

17 GLOBAL GOALS:

UNIVERSITY OF MANITOBA REPORT ON THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS





CONTENTS

3	Traditional Territories Acknowledgment		
4	President's Message		
5	SDG 1: End poverty in all its forms everywhere		
6	SDG 2: End hunger, achieve food security and improve nutrition		
7	SDG 3: Ensure healthy lives and promote well-being for all at all ages		
8	SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		
9	SDG 5: Achieve gender equality and empower all women and girls		
10	SDG 6: Ensure availability and sustainable management of water and sanitation for all		
11	SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all		
12	SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all		
13	SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
14	SDG 10: Reduce inequality within and among countries		
15	SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable		
16	SDG 12: Ensure sustainable consumption and production patterns		
17	SDG 13: Take urgent action to combat climate change and its impacts		
18	SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development		
19	SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss		
20	SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all level		
21	SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development		
22 23	Note to the Reader References		

TRADITIONAL TERRITORIES ACKNOWLEDGMENT

The University of Manitoba's role in Reconciliation, its connections with Indigenous students, partners and communities, and its commitment to Indigenous Achievement are central to the kind of future the University seeks to create. A strongly held view emerged from consultation sessions, the Strategic Planning Committee and the leadership of the University that in order to truly be "Manitoba's University" required that the University of Manitoba's commitment to Indigenous Achievement and to indigenizing the University be elevated to a level of prominence within its strategic plan that traditionally is held by its mission, vision and values. In recent years, the University has adopted the practice, at formal functions, of acknowledging the traditional lands on which it sits. An acknowledgement of these lands, and of the University's commitment to Indigenous peoples and communities, now form part of the foundational statements that define the University of Manitoba.

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, Métis and Inuit knowledge, cultures and traditions are embraced and reflected in the pursuit of its mission

PRESIDENT'S MESSAGE

The University of Manitoba is dedicated to contributing to the cultural, social and economic wellbeing of peoples in Manitoba, Canada and around the world. This commitment aligns with and supports the United Nations' 17 Sustainable Development Goals, or Global Goals.

The Global Goals unite people in action and aim to address three main themes: end extreme poverty, fight inequality and injustice, and tackle climate change. The University of Manitoba is addressing these themes by creating opportunities for our students, staff, faculty and community to participate in actions to help achieve the 17 Global Goals.

This report highlights the groups, projects and initiatives our University is acting on in the context of research and academics, institutional programs and community engagement related to the Global Goals. By no means an exhaustive list of the University community's accomplishments, it provides a snapshot into the areas we are currently pursuing.

I invite you to read our current accomplishments and challenge yourself and your peers to live the Global Goals in your actions, your relationships and your life on and off campus.

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

INTRODUCTION

In 2015, the United Nations Member States created the 2030 Agenda for Sustainable Development, which provides a global blueprint for peace and prosperity for people and the planet, today and into the future. Within the 2030 Agenda, the United Nations outlined 17 Sustainable Development Goals (SDGs), or Global Goals, which are an urgent call for action for the global community. The 17 Global Goals aim to end poverty, improve health and education, reduce inequality and encourage economic growth while tackling climate change. The 2030 Agenda is ambitious, but necessary and attainable through global partnerships and local collaboration.

In April 2017, the president of the United Nations General Assembly wrote to higher education institutions around the world, including the University of Manitoba. The letter was delivered to spark movement and create a call to action to support the 2030 Agenda for Sustainability Development within the university environment. The university was encouraged to include the Global Goals as part of research, teaching and study within the institution. "Young people are the most capable of the transformation required, having the most to gain or lose from the success or failure of the Agenda."

Peter Thomson, President of the United Nations General Assembly

In September 2017, the University of Manitoba profiled the 17 Global Goals in an online event to celebrate the World's Largest Lesson. The campaign took place over 17 consecutive days, highlighting one program, organization, institution or group that takes action to promote and mitigate the principles of the 17 Global Goals on campus. This campaign laid the groundwork to promote and encourage campus groups and departments to engage with the Global Goals. Whether integrating into coursework, planning campus events or encouraging students to take peer-to-peer action, the University of Manitoba is finding innovative ways to engage the campus community.

This report is a stepping-stone to identify the work that is underway at the University of Manitoba and start the conversation toward the advancement of the 2030 Agenda for Sustainable Development.

