

Campus Sustainability Office

Annual Sustainability Report

### Measuring our Impact and Assessing our Progress

2021-2022

### **Table of Contents**

List of Tables	3
List of Figures	3
1 Executive Summary	4
1.1 About this Report: Scope and Purpose	4
1.2 Reviewing the University's Environmental Performance in FY2021	6
1.3 Sustainability Highlights FY2021	
1.4 Challenges and Opportunities	11
2 Energy, Emissions and Responding to Climate Change	. 12
3 Resilient Ecosystems and Healthy Communities	. 17
3.1 Water Consumption	17

3.2 Waste Diversion	
3.3 Campus Food	21
3.4 Equity, Inclusion, Diversity and Indigenization	21
4 Sustainability Education and Knowledge Mobilization	
4.1 Sustainability Education	23
4.2 Sustainability ResearchError	! Bookmark not defined.
5 Engaging our Community and Nurturing Change-Makers	
5.1 Student Engagement	26
5.2 Staff Engagement	
5.3 Faculty Engagement	27
6 Conclusion	

#### LIST OF TABLES

Table 1. Changes to the University's occupied, owned and leased space (FY 1990, FY2019, FY2021)

Table 2. Student and staff population at University of Winnipeg (FY2012 – FY2021).

Table 3. Graduates that have taken at last one sustainability-focused or sustainability-related class as compared to total graduate population, 2017-2021.

Table 4. Staff, faculty, and student participation in CSO-hosted events in FY2021.

Table 5. Monthly CSO newsletter statistics from FY2021.

#### **LIST OF FIGURES**

Figure 1. Sustainability performance summary for the University of Winnipeg from April 1st, 2021 – March 31st, 2022 showing annual percent change for waste collection (T), waste diverted (T), water consumption (L), energy intensity (kWh/m2), electricity consumption (kWh), natural gas consumption (m3), and greenhouse gas (GHG) emissions (TCO2e). GHG emissions and natural gas consumption are normalized for weather.

Figure 2. Breakdown of greenhouse gas emissions (TCO2e) from the University in FY2021 by source, including electricity, natural gas, fleet vehicles, stationary fuel, and refrigerants.

Figure 3. Greenhouse gas emissions (TCO2e) from FY2008 to FY2021 (including the baseline year of 1990) for the University. Real annual emissions and weather adjusted amounts are shown.

Figure 4. Energy consumption (kWh) breakdown for the University from FY1990 to FY2021 including natural gas (weather adjusted) and hydro. The intensity (kWh /m2) is also shown. (Stationary fuel and vehicle fuel, which comprise <1% energy consumption per year, not pictured.)

Figure 5. Water consumption (L) for UWinnipeg from FY2009 to FY2021.

Figure 6. Annual compost, landfill, and recycling weights by proportion and diversion rate, as reported by hauler (FY 2008-2021).

Figure 7. Seats filled and completed in SF/SR courses from 2017-2021.

Figure 8. AWGS meeting in January 2022 with Peggy Bartlett of the Piedmont Project

### **1** EXECUTIVE SUMMARY

#### 1.1 About this Report: Scope and Purpose

This report reviews the University of Winnipeg's environmental and sustainability performance for Fiscal Year 2020 (from April 1, 2020 to March 31, 2021) across a wide range so indicators. This document was prepared by the Campus Sustainability Office (CSO) as part of our ongoing effort to monitor, analyze, and improve the University's social and environmental impact. The scope of the Annual Sustainability Report includes, where possible:

- ✓ the day-to-day operations and management of all the University's owned and leased space, including capital construction and renovations, and all university programs and services,
- ✓ all university programs, initiatives and events, and "arms-length" agencies, corporations, institutes, research centres or other entities, to which University policies may generally apply,
- $\checkmark$  and the routine activities of students, faculty, and staff on campus.

This report considers both the environmental impacts of the University's buildings and operations, such as resource consumption, waste generation, and emissions, and the contributions made by research, education, engagement, and community partnerships to broader sustainability objectives. It is an approach that reflects our commitment to leading on sustainability by taking responsibility for our environmental footprint and leveraging the many ways in which universities mobilize knowledge, foster innovation, and inspire change.

