

Sustainability

Bureau du développement durable

CLIMATE & SUSTAINABILITY ANNUAL REPORT 2022-2023

September 2022 - August 2023



INTRODUCTION

The Climate & Sustainability Annual Report examines achievements, initiatives, and other sustainability-related activities that the McGill community accomplished during the 2022-2023 academic year. These highlights are presented in relation to the eight categories identified in the McGill University Climate & Sustainability Strategy 2020-2025:

- Research & Education
- Buildings & Utilities
- Waste Management
- Travel & Commuting
- Food Systems
- Procurement
- Landscapes & Ecosystems, and
- 🔞 Community Building

Each category section provides an overview of key accomplishments related to the topic area. Accomplishments related directly to strategy actions are denoted with a small category icon (see icons above). Additionally, a bar indicating strategy category implementation progress¹, several key facts and metrics for the academic year (AY), fiscal year (FY) or calendar year (CY), as well as related United Nations Sustainable Development Goals (SDGs) are provided.

Figures included in the report are based on the most recently available data. Most At-A-Glance figures cover the 2022-2023 academic year or are as of August 2023; any exceptions are clearly indicated.

The report also provides an overview of the University's flagship Sustainability Projects Fund (SPF), an update on key performance indicators, as well as a look forward to the next academic year.

The successes described within this report reflect the efforts made by many faculties, units, groups and individuals across the McGill community.

¹The percentage of category progress is calculated based on the level of implementation of each action. Actions categorized as ongoing were not assigned a percentage and were therefore not considered when averaging the degree of completion for the overall category.

03

RESEARCH & EDUCATION

05

BUILDINGS & UTILITIES

07

WASTE MANAGEMENT

09

TRAVEL & COMMUTING

11

FOOD SYSTEMS

13

PROCUREMENT

15

LANDSCAPES & ECOSYSTEMS

17

COMMUNITY BUILDING

19

SUSTAINABILITY PROJECTS FUND

21

KEY PERFORMANCE INDICATORS

22

LOOKING FORWARD

23

SUSTAINABILITY PARTNERS



By 2025, identify strategies to increase learning and research opportunities in sustainability.



KEY ACCOMPLISHMENTS

In Fall 2022, Environment and Climate Change Canada announced that it would **invest more than \$4 million in three McGill-led projects** through the Climate Awareness and Action Fund. These projects address critical data and knowledge gaps about greenhouse gas emissions and their environmental impact.

In March 2023, McGill received a \$1.25 million gift from CIBC in support of the cross-faculty Sustainable Growth initiative (SGI) to fund the CIBC Office of Sustainable Finance. This gift will expand the SGI's ability to promote sustainable finance business practices through five major activities: research-to-action, community engagement, student competitions, thought leadership, and education.

- McGill's online sustainability module, **Creating a Brighter Future: Sustainability at McGill,** was launched in January 2023. Available to all McGill students, the module aims to increase awareness about sustainability and to encourage student engagement with sustainability topics and initiatives. **800 students and counting** have enrolled in the module on MyCourses.
- In 2022-2023, the **Sustainability Education Fellows** program was launched. This initiative brings together faculty and students to advance sustainability in the curriculum and pedagogy at McGill. During the program, **10 Faculty Fellows from 7 faculties** (re)designed a course to infuse sustainability principles into the curriculum, pedagogical practices, and assessments.
- In Fall 2022, the **Climate Crisis & Climate Actions** course was made available to all undergraduate students. The course is designed to provide students the skills necessary for individual and collective actions to address climate change.
- In addition to the release of a **new Sustainable Labs Guide**, 14 McGill labs participated in the **International Freezer Challenge** engagement program in 2023. 160 lab personnel participated, and 131 cold storage units were cleaned.

84% IMPLEMENTED

27% since 2021-2022

RESEARCH & EDUCATION AT-A-GLANCE



\$437,500

in faculty funding awarded by the Bieler School of Environment and the McGill Sustainability Systems Initiative



730

Sustainability Courses Offered in AY2021-2022



81%

of Academic Departments with Sustainability Course Offerings in AY2021-2022



\$9.3M+
for Sustainability
Research in FY2022



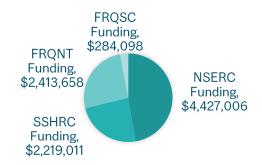
4,918SDG-Related
Research Publications in CY2022



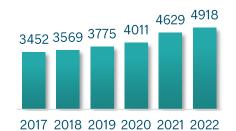
34%

of Students Graduated from Programs Requiring an Understanding of Sustainability in AY2021-22

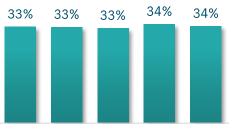
KEY METRICS



NSERC, SSHRC, FRQNT, and FRQSC* Funding Allotted to Sustainability Research (FY2022)



Number of SDG-Related Research Publications by Calendar Year



2014-15 2018-19 2019-20 2020-21 2021-22

% of Students Graduating from Programs that Require an Understanding of the Concept of Sustainability by Academic Year











By 2025, increase the environmental performance of buildings while reducing their carbon footprint.



KEY ACCOMPLISHMENTS

- The Alan Edwards Centre for Research on Pain was awarded **LEED® Gold certification** in August 2023. Renovations included solar shading to reduce cooling requirements, low-flow water fixtures to reduce water demand by over 40%, and the use of low-Volatile Organic Compound (VOC) materials.
- Progress on the project to replace the **natural gas boiler with an electric boiler** and install **heat recovery equipment** at the downtown Powerhouse continued to experience delays in 2022-2023. Despite difficulties, key work was completed on the foundation, underground infrastructure and electrical infrastructure. The boilers are set to be delivered and put into service by 2024. This project is a key part of the University's plan to become carbon neutral by 2040.