SUSTAINABLE DEVELOPMENT GOAL I: End poverty in all its forms everywhere

The University of Manitoba and community organizations are working to create opportunities for students to learn about the determinants of all forms of poverty and how to mitigate and reduce rates across the province through the following initiatives:



INSTITUTION

45+ community based outreach services directly related to SDG1



PROGRAMS

8 programs at U of M have students explore the themes of SDG1



RESEARCH

10+ research projects directly related to poverty reduction and the principles of SDG1

Habitat for Humanity Build: Staff, students, instructors and faculty members from the College of Dentistry, Max Rady College of Medicine, Colleges of Nursing, Pharmacy and Rehabilitation Sciences have partnered with Habitat for Humanity to build houses for community members. To date, the Faculty of Health Sciences has helped build two homes for Winnipeg families in need.

Poverty Awareness & Community Action

Workshop: This experiential learning activity for students uses role-play and discussion to deepen awareness of the impacts of poverty and social welfare systems. Participant's role-play as members of different family units living on a lower income to develop empathy for those experiencing poverty. After the role-play, students discuss what they have learned through targeted reflection activities and plan ways to integrate their new learning into their studies, work, or volunteering. The Poverty Awareness & Community Action workshop was created in partnership with Student Life and the University of Manitoba Students' Union.

5 Days for the Homeless: This annual event (pictured above) features six students who give up the comforts of home and live outside on the University of Manitoba Fort Garry campus for five chilly nights in mid-March. These students join 26 Canadian universities for the national 5 Days for the Homeless campaign, which aims to raise awareness and funds to fight youth homelessness. At the University of Manitoba, the Asper School of Business is raising funds for Resource Assistance for Youth, Inc. (RaY Inc.), a local charity that helps homeless and marginalized young people achieve independence. 2 ZERO HUNGER

> SUSTAINABLE DEVELOPMENT GOAL 2: End hunger, achieve food security and improve nutrition and promote sustainable agriculture

With our founding roots as an Agricultural College, the University of Manitoba has a long-standing relationship with agricultural development and research. Students have the opportunity to enroll in programs that teach the importance of sustainable agriculture, food production and nutrition through a variety of different academic and social programs like these:

The Nutrition and Education Community Outreach (NECO) works collectively towards promoting nutrition related topics on campus and in the community by supporting Human Nutritional Science Students with relevant information, resources and networking opportunities. NECO maintains a Nutritional Education Library, a free education resource lending library for students, faculty, and staff members.



INSTITUTION

170+ courses offered to students directly related to SDG2

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PROGRAMS

11 programs at the U of M give students the opportunity to learn about the factors in SDG2



RESEARCH

35+ current research projects specific to SDG2

Bruce D. Campbell Farm and Food Discovery Centre

The Discovery Centre is the first hands-on facility which explores the ways in which food is made in Canada. The Centre is located at the National Centre for Livestock and the Environment, at the University's Glenlea Research Station. Exciting and interactive exhibits lead visitors from the farmer's wheat field to the kitchen table. Visitors learn about every aspect of food production from farming practices to retail sales. The Discovery Centre also highlights ongoing research at the National Centre for Livestock and the Environment. **B** GOOD HEALTH AND WELL-BEING



SUSTAINABLE DEVELOPMENT GOAL 3: Ensure healthy lives and promote well-being for all at all ages

Ensuring healthy lives and promoting well-being for all ages at the University of Manitoba is evident through the initiatives and programming offered by the Recreation Services Health Promotion. In addition, the *Success Through Wellness* mental health strategy is a call to action for campus members to view the promotion and support of mental health as a collective responsibility. The strategy focuses equally on students, staff and faculty members, examining all aspects of the university and identifies ways in which the community can be committed, caring, healthy, responsive, supportive and resourceful. The University also promotes the following initiatives related to healthy lives and well-being:



INSTITUTION

17 courses offered to students directly related to SDG3



PROGRAMS

26 programs at U of M give students the opportunity to learn about the factors of SDG3

RESEARCH

170+ current research projects specific to SDG3

Healthy U

Healthy U is a team of committed and trained student volunteers who provide health and wellness education on a variety of topics through creative outreach and presentations. They spread awareness on multiple aspects of health ensuring students learn to make health - including mental and sexual health - a priority in their lives.

KHPT Research Centre: The University has collaborated with international organizations such as the KHPT Research Centre located in India. This centre works on maternal, neonatal and child health, adolescent health and education, violence against women, tuberculosis, nutrition, orphans and vulnerable children, HIV AIDS, and institution building for the community. QUALITY EDUCATION

SUSTAINABLE DEVELOPMENT GOAL 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The University of Manitoba's strategic plan, *Taking Our Place*, outlines priorities of the University, such as Inspiring Minds. This strategic priority ensures the University is committed to ensuring that undergraduate and graduate students have an outstanding educational experience. Students engage with their courses and programs in learning and related environments that best contribute to their success. Here are examples of how the University is creating inclusive, equitable quality education and lifelong learning opportunities for all:



INSTITUTION

30+ lifelong learning opportunities which promote multiple platforms to engage in the love of learning



PROGRAMS

6 programs at U of M give students the opportunity to take an in depth look at the factors of SDG4



RESEARCH

60+ current research projects specific to SDG4

Accessibility Audit and Training: The University is committed to creating an inclusive and accessible community for all faculty, students and staff. Barriers to accessibility, including attitudinal, systemic, technological, physical and architectural, information and communication, exist all over campus. The U of M is dedicated to removing these barriers in order to make our campuses more accessible for all. Mini U: The Mini U program develops innovative leaders and provides stimulating, quality programming for children and youth that reflect the values of inclusiveness, fair play and healthy development. Children have the opportunity to engage in leadership development, special interest programs such as robotics and architecture, and to improve their skills through various sport-focused programs.

Extended Education: Extended Education at the University extends the academic power of the University of Manitoba to a number of varied communities with specifically-designed programs. Extension Credit programs are designed for those in search of professional development or industry-specific designations.

Learning for Life

This program provides exclusive opportunities for alumni 60+ to explore new ideas and hear from professors, researchers and fellow alumni who are some of the University of Manitoba's leading experts and innovators. Participants attending the seven sessions engage in discussion with the presenters and with others who share their love of learning. **5** Gender Equality



SUSTAINABLE DEVELOPMENT GOAL 5: Achieve gender equality and empower all women



INSTITUTION

55+ courses offered to students directly related to SDG5



PROGRAMS

5 programs at U of M give students the opportunity to learn about the factors of SDG5 Building a community that creates an outstanding learning and working environment is a priority of the University of Manitoba. To do this, the University is creating student, staff, faculty and leadership diversity that reflects society, especially with respect to the inclusion of women, Indigenous peoples, people with disabilities, gender and sexual minorities, and racialized minorities. Additionally, gender equality and empowerment for all women can be found at the University through the following initiatives:



RESEARCH

70+ current research projects specific to SDG5

WISE Kid-Netic Energy (pictured above): Women in Science and Engineering (WISE), is an outreach group from the University of Manitoba which, educates and motivates youth, including young girls, about exciting careers in Engineering and Science. They provide handson, curriculum-based workshops for schools, clubs, camps and more.

Women & Gender Studies

This program explores a wide range of womencentred social, political and cultural issues. As a dynamic and interdisciplinary program, students study diverse theoretical and practical approaches, including popular culture and consumption, violence against women, lesbian/gay/queer studies, women in science and technology, human geography, Indigenous feminism, masculinity studies, and history.

Womyn's Centre: This organization is a queer-positive, pro-choice, feminist, non-hierarchical collective on campus. They are dedicated to challenging and creating awareness to avoid sexism, racism, able-ism, classism, homophobia, age-ism, and fat-ism within the University community.

united nations academic impact

Sharing a Culture of Intellectual Social Responsibility





SUSTAINABLE DEVELOPMENT GOAL 6: Ensure availability and sustainable management of water and sanitation for all

Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choice and educational opportunities for communities across the world. The University has a variety of programs and initiatives which are helping improve the determinants of this goal:



INSTITUTION

50+ courses offered to students directly related to SDG6



PROGRAMS

5 programs at U of M give students the opportunity to explore factors related to SDG6

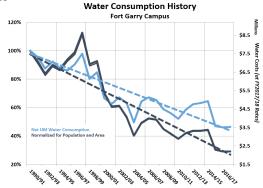


RESEARCH

110+ current research projects specific to SDG6

CREATE H2O: This initiative is designed to address research science and training gaps that are preventing effective, culturally appropriate investments in water and sanitation security on First Nations reserves. The CREATE H₂O program is the first science-engineering research training program in Canada that combines technical water and wastewater management training with Indigenous theory, law and methodological skills training. The students involved are working on research projects related to First Nation source water, drinking water or wastewater United Nations Academic Impact (UNAI) hubs are member organizations that have been chosen based on their research and innovation relating to a specific SDG. The University of Manitoba was selected as the UNAI hub for SDG6 for its interdisciplinary research on water systems to help build sustainable, resilient communities, including research with Indigenous communities, management of water quantity and quality issues, and the impact of climate change on our water systems. As the hub for SDG6, the U of M will continue to advance research, analysis and policy for clean water and sanitation in our classrooms, on our campuses and in our communities.

U of M Water Conservation: Taking into account the significant expansion of the Fort Garry campus, water consumption at the University of Manitoba has decreased by 71% since 1990/91. That is the equivalent to 8.1 billion litres of water saved. Water metering technologies have been implemented providing facilities staff with the capacity to monitor actual campus water usage throughout the year.