Our annual reporting process also allows us to assess our progress toward our strategic objectives over an extended period. This is our fourth year reporting on the University's 2017 Institutional Sustainability Strategy, which established nineteen specific targets within four overarching goals:

- 1) Exceed Canada's commitments under the Paris Accord.
- 2) Cultivate principled relationships with people on and off campus and with ecosystems near and far.
- 3) Develop and deliver curriculum, student services, and programming that deepen student knowledge about sustainability and that help motivate thoughtful leadership and action
- 4) Mobilize evidence and research to address local and global sustainability challenges

The four main sections of this report each focus on one of these goals, assessing progress on specific targets and outlining our strategic approaches to navigating emergent challenges.

This report can help people on and off campus learn about the University's sustainability initiatives and the ways in which the University is addressing climate change and other environmental issues. We are intentionally

contributing to a body of knowledge guiding university sustainability professionals across Canada and abroad while inviting businesses and organizations here in Manitoba into a dialogue about how we uphold our environmental responsibilities. If you would like to learn more about the University's sustainability projects or take a closer look at the data presented in this report, please contact the Campus Sustainability Office.

If you have any questions, please contact:

#### University of Winnipeg Campus Sustainability Office

sustainability@uwinnipeg.ca

204.988.7618

https://www.uwinnipeg.ca/sustainability

#### 1.2 Reviewing the University's Environmental Performance in FY2021

#### 1.2.1 CHANGES TO OWNED AND OCCUPIED SPACE AND THE CAMPUS POPULATION

Space owned and leased by the University of Winnipeg remained unchanged. Though our campus footprint has increased since FY1990, the University remains committed to targets based on gross emissions and other performance factors. Note that while student and staff population remained stable, few classes were held on campus and the majority of employees worked from home due to the COVID-19 pandemic.

	Total Area Occupied	Total Owned Space	Total Leased Space
FY1990	90,137	90,137	-
FY2020	156,811	147,112	9,698
FY2021	156,811	147,112	9,698

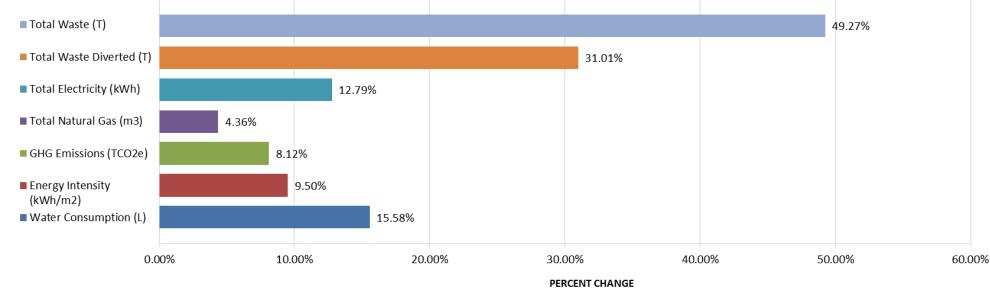
### Table 1: Changes to the University's occupied, owned and leased space (FY1990, FY2019, FY2020)

Fiscal Year	Students (FCE)	Students (FTE)	Staff (FTE)
FY2012	32,951	7,559	824
FY2013	32,906	7,679	810
FY2014	32,135	7,496	854
FY2015	32,241	7,563	832
FY2016	31,696	7,576	832
FY2017	31,722	7680	869
FY2018	31,893	7790	869
FY2019	33,178	8100	840
FY2020	33,675	7987	858
FY2021	33,318	7828	858

**Table 2:** Student and staff population at University of Winnipeg (FY2012 – FY2021).

#### 1.2.2 PRIMARY ENVIRONMENTAL PERFORMANCE INDICATORS

Increases across all sustainability indicators were evident from FY2020-2021. It is worth noting that performance indicators are still relatively low; we expect an even larger jump in the next reporting period, when campus populations have returned to pre-pandemic levels.



