable Transportation Strategy 2017-2022* created to guide transportation development on campus.

### GOAL:

*Increase active transportation infrastructure and enhance options for sustainable transportation.*

### COMMITMENTS:

- Continue to implement the *Sustainable Transportation Strategy 2017-2022* including pedestrian and cycling infrastructure improvements and execute renewal in 2023.
- Develop and implement electric vehicle infrastructure to support sustainable commuting and fleet options as well as provide research and learning opportunities on emerging technology.

### GOAL:

*Integrate Indigenous knowledges and perspectives into campus planning and development.*

### COMMITMENTS:

- ⊕ Continue collaboration between administrative units and Indigenous leaders, faculty, staff and Elders to implement the Indigenous Planning and Design Principles, documenting lessons learned from each project while continuing to refine the process.

## GOAL:

*Reduce greenhouse gas emissions.*

## COMMITMENTS:

- Develop green building and construction guidelines that support long-term sustainable campus development.
- Update existing University space policies and develop new space management procedures to ensure physical spaces are being used in an efficient way to minimize new buildings and optimize resource use.
- Increase efficiency in the management and procurement of campus fleet vehicles.
- Explore Net Zero approaches, methods and technologies in new construction and retrofit projects including the application of renewable energy systems.
- Create a climate action plan that includes targets for emission reductions, resilience and adaptation, and considers the financial benefits of planning.
- Reduce air travel emissions by providing infrastructure, education and support for web-based meetings and conferences, and access to carbon offsets and alternative transportation methods.
- Develop and implement a comprehensive energy master plan that considers building level and district energy systems to reduce energy while providing ongoing improvements through target-setting, monitoring and tracking

## GOAL:

*Increase collective and individual actions that promote resource conservation and waste minimization.*

## COMMITMENTS:

- Continue ongoing orientation and training on waste management, procurement and other sustainability initiatives to all staff.
- Create water management guidelines that evaluate potable water demand including process water systems and methods for reduction and reuse.
- Review and amend the University Electronics Policy (Custody and Control of Electronic Devices and Media) and process to include responsible disposal or repurposing of non-computer-related electronic waste.
- Create a campus waste management and reduction plan with specific goals and weight reduction targets that considers behavioural change, infrastructure support and single-use plastics.
- Create and implement an organic waste management program to reduce the amount of waste being sent to landfill.

# ADMINISTRATION & OPERATIONS

*continued...*



*Riparian zone at Fort Garry campus looking north over the Red River*

## **GOAL:**

*Increase the protection, management and development of natural spaces on campus to support biodiversity and ecosystem health.*

## **COMMITMENTS:**

- ③ Increase native plants and biodiversity on campus to promote natural prairie and riparian ecosystems and resource conservation.
- ③ Enhance greenhouses, campus gardens, rooftop gardens and greenspaces, both indoor and out, by examining open and underused spaces to connect the campus to our surrounding environment.
- ③ Develop an Urban Forestry Management Strategy for the Fort Garry campus that sets a framework for how trees on campus are monitored, maintained, protected, regenerated and planned for, to increase the number of healthy trees and to sustain existing canopy cover.
- ③ Create and implement the Integrated Pest Management Plan to prevent pollution and support ecological systems.
- ③ Create and implement a restoration and enhancement plan for the University's riparian zones that includes controlling invasive species and riverbank stabilization.

- Review stormwater runoff and land drainage opportunities to reduce discharge rates.
- Develop a Landscape Master Plan for the Fort Garry campus that builds upon the vision of the Visionary (re)Generation Master Plan, to create a framework for future development that preserves and enhances campus open space.
- Complete and implement the Wildlife Management Plan to support ecological systems and coexistence with species.