AFFORDABLE AND CLEAN ENERGY



SUSTAINABLE DEVELOPMENT GOAL 7: Ensure access to affordable, reliable, sustainable and modern energy for all

The University of Manitoba has an ongoing energy management program and encourages sustainable energy solutions through a variety of courses and initiatives offered on campus such as:



INSTITUTION

20+ courses offered to students in Engineering and other Faculties directly related to SDG7



PROGRAMS

7 programs at U of M give students the opportunity to learn about the factors of SDG7



RESEARCH

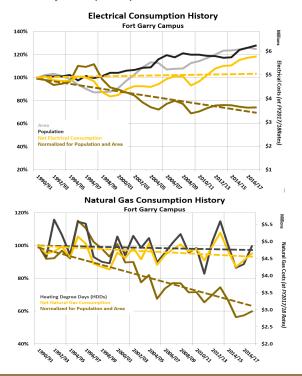
120+ current research projects specific to SDG7

The Alternative Village

The Alternative Village is a unique research area located on 1.5 acres at the Fort Garry campus. The Village is a venue for research, testing and creating industry partnerships and provides students with hands-on experience in thermal energy, electricity generation, biological systems, building systems and community partnerships through the Biosystems Engineering program.

Energy Management

The University of Manitoba continues to strive for a 5% year-over-year utility savings, a goal outlined in the *Sustainability Strategy 2016-2018*. Since 1990/91 the University of Manitoba Fort Garry Campus has reduced its natural gas consumption by 40% and electrical consumption by 26% per square foot. This reduction in non-renewable energy has reduced greenhouse gas emissions by 57% per square foot.



B DECENT WORK AND ECONOMIC GROWTH



SUSTAINABLE DEVELOPMENT GOAL 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment for all

The University of Manitoba believes in the inherent dignity of all people. All who have the potential to succeed at our University should have access to it. We respect our differences, celebrate our commonalities, and are united in our mutual focus on intellectual achievement. We promote workplace diversity in access to our programs and employment and in the conduct of the University's affairs. Here are a few examples how the University is promoting inclusive, sustainable economic growth and employment for all:



INSTITUTION

23 languages taught on campus, including Indigenous languages such as Cree, Ojibwe and Inuktitut



PROGRAMS

8 programs are offered at the U of M to engage students in topics regarding SDG8



RESEARCH

110+ current research projects specific to SDG8

No Sweat Policy: The University of Manitoba's Bookstores follow a "No Sweat Policy", which adhere to the Fair Labour Association Code of Conduct. The store purchases clothing from vendors and manufacturers who employ fair labour practices, and follow the Fair Labour Association's Workplace Code of Conduct.

Diversity & Inclusion Program

This program promotes diversity and fosters a culture of inclusion at the University where all people feel valued, respected, and included across all differences including being a place where talented people choose to work. The mission of Diversity & Inclusion program is to assist in creating the initiatives that support the goals of the President's Advisory Committee on Respect and three of the five institutional priorities, Creating Pathways to Indigenous Achievement, Building Community that creates an outstanding learning and working environment and Forging Connections to foster high impact community engagement in the Strategic Plan. The goal of Diversity and Inclusion is to ensure that all job applicants, faculty and staff have fair and equitable access to employment opportunities in hiring, training and advancement. No person should be denied employment opportunities for reasons unrelated to ability and employment decisions at the University are based on job performance, skills, and knowledge and abilities relevant to specific positions.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SUSTAINABLE DEVELOPMENT GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

University of Manitoba scientists, engineers, artists and scholars are finding innovative solutions to many of the challenges facing Canada and the world in the 21st century. With the support of our partners in research, including governments, business and industry, and community organizations, we are discovering new ways to improve our health, increase our understanding of ourselves and our world, advance our technology, strengthen our communities and protect our environment. Here are a few examples how the University is helping achieve SDG9:



INSTITUTION

16+ alternative energy projects incorporated into the Alternative Village on campus to teach students about SDG9



PROGRAMS

9 programs at U of M give students the opportunity to learn about the factors of SDG9



RESEARCH

120+ current research projects specific to SDG9

Smartpark

MARTPARK INNOVATION

This designated 100-acre parcel of University land is being developed as a research and technology park with the vision of "Building a Community of Innovators" on the doorstep of the University of Manitoba. Smartpark's mission is to develop space for lease to research and technology companies and organizations involved in research areas that complement the University's academic and research mission. Smartpark is fully occupied and leased at market rates and is home to 20 organizations who employ over 1,100 people in 9 buildings across the park, comprisd of 415,000 square feet of research space.