**Figure 1.** Sustainability performance summary for the University of Winnipeg from April 1st, 2022 – March 31st, 2022 showing annual percent change for waste collection (T), waste diverted (T), water consumption (L), energy intensity (kWh/m2), electricity consumption (kWh), natural gas consumption (m3), and greenhouse gas (GHG) emissions (TCO2e). GHG emissions and natural gas consumption are normalized for weather.

#### 1.3 Sustainability Highlights FY2020

#### 1.3.1 REDUCED ENVIRONMENTAL IMPACT

Like the previous year, energy consumption, emissions and waste levels in FY2021 were significantly lower than prepandemic years. Though we do not consider this a "win" in a traditional sense, this information does provide a baseline that shows us the difference between bare minimum campus operations and the resource consumption of the campus population. Since 2020, the University's Facilities team has been able to leverage our smart building technology to save energy, reduce emissions, and accurately control airflow and indoor environment controls essential for health and safety during the pandemic.

As some campus activities resumed in FY2021, key sustainability indicators also began their return to pre-pandemic levels. Weather adjusted GHG emissions are up 8% over 2020, and electricity use is up 12% (Figures 1 and 2 respectively). The extended winter of 2021, with cooler than average temperatures, also contributed to increased emissions and energy use. To improve health outcomes and reduce anxiety for those returning to campus during the pandemic, additional resources were also used to ventilate spaces and circulate large quantities of fresh air throughout campus buildings, in accordance with the University's <u>air control strategy</u>. This resulted in higher than normal electricity and natural gas consumption. The CSO and the facilities department look forward to investigating further avenues for GHG reductions and improved building efficiency in 2022.

#### 1.3.2 SUSTAINABLE COURSE TRACKING

For the last three years, the CSO has been working with the Academic Working Group on Sustainability (AWGS) to identify sustainability-focused (SF) and sustainability-related (SR) courses, as met by parameters set out by the Association for the Advancement of Sustainability in Higher Education (AASHE). In 2021, we were able to work with technology services to flag all SF and SR courses and get a first look at student sustainability education on campus. Initial results show that 90% of graduates in 2021 took at least one SF or SR course during their time at the University (see table 1), and that the number of students graduating with at least one sustainability course is on the rise over the last 5 years.

#### **1.4 Challenges and Opportunities**

#### 1.4.1 REMOTE WORKING AND LEARNING

FY2021 was the second full year of operations within the realities of the COVID 19 pandemic. Classes remained virtual for students, and most staff worked from home for the majority of the year, although more staff were on campus than in 2021. From an environmental standpoint, one benefit of the remote work model used during much of FY2020 is that it led to reduction of waste and emissions on campus. However, we also know that university activities happening off campus have environmental impacts that we cannot measure. Although students and staff are working from home, they are still consuming goods and using energy as part of their University activities, and we must keep this in mind when looking at sustainability performance data for FY2021. The CSO and its institutional partners will be looking for ways to make it easier for our staff, faculty and students to make sustainable lifestyle choices like eating locally, accessing green commuting options, and engaging in opportunities for social and environmental community service off campus.