#### GOAL:

*Improve transparency and responsibility in University investments and governance.*

#### COMMITMENTS:

- Continue to engage in discussions with Indigenous students, faculty and staff around the promotion of Indigenous languages and the inclusion of Indigenous voices at the University.
- Continue annual reporting on Sustainability Strategy metrics.
- Create a sub-committee of the Sustainability Committee at Bannatyne campus to more directly address ideas, concerns and needs at the Bannatyne campus.
- Continue tracking sustainability progress through STARS to maintain current Gold status, and pursue opportunities to achieve Platinum rating.
- Finalize and implement a community engagement framework that ensures consultation to support sustainable decision-making within the University.
- Review and update the Sustainability Policy to reflect changes to provincial legislation and University objectives.
- Develop sustainable procurement guidelines to evaluate and prioritize products and vendors that consider life-cycle costing, social and environmental responsibility, and Indigenous criteria.
- Recognize social and environmental aspects of the University's investments by exploring a responsible investment strategy, including transparent reporting and the divestment from fossil fuel industries.
- Increase vendor accountability and responsibility to include environmental and social parameters.



*The Medicine Garden of Indigenous Learning at Bannatyne campus*

# METRICS

Key performance indicators for the *Sustainability Strategy 2019-2023* are listed below. These metrics reflect the University of Manitoba's priorities and top-line performance in key areas.

Substantial additional performance assessment was completed in 2018 and is planned to be done triennially through the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment and Rating System (STARS).

	Metric	Goal	Trend vs Baseline (%)	Annual Trend	Baseline		
RESEARCH & ACADEMIC	Total number of Living Lab projects in progress	Increase		New measure			
	Number of sustainability courses offered	Increase		New measure	2016/17	52	
	Number of courses offered that include sustainability	Increase	↑	115.0%		2013/14	439
	% of research projects addressing sustainability	Increase	↑	14%		2013/14	20%
CAMPUS LIFE	Campus shuttle utilization rate	Increase		New measure			
	Number of volunteers in the Sustainability Ambassador Program	Increase		New measure			
	Number of Green Office Representatives (GO-Reps)	Increase		New measure			
	% of UM Dining Services food that is local or certified sustainable	Increase	↑	2%		2013/14	17%
	% of vendors on campus that discount reusable containers	Increase		New measure			
	Drive-alone rate (student)	Reduce	↑	4.0%		2015/16	26.5%
	Drive-alone rate (faculty and staff)	Reduce	↓	-5.6%		2015/16	55.6%
	Cycle count numbers (% increase in ridership)	Increase		New measure			
	Self-reported mental health (survey results; % of students feeling "more than average" or "tremendous" stress)	Reduce	↑	14.0%		2013/14	53%
	Active gym memberships (total)	Increase	↑	296.2%		2013/14	8,052
	Total number of cycling and active living events held on campus	Increase		New measure			



	Metric	Goal	Trend vs Baseline (%)	Annual Trend	Baseline		
ADMINISTRATION & OPERATIONS	% of sustainably certified/recycled purchased paper	Increase	↓ -4.6%		2015/16	72.6%	
	STARS rating points with the Association for the Advancement of Sustainability in Higher Education (AASHE)	Increase	↑ 40.4%		2015/16	50.06	
	Classroom utilization rate (usage % of available time)	Increase	↑ 2.5%		2013/14	60%	
	University vehicle fleet composition (% zero or low emission)	Increase	↑ 2.4%		2013/14	3.4%	
	Electrical Energy Intensity (kWh/gsf)	Reduce	↓ -6.8%		2013/14	22.1	
	Electrical energy use per weighted campus user (kWh)	Reduce	↑ 2.1%		2013/14	4,346	
	Natural Gas Energy Intensity (kWh/gsf)	Reduce	↓ -14.0%		2013/14	33.1	
	Natural gas use per weighted campus user (kWh)	Reduce	↓ -5.7%		2013/14	6,498	
	Emission intensity (kg CO2e/gsf)	Reduce	↓ -14%		2013/14	8.15	
	Greenhouse gas emissions per weighted campus user (tonnes)	Reduce	↓ -6%		2013/14	1.60	
	Potable water use intensity (L/gsf)	Reduce	↓ -32.7%		2013/14	127.4	
	Potable water use per weighted campus user (L)	Reduce	↓ -26.2%		2013/14	24,993	
	Total waste generated (tonnes)	Reduce	↓ -31.7%		2013/14	2,124	
	Total waste per weighted campus user (kg)	Reduce	↓ -31.3%		2013/14	85.3	
	% of waste diverted from landfill	Increase	↑ 40.0%		2013/14	23.3%	
	% of construction waste diverted from landfill	Increase		New measure		2015/16	90.1%
	Number of EV parking stalls on campus (Level 1, 2 & 3)	Increase	↓	New measure		2015/16	1+L1s
	Number of carpool-only parking stalls on campus	Increase		New measure		2015/16	25
	Total air travel emissions (kg CO2e)	Reduce	↓ -19.9%		2013/14	4,868,000	
	Total composted organic waste (kg)	Increase		New measure			
% of cost reduction in purchasing annual plant species	Increase		New measure				
% of recommendations in the Wildlife Management Plan completed	Increase		New measure				