Sustainable Transportation Strategy 2017-2021: The Strategy defines the University's future transportation system as an equitable, integrated, flexible, responsible and innovative network that meets the needs of the campus community. The goals and actions in the strategy align with local and regional planning policy, including Taking Our Place: The University of Manitoba Strategic Plan 2015-2020; Visionary (re)Generation Master Plan; Bannatyne Campus Master Plan; and the *Sustainability Strategy 2016-2018*. The plan encompasses transit, cycling, pedestrian and vehicular traffic and movement on campus.

SUSTAINABLE DEVELOPMENT GOAL IO: **Reduce inequality within and among countries**

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INSTITUTION

65+ courses offered to students directly related to SDG10

Economic growth must consider the three pillars of sustainable development - economic, social and environment. The University of Manitoba has ongoing programs and initiatives to help meet these pillars while reducing inequality within and among countries which include the following initiatives:

VORLD



PROGRAMS

7 programs at U of M give students the opportunity to learn about the factors of SDG10



RESEARCH

320+ current research projects specific to SDG10

Population and Global Health

The University has built a world-leading team of researchers in the areas of population and global health, with highly developed networks of international partnerships and collaborations. The Centre for Global Public Health has been at the forefront of basic and applied research in HIV prevention with an established reputation of innovative work in maternal, neonatal and child health, including the health of Indigenous populations, both in Canada and globally.

World University Service of Canada (WUSC)

The University of Manitoba is part of a national network of universities committed to promoting sustainable and equitable development. By volunteering, campaigning, and advocating, WUSC (pictured above) aims to promote education, employment and empowerment opportunities for youth in Canada and abroad. In developing countries, WUSC supports programs that provide knowledge, training, and skills development. Individuals participating in the program gain knowledge and skills to strengthen communities by improving livelihoods, balancing inequities, promoting health and fostering social and economic development.

SUSTAINABLE CITIES



SUSTAINABLE DEVELOPMENT GOAL II: Make cities and human settlements inclusive, safe, resilient and sustainable

The future of cities includes opportunities for all, with access to basic services, energy, housing, transportation and more. The University of Manitoba has created programs and courses to help inspire students to create inclusive, safe, resilient and sustainable cities in our province and around the world.



INSTITUTION

20+ courses offered to students directly related to SDG11



PROGRAMS

14 programs at U of M give students the opportunity to learn about the factors of SDG11



RESEARCH

250+ current research projects specific to SDG11

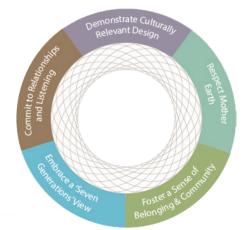
Department of City Planning

This department encourages students in City Planning to engage in key planning debates and professional practice on multiple fronts - participatory planning and design, homelessness and housing, urban revitalization, arts and culture, social justice issues, environmental sustainability, regional planning issues, transportation planning and infrastructure, age-friendly and child-friendly planning and design, and Indigenous planning and governance.

Indigenous Planning and Design Principles

The University of Manitoba's Visionary (re)Generation campus plan includes over arching Indigenous Planning and Design Principles that have been established to guide the planning and design occurring on all University lands and campuses, based on the high priority placed on Indigenous Achievement and Reconciliation at the University of Manitoba.

Although the principles are a source of design and planning guidance, they do not encapsulate the depth and complexity of Indigenous teachings, knowledge, and cultures. In this respect, the principles represent a starting point, and implementing the principles in campus projects requires continuous engagement with Indigenous Elders, traditional knowledge holders, and leaders.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

SUSTAINABLE DEVELOPMENT GOAL 12: Ensure sustainable consumption and production patterns

Sustainable consumption and production aims to doing more and better with less, increasing net gains from economic activities by reducing resource use, degradation and pollution along the whole life cycle, while increasing quality of life. The University of Manitoba takes the necessary steps to ensure students have the opportunity to learn and engage with topics and initiatives around sustainable consumption and production.

Department of Supply Chain Management

This department brings together nine academic areas, including logistics, management science, operations management, and transportation. Academics in this area work with the Transport Institute under our joint mandate to develop a Centre of Excellence in Transportation, Logistics, and Supply Chain Management at the University of Manitoba. Within the department, several researchers focus on sustainable supply chain management.

Recycling at the University of Manitoba

The University of Manitoba has a comprehensive mixed material blue bin program. On average, the Fort Garry and Bannatyne campuses, divert over 140 tonnes of mixed recyclables from landfill each school year combined. In addition, the University has a variety of other recycling streams such as batteries, construction waste and small scale composting to reduce waste sent to landfill from campus.