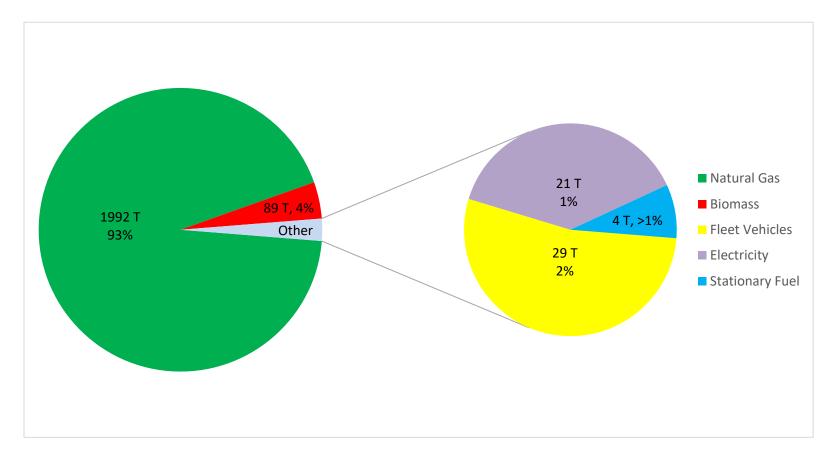
#### 1.4.2 AASHE STARS

The Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking and Rating System (STARS) is the primary tool that the University uses to measure its sustainability performance, as it provides a standardized rating and allows us to see where we stand in comparison to other universities. In 2017, the University of Winnipeg received a silver rating, and we had the highest rating in campus food services in Canada. In 2021, the CSO began a preliminary STARS assessment to see where we might stand in our next reporting period. In this process, it became apparent that the CSO should wait until fall 2023 to submit a new report, in the hopes that we can have a full year of data that includes a full student campus population. It also allowed us to set ambitious goals to help improve sustainability practices on campus and improve our STARS score. These improvements include administering a sustainability survey to students, working with the Research Office to better track sustainability research, and exploring methods to track greenhouse gases beyond our current scope. We look forward to reporting these improvements in the coming year.

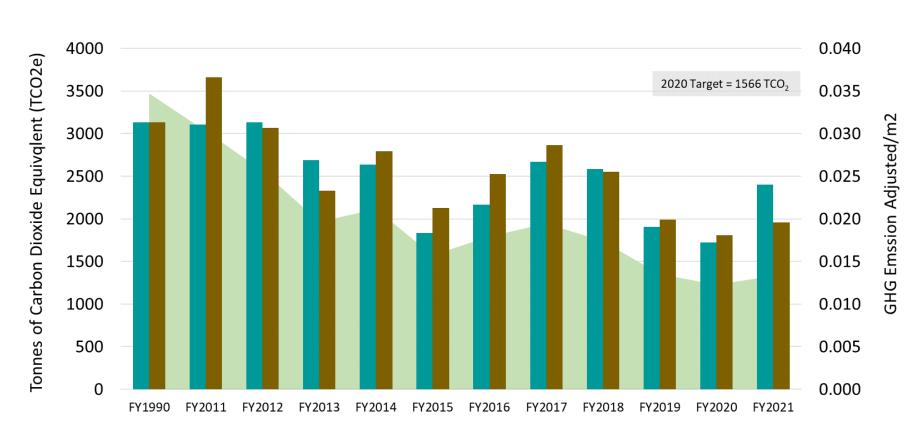
# **2** ENERGY, EMISSIONS AND RESPONDING TO CLIMATE CHANGE

In this section, we will report on energy and emissions of owned buildings. Because we do not operate the energy systems of leased buildings and cannot exercise direct influence over these spaces, they are not included in our inventory. As campus activities started to resume in FY2021, key sustainability indicators also began their return to pre-

pandemic levels. The extended winter of 2021, with cooler than average temperatures, also contributed to increased emissions and energy use. To improve health outcomes and reduce anxiety for those returning to campus during the pandemic, additional resources were also used to ventilate spaces and circulate large quantities of fresh air throughout campus buildings; this resulted in higher than normal electricity and natural gas consumption. The CSO and the facilities department look forward to investigating further avenues for GHG reductions and improved building efficiency in 2022.



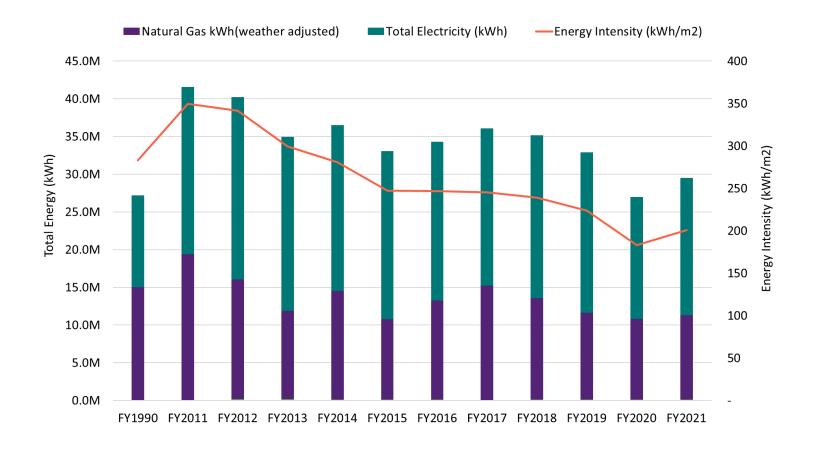
**Figure 2.** Breakdown of greenhouse gas emissions (TCO2e) from the University in FY2021 by source, including natural gas, biomass, electricity, fleet vehicles, and stationary fuel.