# APPENDIX A

	Goals	Commitments	SDGs	Accountability	Time-line
RESEARCH & ACADEMIC	Increase interdisciplinary, collaborative and experiential learning opportunities that address global sustainability issues such as social justice, health and well-being, sustainable food systems, agriculture and water management systems.	Increase staff and student engagement in research projects that address the United Nations SDGs and other sustainability projects.	1-17	OOS, EFS Committee, Research & International	Ongoing
		Increase the number of living lab projects by promoting the program to the University community and encouraging new opportunities for an interdepartmental and interdisciplinary approach.	4, 1-17	OOS	Ongoing
		Promote and utilize the Fort Garry campus permaculture garden for experiential learning opportunities.	4, 15	OOS	2021
		Promote sustainability-related courses across all disciplines, including capstone courses, and seek to develop a specialized sustainability-themed capstone course.		OOS, EFS Committee	2021
		Develop and implement a strategic communication program to showcase the University's sustainability research and teaching achievements to engage the broader community in advancing sustainability locally and globally.		OOS, EFS Committee	2022
		Develop guidelines for University research project proposals that consider sustainability aspects such as emission reductions, green procurement and waste reduction within research activities.	1-17	OOS, EFS Committee, Research & International	2023
		Explore the creation of a degree designation in Sustainability Studies for students in any program to be able to access.		OOS, EFS Committee	2023
		Create an institutional pathway for researchers and students to obtain approval where necessary and support for demonstrative research and beta testing sustainability concepts on campus.	4	OOS, EFS Committee	Started by 2023
		Investigate and create a collaborative digital platform and physical spaces to support interdisciplinary research and learning opportunities.	4, 1-17	OOS, EFS Committee	Started by 2023
		Explore and support the connection of Indigenous knowledges and pedagogies through research, teaching and learning.	Develop partnerships with Indigenous partners, faculty, staff and students, including the department of Native studies, to highlight and increase experiential learning and research on sustainability issues.	4, 11, 17, 10, 16	OOS, EFS Committee
Collaborate with Indigenous partners, Elders and communities in the development of course content and structure to reflect Indigenous practices and language.	4, 11, 17, 10, 16			OOS, EFS Committee	Ongoing
Increase number of courses that collectively address sustainability as an integrated concept having social, economic and environmental dimensions.	Create an award for sustainability teaching to celebrate and efforts and provide a cross-institutional learning framework		1-17	OOS, EFS Committee	2021
	Provide resources and incentives for faculty in all disciplines to revise existing courses and create new projects that have sustainability as a core principle.			OOS, EFS Committee	Started by 2023
CAMPUS LIFE	Weave Indigenous perspectives and cultures into our campuses.	Promote increased visibility of Indigenous cultures and perspectives throughout the Fort Garry and Bannatyne campuses by supporting placemaking initiatives and ensuring that stakeholders are meaningfully involved in the design of the built environment.	11, 10, 16	OOS, AES, O&M, CPO	Ongoing
	Improve sustainable and active transportation modes, and advocate to support well-being, community connections and reduce environmental impact.	Engage City of Winnipeg, city councillors and other stakeholders on improved, strategic, transportation routes and services to enhance and support connectivity with surrounding community.	11, 13	OOS, CPO	Ongoing
		Improve shuttle accessibility and efficiency through refined routing and scheduling.	11, 13	OOS, Ancillary Services	2021
		Create a campus bike share program.	3, 11, 13	OOS, UMSU	2022
		Continue to implement the University of Manitoba Sustainable Transportation Strategy, including integrating active transportation infrastructure in existing infrastructure renewal projects.	11, 9	OOS, AES, O&M, CPO	2022