INSTITUTION

10+ courses offered to students directly related to SDG12



PROGRAMS

10 programs at U of M give students the opportunity to learn about the factors of SDG12



RESEARCH

115+ current research projects specific to SDG12

Campus Reuse Shop

The Physical Plant department operates the University Reuse Shop (Re-Shop) that is open for students, staff and faculty from all campuses. Visitors are invited to browse through the inventory and take away what can be used including a variety of file cabinets, desks and tables. The university community is encouraged to visit the Re-Shop to see what might be suitable for their office, living space or charity needs. On occasion, the Re-Shop also stocks bookcases, magazine racks, room dividers and an assortment of other office furnishings.





SUSTAINABLE DEVELOPMENT GOAL 13: Take urgent action to combat climate change and its impacts



INSTITUTION

8+ courses offered to students in Clayton H. Riddell Faculty of Environment, Earth and Resources related to SDG13



PROGRAMS

12 programs at U of M give students the opportunity to learn about the factors of SDG13



RESEARCH

75+ current research projects specific to SDG13

Careers that Fight Climate Change Mentorship Program

This initiative connects university students, Indigenous and newcomer youth, and community leaders around the topic of climate change resiliency. This program helps build the knowledge of climate change resiliency in youth. Students help facilitate a mentorship program for Indigenous and newcomer youth. They introduce youth to careers that fight climate change, increasing knowledge about climate change resiliency, and improving Indigenous and newcomer relations. The University of Manitoba is a signatory to the University and College Presidents' Climate Change Statement of Action for Canada, which includes reducing greenhouse gas emissions, developing targets using research and science, developing plans to achieve these targets, measuring success and disclosing progress so the University is accountable to these commitments. In addition to this, the University has a variety of programs, courses and research groups focused on reducing the effects and mitigating climate change including:

Clayton H. Riddell Faculty of Environment, Earth, and Resources: The faculty is made up of a conglomeration of entities with education and research focus centered around the planet and the impacts of climate change. These areas are:

- Centre for Earth Observation Science (CEOS): CEOS aims to research, preserve and communicate knowledge of Earth system processes using the technologies of Earth Observation Science.
- **Department of Environment and Geography:** This department aims to provide students with a greater awareness of issues involving environment and geography, and to conduct research on a variety of associated issues.
- **Department of Geological Sciences:** Recognized as one of Canada's leading geoscience units, this department is a dynamic and diverse group of interests of research in the geological sciences.
- **Natural Resource Institute (NRI):** The Institute integrates knowledge gained from the natural and social sciences to develop holistic perspectives on environmental and natural resources management problems.





SUSTAINABLE DEVELOPMENT GOAL 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. The University of Manitoba provides students with the opportunity to learn about and research sustainable marine ecosystems and resources through the following initiatives:

Experimental Lakes Area (ELA)

Located near Kenora, Ontario the ELA is a research station with a global perspective around the understanding and value of freshwater ecosystems. The Governments of Ontario and Manitoba, along with the International Institute for Sustainable Development help support research in the area. In 2017, ELA hosted a university-based field course through the Department of Environment and Geography that focused on environmental monitoring and water quality. Students from the University of Manitoba and Trent University participated. The course was sponsored in part by the CREATE H2O program, which focuses on the challenges around drinking and wastewater treatment in First Nation communities (see SDG6).



INSTITUTION

40 faculty research projects are directly related to SDG14

PROGRAMS

3 programs at U of M give students the opportunity to learn about the factors of SDG14



RESEARCH

40+ current research projects specific to SDG14

Churchill Marine Observatory

The Churchill Marine Observatory (CMO) will achieve the goal of dramatically advancing knowledge of oil and other contaminant spills in sea ice and ice-covered waters, impacts of these contaminants on the marine ecosystem and development of environmental technologies designed for detection, fate and effects, and mitigation of ontaminant spills in ice-covered waters. This national facility, serving international needs, will be located on the shores of Hudson Bay. The CMO will be a state-of-the-art Arctic marine observatory, technology incubation and commercialization centre. It will deliver cutting-edge research into approaches and technologies to detect oil, liquefied natural gas, dispersants, and other contaminants in Arctic systems on marine ecosystems, people, and physical aspects of the atmosphere and ocean.

15 LIFE ON LAND



SUSTAINABLE DEVELOPMENT GOAL 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Forests cover 30 per cent of the earth's surface and in addition to providing food security and shelter, forests are key to combating climate change and protecting biodiversity. The University of Manitoba is working to protect, restore and promote sustainable use of land on its campuses and around the world through the following projects:



INSTITUTION

53 hectares of University of Manitoba lands are natural riverbank forests (riparian zones)



PROGRAMS

6 programs at U of M give students the opportunity to learn about the factors of SDG15



RESEARCH

110+ current research projects specific to SDG15

Campus Biodiversity Study: In support of the University's dedication to sustainable operations, the Office of Sustainability initiated a biodiversity baseline study and assessment of the riverbank forests (riparian zones) situated within University lands. The study aims to enhance the University's capacity to conserve biodiversity by preventing, managing, or remediating damage to natural habitat and sensitive areas. The study enables the University to activate and track a new sustainability indicator, ecology and land management, within the AASHE Sustainability Tracking Assessment and Rating System (STARS). The study also positions the University, to develop a conservation and biodiversity plan as one of six strategies under the Ecology and Environment theme within the University's Sustainability Strategy 2016-2018.