GHG Emssion Adjusted/m2
Real Annual Emissions
Weather Adjusted/m2

Weather Adjusted Annual Emissions

**Figure 3.** Greenhouse gas emissions (TCO2e) from FY2008 to FY2021 (including the baseline year of 1990) for the University. Real annual emissions and weather adjusted amounts are shown.



**Figure 4.** Energy consumption (kWh) breakdown for the University from FY1990 to FY2021 including natural gas (weather adjusted) and hydro. The intensity (kWh /m2) is also shown. (Stationary fuel and vehicle fuel, which comprise <1% energy consumption per year, not pictured.)

# **3** RESILIENT ECOSYSTEMS AND HEALTHY COMMUNITIES

#### 3.1 Water Consumption

In FY2020, water consumption at UWinnipeg fell by 82% due to the COVID-19 pandemic (Figure 5). Water consumption remained low in FY2021 as well, with 18.1 million litres used (compared to 53.5 million litres in FY2019). Our goal remains a 10% reduction over 2018 levels, but it is not yet clear whether water efficiency measures installed in FY2020 (plumbing upgrades, an improved water monitoring and leak detection system) will allow us to meet this goal once campus populations have returned to pre-pandemic levels.

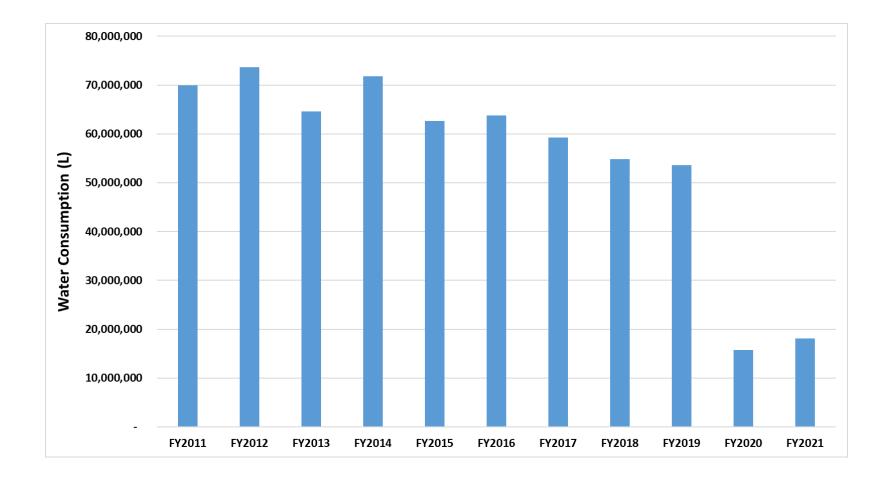


Figure 5. Water consumption (L) for UWinnipeg from FY2011 to FY2021.

#### 3.2 Waste Diversion

Waste continues to fall far below levels observed in pre-pandemic years, although total waste is up 49% over 2020 waste production. Diversion, or percent waste that is diverted from landfills to either recycling or compost streams, is up 31% over 2020 levels.

Waste reduction initiatives continued as possible on campus in 2021. The 3<sup>rd</sup> Annual McFeetors Hall Giveaway took place in April, an event led by the CSO in partnership with the University Facilities and Housing departments as well as Agape Table. For two weeks leading up to the event, students and other University community members can drop off dorm and household items and clothing at a designated collection area, and these goods are then set out on Giveaway Day for interested community members. In June 2021, the CSO was able to partner with Housing for a second time to donate enough furniture to fill a one-bedroom apartment to various community members for reuse through Centre Flavie-Laurent. Through events and partnerships like these, the University is able to divert large volumes of waste from the landfill while extending the life cycle of products for better use in the community.