	Goals	Commitments	SDGs	Accountability	Time-line
CAMPUS LIFE	Enhance a sense of a sustainable campus community that supports University-wide pride, belonging, exploration, lifelong learning and sustainability ethic.	Increase the number of volunteers in the Sustainability Ambassador Program, including student research projects through the Living Lab Program relative to the 2018 baseline year.	1-17	OOS	Ongoing
		Build community connections through sustainable activities and events that promote engagement and action throughout the year.	1-17	OOS	Ongoing
		Coordinate with campus student groups to support peer-to-peer sustainability mentoring.	17	OOS	Ongoing
		Develop a strategy for including sustainability-related information in orientation sessions and materials.	1-17	OOS	2021
		Conduct sustainability literacy surveys to gauge level of understanding to guide sustainability initiatives and resourcing.	1-17	OOS	2021
		Establish 'Building Stewards' to champion localized sustainability initiatives on waste reduction and resource conservation.	6, 12, 14, 15	OOS	2021
		Promote the use of the Green Events Guide throughout all University of Manitoba events.	6, 13, 14, 15	OOS	2021
	Continue to enhance campus well-being by evaluating the community's needs, providing safe and accessible programs and resources to encourage self-care.	Review and renew the University of Manitoba's Success Through Wellness mental health strategy by providing accessible resources for all students, faculty and staff.	3	Human Resources	Ongoing
		Increase the number, quality and awareness of restorative spaces to encourage mental well-being.	3	OOS, AES, O&M, CPO, Human Resources	Ongoing
	Provide healthy, nutritious and affordable food options that consider environmental and social impacts while providing culturally inclusive and dietary choices.	Increase the number of events, workshops and learning opportunities focused on sustainable food systems.	2	OOS, Dining Services, UMSU	Ongoing
Expand resources for students on campus, including extended hours for campus services such as food services, grocery and amenities.		2	OOS, Ancillary Services, UMSU	2022	
Pursue Fairtrade Campus Certification for Fort Garry campus.		2, 8	OOS	2022	
Increase local and sustainable food provider contracts to encourage the Food Services Committee to promote and enable access to healthy, affordable food through reporting and transparent public communications.		2, 11	OOS, Dining Services, UMSU	2023	
ADMINISTRATION & OPERATIONS	Increase active transportation infrastructure and enhance options for sustainable transportation.	Continue to implement the Sustainable Transportation Strategy 2017-2022 including pedestrian and cycling infrastructure improvements and execute renewal in 2023.	11, 13	OOS, AES, O&M, CPO	2023
		Develop and implement electric vehicle infrastructure to support sustainable commuting and fleet options as well as provide research and learning opportunities on emerging technology.	11, 13	OOS, AES, O&M, Parking Services	2023
	Integrate Indigenous knowledges and perspectives into campus planning and development.	Continue collaboration between administrative units and Indigenous leaders, faculty, staff and Elders to implement the Indigenous Planning and Design Principles, documenting lessons learned from each project while continuing to refine the process.	11, 16	OOS, AES, O&M, CPO	Ongoing
	Reduce greenhouse gas emissions.	Develop green building and construction guidelines that support long-term sustainable campus development.	11, 13	OOS, AES, O&M, CPO	2021
		Increase efficiency in the management and procurement of campus fleet vehicles.	11, 13	OOS, O&M, Ancillary Services, Research, Security Services	2022
		Update existing University space policies and develop new space management procedures to ensure physical spaces are being used in an efficient way to minimize new buildings and optimize resource use.	11, 13	CPO	2022