Community Based Resource Management: As part of the Natural Resources Institute, this program has affiliations with a number of outside agencies, academics and community groups. Research in this area is focused on advancing the knowledge on commons, investigating different kinds of community-based management, including the community at the international level. It deals with commons institutions and environmental governance; ways of expanding the range of knowledge used (including Indigenous knowledge); and applications of resilience theory to environmental change and adaptation. This group carries out applied work through various projects in areas such as coastal livelihoods, food security, and the use of co-management and Indigenous knowledge for adaptation to climate change.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

SUSTAINABLE DEVELOPMENT GOAL 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all

The University of Manitoba is dedicated to the advancement of human rights, conflict resolution, global citizenship, peace, and social justice through research, education, and outreach. There are a variety of programs, initiatives and research projects which facilitate learning which include:



INSTITUTION

20+ courses offered to students directly related to SDG16



PROGRAMS

4 programs at U of M give students the opportunity to learn about the factors of SDG16



RESEARCH

100+ current research projects specific to SDG16

Storytelling for Peace and Renewing Community

This initiative is part of the Arthur V. Mauro Centre which encompasses the following programs: Winnipeg International Storytelling Festival, Storytelling on the Path to Peace, the Youth Forum on Human Rights, Peace, and Social Justice, a 6-credit master's-level Summer Institute on Storytelling for Peace and Human Rights, and the Mauro Centre Storytelling Working Group.

Arthur V. Mauro Centre for Peace and Justice

The Arthur V. Mauro Centre for Peace & Justice at St. Paul's College is dedicated to the advancement of human rights, conflict resolution, global citizenship, peace, and social justice through research, education, and outreach. The Centre is also interested in the role of the Abrahamic religions of Judaism, Christianity, and Islam in pointing ways for people to live in peace and harmony in a post-modern world. The Centre is home to the University of Manitoba's Ph.D. Program and Joint MA Program (University of Winnipeg) in Peace and Conflict Studies, which seeks to prepare leaders in a multiplicity of contexts who make a difference locally, nationally, and globally.

National Centre for Truth and Reconciliation

The University hosts the NCTR which permanently houses all statements, documents and other materials gathered by the Truth and Reconciliation Commission of Canada. The NCTR has the mandate to ensure former Residential School Students and their families have access to their own history, educators can share the Indian Residential School history with future generations of students, researchers can more deeply explore the Residential School experience, the public can access historical records and other materials to help foster Reconciliation and healing, and the history and legacy of the Residential School system are never forgotten.

7 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOAL 17: Strengthen the means of implementation and revitalize the Global Partnership of Sustainable Development

The University of Manitoba is working to strengthen global partnerships of sustainable development through experiential learning opportunities, international research projects and student engagement activities including the following:



INSTITUTION

3 signed, international declarations indicating a University of Manitoba commitment to the principles and practices of sustainable development and climate protection



PROGRAMS

4 programs at U of M give students the opportunity to learn about the factors of SDG17



RESEARCH

15+ current research projects specific to SDG17

Alternative Reading Week

The Indigenous Scholar's Network has expanded its service-learning and community-based research opportunities with global Indigenous communities. Alternative Reading Week encourages students to spend Reading Week abroad learning about other cultures through community-based experiences. The most current destinations include Belize (pictured above) and Ecuador as well as an Ecuador Service-Learning Experience and Chile Service Learning Experience.

Engineers Without Borders

This University of Manitoba Student Chapter is a student volunteer organization which promotes environmental and social sustainability at the University of Manitoba and within other developing countries. They are comprised of students from multiple disciplinary areas of study. Some of their recent projects include promoting fair trade on campus, working toward a fair trade campus designation and developmental planning in Africa.

Campus as a Living Lab: The Sustainability Research in Action (SRA) program connects University of Manitoba faculty and staff with students who are passionate about solving sustainability challenges on campus through research projects. The Office of Sustainability helps to coordinate these initiatives while providing a platform for the community to access the completed research. The SRA program promotes a culture of sustainable change through growth, education, and action.