The CSO has also been able to make use of social media platforms to continue to stay connected with the campus community and members of the public about sustainability on campus. We have utilized computer software to enhance waste diversion outreach and education on campus.

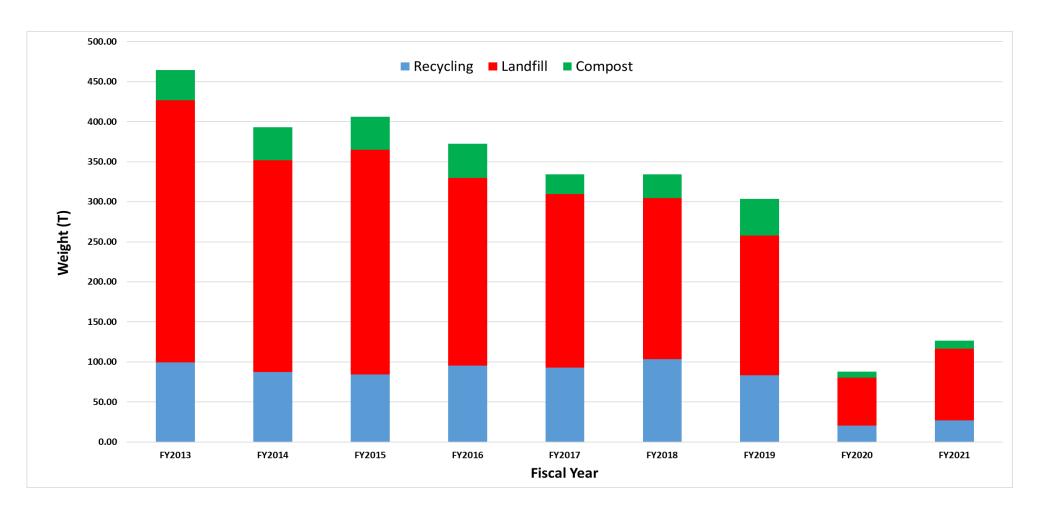


Figure 6. Annual compost, landfill, and recycling weights (T), as reported by hauler (FY 2008-2021).

#### 3.3 Campus Food

Diversity Foods was glad to have some return of student populations in FY2021. The reduced services also made time for renovations and business adaptation, including a renovated Riddell Hall, on-line ordering and menu-less dining at Elements, and planning for a new plant based kitchen. They were also able to expand their business model, allowing employees to remain at work even as campus levels remained low. This included the launch of Spruce Catering, a new department that featuring high-end, low-cost foods, which was able to work with clients like the Royal Canadian Aviation Museum, the Manitoba Museum, Red River College, Kinlock Grove, and FortWhyte Alive. This expansion also included test-marketing Diversity baked goods at the South Osborne Farmers market.

Diversity remains committed to social sustainability. In FY2021, they increased staff compensation packages to help minimize the effects of inflation on our team members. These employees enjoy quality jobs with family benefit plans, fair wages, and a defined contribution pension plan. Diversity moves forward with plans to increase staff size in the coming year.

#### 3.4 Equity, Inclusion, Diversity and Indigenization

The University of Winnipeg is committed to equity, diversity, and inclusion (EDI), as well as the general improvement of social sustainability on campus. In the spring of 2019 UWinnipeg was awarded an EDI Institutional Capacity Building Grant as part of the Equity, Diversity and Inclusion (EDI) Institutional Capacity-Building program from the Canadian Government. This year, the grant was used to support EDI education. The University continued its work under the Dimensions Pilot Program, which aims to assess systemic barriers in post-secondary environments, particularly those experienced by members of traditionally underserved, marginalized and excluded groups.