# APPENDIX A - Continued

	Goals	Commitments	SDGs	Accountability	Time-line
ADMINISTRATION & OPERATIONS	Reduce greenhouse gas emissions.	Explore Net Zero approaches, methods and technologies in new construction and retrofit projects including the application of renewable energy systems.	11, 13	AES, O&M	2023
		Create a climate action plan that includes emission reductions, resiliency, adaptation and the financial benefits of planning.	11, 13	OOS, AES, O&M, Risk Management	2023
		Reduce air travel emissions by providing infrastructure, education and support for web-based meetings and conferences, and access to carbon offsets and alternative transportation methods.	11, 13	OOS, Research	2023
		Develop and implement a comprehensive energy master plan that considers building level and district energy systems to reduce energy while providing ongoing improvements through monitoring and tracking.	11, 13	AES, O&M	Started by 2023
	Increase collective and individual actions that promote resource conservation and waste minimization .	Continue ongoing orientation and training on waste management, procurement and other sustainability initiatives to all staff.	6, 11, 15	OOS	Ongoing
		Create water management guidelines that evaluate potable water demand including process water systems and methods for reduction and reuse.	6, 11, 13, 15	AES, O&M	2022
		Review and amend the University Electronics Policy (Custody and Control of Electronic Devices and Media) and process to include responsible disposal or repurposing of non-computer-related electronic waste.	11, 15	OOS, O&M	2022
		Create a campus waste management and reduction plan that considers behavioural change, infrastructure support and single-use plastics.	6, 11, 15	OOS, O&M	2022
		Create and implement an organic waste management program to reduce the amount of waste being sent to landfill.	6, 11, 13, 15	OOS, O&M	2022
	Increase the protection, management and development of natural spaces on campus to support biodiversity and ecosystem health.	Increase native plants and biodiversity on campus to promote natural prairie and riparian ecosystems and resource conservation.	15	O&M	Ongoing
		Enhance greenhouses, campus gardens, rooftop gardens and greenspaces, both indoor and out, by examining open and underused spaces to connect the campus to our surrounding environment.	13, 15	OOS, AES, O&M, CPO	Ongoing
		Develop an Urban Forestry Management Strategy for the Fort Garry campus that sets a framework for how trees on campus are monitored, maintained, protected, regenerated and planned for, to increase the number of healthy trees and to sustain existing canopy cover.	15	OOS, AES, O&M, CPO	2021
		Create and implement the Integrated Pest Management Plan to prevent pollution and support ecological systems.	15	O&M	2022
		Create and implement a restoration and enhancement plan for the University's riparian zones that includes controlling invasive species and riverbank stabilization.	15	OOS, AES, O&M	2022
		Review stormwater runoff and land drainage opportunities to reduce discharge rates.	15	AES	2023
Complete and implement the Wildlife Management Plan to support ecological systems and coexistence with species.		14	OOS, O&M	Started by 2023	
Develop a Landscape Master Plan for the Fort Garry campus that builds upon the vision of the Visionary (re)Generation Master Plan, to create a framework for future development that preserves and enhances campus open space.		15	CPO	2023	

	Goals	Commitments	SDGs	Accountability	Time-line
ADMINISTRATION & OPERATIONS	Improve transparency and responsibility in University investments and governance.	Continue to engage in discussions with Indigenous students, faculty and staff around the promotion of Indigenous languages and the inclusion of Indigenous voices at the University.	10, 11	OOS, AES, O&M, CPO	Ongoing
		Continue annual reporting on Sustainability Strategy metrics.	17	OOS	Ongoing
		Create a sub-committee of the Sustainability Committee at Bannatyne campus to more directly address ideas, concerns and needs at the Bannatyne campus.	17	OOS, Sustainability Committee	2021
		Continue tracking sustainability progress through STARS to maintain current Gold status, and pursue opportunities to achieve Platinum rating.	17	OOS	2021
		Finalize and implement a community engagement framework that ensures consultation to support sustainable decision-making within the University.	16, 17	OOS, AES, O&M, CPO	2022
		Review and update the Sustainability Policy to reflect changes to provincial legislation and University objectives.		OOS, Sustainability Committee	2022
		Develop sustainable procurement guidelines to evaluate and prioritize products and vendors that consider life-cycle costing, social and environmental responsibility, and Indigenous criteria.	11, 15	OOS, Purchasing Services, Sustainability Committee	2023
		Recognize social and environmental aspects of the University's investments by exploring a responsible investment strategy, including transparent reporting and the divestment from fossil fuel industries.	8, 13	OOS, Sustainability Committee	Started by 2023
		Increase vendor accountability and responsibility to include environmental and social parameters.	11, 15	OOS, Purchasing Services	Started by 2023

Note: OOS = Office of Sustainability, CPO = Campus Planning Office, AES = Architectural and Engineering Services, O&M = Operations and Maintenance, EFS = Education for Sustainability, SDGs= United Nations Sustainable Development Goals



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