NOTE TO THE READER

Data Sources

The number of courses, research projects and programs quoted for each goal were collected from a database of the Department of Research Information Systems in the Office of Research Services at the University of Manitoba. The database was then searched with a list of keywords related to the Sustainable Development Goals. The keyword list was created by Monash University and SDSN Australia/Pacific which can be found here: <u>ap-unsdsn.org/wp.../Compiled-Keywords-for-SDG-Mapping_Final_17-05-10.xlsx.</u> Information was also collected from the University of Manitoba course calendar and searched with the same keyword list indicated above. The data presented is not an exhausted list of programs, courses and research projects at the university, rather it offers a broad overview of the work being conducted during the 2017/18 academic year.

REFERENCES

SDG 1:

5 Days for the Homeless U of M Chapter: https://5days.ca/schools/university-of-manitoba/

Habitat for Humanity Build: http://news.umanitoba.ca/building-hope/

Poverty Awareness and Community Action Workshops: http://umanitoba.ca/student/studentlife/engagement/povertyawareness.html

SDG 2:

Bruce D. Campbell Farm & Food Discovery Centre: http://umanitoba.ca/afs/discoverycentre/

Nutrition, Education and Community Outreach (NECO): https://necoumanitoba.wordpress.com/

SDG 3:

Healthy U: http://umanitoba.ca/student/health-wellness/healthyu/index.html

Karnataka Health Promotion Trust (KHPT): http://www.khpt.org/

SDG 4:

Extended Education: https://umextended.ca/

Learning for Life: http://news.umanitoba.ca/alumni/seniors-alumni-program/

Mini U Programs: http://umanitoba.ca/faculties/kinrec/bsal/miniu/

U of M Accessibility Training: http://umanitoba.ca/admin/vp_admin/ofp/ohrcm/accessibility/resources.html

SDG 5:

WISE Kid-Netic Energy: http://umanitoba.ca/faculties/engineering/alumni_community/alumcomm_wise. html

Womyn's Centre: https://umsu.ca/services-and-support/community-groups/

Women's and Gender Studies Program: http://umanitoba.ca/faculties/arts/departments/womens_studies/

SDG 6:

CREATE H2O: http://create-h2o.ca/

Water Conservation: http://umanitoba.ca/campus/sustainability/resources/942.html

SDG 7:

Energy Management: http://umanitoba.ca/campus/sustainability/resources/942.html

Alternative Village: http://umanitoba.ca/faculties/engineering/departments/ce2p2e/alternative_village/index.html

SDG 8:

Diversity and Inclusion Strategy: http://umanitoba.ca/admin/human_resources/equity/about_us.html

No Sweat Policy: http://umanitoba.ca/campus/bookstore/no_sweat.html

SDG 9:

Smartpark: http://umanitoba.ca/smartpark/

SDG 10:

Population and Global Health: http://umanitoba.ca/faculties/health_sciences/medicine/units/chs/ departmental_units/cgph/

World University Service of Canada (WUSC): https://wusc.ca//U of M Chapter: https://www.facebook.com/WUSCUofM/

SDG 11:

Department of City Planning: http://umanitoba.ca/faculties/architecture/programs/cityplanning/index. html

Indigenous Planning and Design Principles: http://umanitoba.ca/admin/avp_admin/6401.html

SDG 12:

Supply Change Management: http://umanitoba.ca/asper/academic_depts_centres/dept/supplychain/ index.html

Re-Shop: http://umanitoba.ca/campus/physical_plant/waste_prevention/599.html

SDG 13:

Clayton H. Riddell Faculty of Environment, Earth, and Resources: http://umanitoba.ca/environment/

Careers that Fight Climate Change Mentorship Program: http://umanitoba.ca/student/studentlife/ servicelearning/cfccn.html

SDG 14:

Experimental Lakes Area (ELA): https://www.iisd.org/ela/

Churchill Marine Observatory: http://umanitoba.ca/ceos/research/CMO.html

SDG 15:

Biodiversity Baseline and Assessment Study: http://umanitoba.ca/campus/sustainability/media/UofM_Biodiversity_Final_Report_Jan_29.pdf

Community Based Resource Management: http://umanitoba.ca/institutes/natural_resources/nri_cbrm_ overview.htm

SDG 16:

Arthur V. Mauro Centre for Peace and Justice: http://umanitoba.ca/mauro_centre/

National Centre for Truth and Reconciliation: https://nctr.ca/map.php

Storytelling for Peace and Renewing Community (SPARC): http://umanitoba.ca/colleges/st_pauls/mauro_centre/sparc/658.html

SDG 17:

Alternative Reading Week: http://umanitoba.ca/student/studentlife/experience/index.html

Engineers Without Borders: http://umanitoba.ewb.ca/

Living Lab: http://umanitoba.ca/campus/sustainability/SustainabilityResearch.html