In FY2021, the HR Equity Census and Faculty Survey was administered with updated, more inclusive language and collection of disaggregated data that will enhance the University's analysis of its EDI efforts. The CSO and the Human Resources department will continue collaboration leveraging the data for strategic forward action, highlighting the links between environmental sustainability and workplace wellness.

Pursuant to Academic Hiring Guidelines introduced in the previous year to help increase representation rates of equitydeserving scholars, many faculty postings over the last two years have been designated or preferred hires. The Faculty of Arts recently introduced a requirement that all of its hires be designated or preferred.

The University's Human Rights and Diversity Office (HRDO) undertook several initiatives in FY2021-2022 to improve EDI indicators at UWinnipeg. Faculty Employment Equity Officers were trained to provide support to Departmental Personnel Committees (academic hiring committees) with EDI issues during recruitment. The HRDO also maintains a list of publications to advertise job postings to attract equity-deserving scholars and offers education sessions to hiring committees on reducing bias in recruitment and hiring.

All UW departments received updated Sexual Violence Prevention Policy (SVPP) Training, as did students and others. Other educational sessions offered or arranged by the HRDO included comprehensive Respect in the Workplace, Consent and Healthy Relationships, Duty to Accommodate, Learning Disabilities, Microaggressions, and Anti-Racism sessions. Online and written resources were expanded including a Faculty Resources section with additional online training options. The Accessibility for Manitobans Act Steering Committee was reconstituted and work commenced on updates to the University's Accessibility Plan. The HRDO also participated as a member of the MB Flexible Learning HUB's Project Board working on an EDI course for faculty at MB post-secondary institutions

## **4** SUSTAINABILITY EDUCATION AND KNOWLEDGE MOBILIZATION

#### 4.1 Sustainability Education

For the last three years, the CSO has been working with the Academic Working Group on Sustainability (AWGS) to identify sustainability-focused (SF) and sustainability-related (SR) courses, as met by parameters set out by the Association for the Advancement of Sustainability in Higher Education (AASHE). In 2021, we were able to work with technology services to flag all SF and SR courses and get a first look at student sustainability education on campus. Initial results show that 90% of graduates in 2021 took at least one SF or SR course during their time at the University (see table 1), and that the number of students graduating with at least one sustainability course is on the rise over the last 5 years.

We also explored seats filled and completed in SF or SR courses over the last five years. In 2021, 20% less seats were filled and completed than the year prior (see Figure 10). This could be due to lower SF/SR offerings, low retention rates in classes offered, or other factors. The CSO will work with departments with declining enrollment in SF/SR courses in the coming year to address this decline.

The CSO was also able to compare departmental graduates with sustainability education, and found that 41 out of 46 undergraduate departments had more than half of their students take a sustainability course before graduating. The AWGS and the CSO will be reaching out to the remaining 5 departments in the coming year to explore developing relevant sustainability course content.

**Table 3.** Graduates that have taken at last one sustainability-focused or sustainability-related class as compared to total graduate population, 2017-2021.

Total graduates with at least one SF or SR course	1407	1445	1403	1386	1531
Total graduates	1750	1754	1668	1603	1707
% graduated with at least one SF or SR course	80%	82%	84%	86%	90%

2017 2018 2019 2020 2021

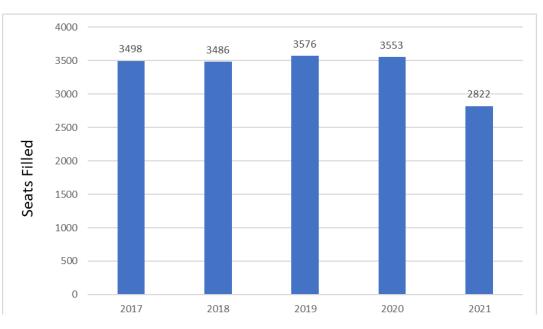


Figure 7. Seats filled and completed in SF/SR courses from 2017-2021.

## **5** ENGAGING OUR COMMUNITY AND NURTURING CHANGE-MAKERS

In FY2021, the CSO was able to extend our presence by offering student, staff, and faculty engagement through both virtual and on-campus outreach. The CSO continued to reach the campus community at large with newsletters as well as cross-campus and annual events. The CSO was also happy to reconvene the Academic Working Group on Sustainability (AWGS) in FY2021. Tables 3 and 4 below provide a two-year comparison of our engagement efforts.

Fiscal Year	Student participants	Staff participants	Faculty participants
FY2020	80	76	0
FY2021	62	37	16

Table 4. Staff, faculty, and student participation in CSO-hosted events in FY2021.

 Table 5. Monthly CSO newsletter statistics from FY2021.

Fiscal Year	Newsletters mailed	% of recipients who opened newsletter	% who followed an embedded link
FY2020	7561	31.5	7.8
FY2021	6180	25	6

#### 5.1 Student Engagement

In FY2021, the International Institute for Sustainable Development (IISD) hosted two online workshops for UW students. These workshops were titled *The Activist's Guide to Navigating Environmental Policy* and *A Closer Look at the SDGs.* The CSO presented to two Collegiate Geography classes (28 students) about sustainability initiatives and waste diversion on campus. Social media has been a great tool for building relationships with new and returning students while on a hiatus from being in-person. Despite the pause in campus activities, the CSO was able to increase the number of Instagram followers in 2021.

#### 5.2 Staff Engagement

The Green Office Program (GOP) continues to be the primary program to reach staff across campus and work with departments to improve their environmental awareness and performance. During FY2021, the CSO hosted one workshop specifically targeted to GOP members: *Beginner's Guide to the Food Cycle*. The CSO also coordinated with the Office of the Department of Justice Canada (DOJ) to present to numerous DOJ offices across Canada, including Manitoba, Ontario, and Alberta.

For those looking for a more active role in our Green Office Program, there is the option to become a GOP Representative. These individuals meet with a CSO staff member to conduct a Green Office Walkthrough and set yearly goals for their office based on our GOP Checklist. They then work with CSO staff to achieve these goals. Staff members in the Criminal Justice department have expressed that they would like to partake in more sustainability initiatives.

#### 5.3 Faculty Engagement

In 2021, the CSO led a renewal of the University's Academic Working Group on Sustainability (AWGS). Several new faculty members were recruited to the group which now was representation from seven academic departments. The AWGS met once a month between October 2021 and April 2022. These meetings were essential for onboarding new members and building a collective understanding of the group's raison d'etre. Several members also attended a workshop hosted by AASHE on the incorporation of sustainability concepts into courses across different academic departments. Through these meetings, the members developed a new mission statement which encompasses the original intent of the group established by the Campus Sustainability Council and provides direction for our future initiatives. The current mission statement reads as follows:

The Academic Working Group for Sustainability is an advocacy body that provides opportunities for faculty, students, and community to be leaders in sustainability education and research. We work to ensure that sustainability and other ideas relating to social and environmental justice, and Indigenization remain central to teaching, research, and learning at the University of Winnipeg.

In the coming academic year, the AWGS will pursue the following goals:

1) Host workshops that help interested faculty to integrate sustainability concepts into courses across many departments, drawing on models for faculty engagement and development established by other universities.

- 2) Develop a collaborative research project led by AWGS members and supported by Campus Sustainability Office staff that tracks the impact of these workshops.
- 3) Advocate for sustainability as a key issue in future administrative strategy and mandates like the Integrated Academic and Research Plan.
- 4) Provide academic oversight to the existing Student Sustainability Leadership Program and related activities like a student leadership retreat.
- 5) Explore the possibility of establishing a sustainability-related alternative credentialling program at the University of Winnipeg

## 6 CONCLUSION

As on-campus activities resumed in FY2021, the University strived to make campus a safe place to work and study. The CSO also worked to provide outreach to students and staff in both remote and in-person formats, reestablishing our connection with the wider campus community. The CSO will use pandemic-period data in the coming years to establish new baselines for sustainability performance, and we will also use the skills gained in remote outreach to maintain our connection to students through breaks and periods of low engagement. As always, the CSO would like to thank all our other departmental collaborators in this challenging year, and know we look forward to working with you again in FY2022.