In 2022, building construction and renovations generated over 675 tonnes of construction and demolition waste; thanks to dedicated sustainability efforts, **93% of this waste** was diverted away from landfills.

The University's net emissions in 2022 were **44,659 tCO2e**, a decrease of **21% since 2015**. This achievement is due in part to continued decreases in university-related air travel and commuting as a result of the COVID-19 pandemic, smart energy grids, and recently implemented heat recovery projects, which have counteracted emissions from increased ventilation rates throughout 2022 to combat the transmission of COVID-19.



57% IMPLEMENTED

9% since 2021-2022

BUILDINGS & UTILITIES AT-A-GLANCE



-21%

in Institutional Greenhouse Gas Emissions between 2015 and 2022



100%

Eligible new construction built to LEED® Certification specifications



0.93 tCO₂e

Building-Related Emissions per FTE Student in AY2021-22



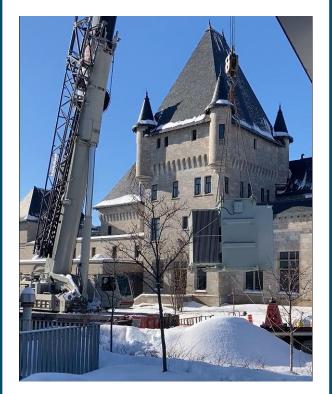
-9,000 tCO₂e

Expected Reductions from the Boiler Replacement and Heat Recovery Project

KEY METRICS



Building-related GHG emissions per Full-time Equivalent Student by Academic Year



In February 2023, transformers were delivered to the downtown Powerhouse for the Boiler Replacement and Heat Recovery Project.

RELATED SDGS











By 2025, expand reuse, recycling, and composting efforts to increase the University's waste diversion rate.



KEY ACCOMPLISHMENTS

In April 2023, McGill received recognition for its waste management practices: RECYC-QUÉBEC, the government branch responsible for sustainable waste management, **awarded McGill's downtown campus the <u>"Performance"</u> <u>designation</u> within its ICI on recycle + certification program.**

- In 2022-2023, Zero-Waste Ambassadors conducted **700 hours** of tabling over the Fall and Winter terms and had over **2,700 interactions**. McGill also hired a **Zero Waste Intern** to create and disseminate a centralized suite of educational materials and resources while identifying opportunities to engage with the McGill community. Moreover, the University developed a **Zero-Waste Knowledge Base**, a resource to help members of the McGill community understand the impacts of waste, learn what McGill is doing to become zero-waste, and to rethink consumption and waste sorting habits.
- Recycling was made available outdoors on campus for the first time with the installation of 40 outdoor two-stream waste bins. These replaced stand-alone trash bins in high traffic areas of the downtown campus.

A new project aimed at addressing lab waste management at McGill was awarded **close to \$400,000 by the SPF.** The project tackle systemic issues in lab waste and will be implemented over the next two years.

66% IMPLEMENTED

WASTE MANAGEMENT AT-A-GLANCE



34 Student Zero-Waste **Ambassadors Recruited**



40 **New Outdoor Multi-stream Waste Sorting Stations Installed**

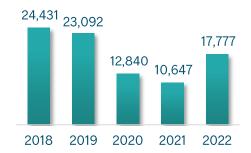


53% of McGill's Waste was **Diverted from the Landfill** in CY2022



27% **Decrease in McGillbranded Paper Products** from 2018 to 2022

KEY METRICS



Kilograms of McGill-branded Paper Products produced by Calendar Year







Zero-Waste Ambassadors created waste-sorting Instagram reels and received over 30,000 views. These were complemented by Zero-Waste Wednesdays graphics and explainers throughout the year.

RELATED SDGS











By 2025, develop initiatives to reduce the carbon footprint of commuting activities, directly funded air travel, and McGill's fleet of vehicles.



KEY ACCOMPLISHMENTS

- In 2023, a **new Ride & Refresh program** was launched to make it easier for McGill employees to bike to work. With access to on-campus shower and locker room facilities, participants get to enjoy an active commute and arrive at the office clean and refreshed. Moreover, **new bike racks and a repair station** were installed outside of the Currie Gymnasium to complement the program.
- The Bayano tree plantation project team **developed a maintenance and monitoring plan** for 2023-2024 and have **expanded student research** on the project. Eight students have worked on research that includes carbon sequestration calculations, fire control, monitoring, leakage, and participants' motivations and visions for the future. Additionally, local coordinators began monitoring trees planted in 2020 with the help of McGill researchers.
- The SPF-funded \$250,000 Electric Vehicle Subsidy was extended another 5 years, to 2028. This initiative provides an internal subsidy to McGill fleet vehicle managers to support the transition from conventional fuel to sustainable vehicles, defined as hybrid, plug-in hybrid and electric.
- The SPF-funded project led by Multimedia Services to **renovate multimedia studios**, thereby providing an alternative to air travel,
 progressed during the academic year. The project involved creating a livestreaming studio and implementing services for McGillians to deliver
 lectures remotely for international conferences.

76% IMPLEMENTED

21% since 2021-2022

TRAVEL & COMMUTING AT-A-GLANCE



44,500

Trees Planted as part of the Bayano-McGill Reforestation Project (2020-2022)



23Electric Vehicle Charging Heads on our Campuses



4
Bike Repair Stations
Installed Downtown



KEY METRICS



Percentage of Electric and Hybrid Vehicles in the McGill Fleet by Calendar Year



Communications & External Relation's livestreaming studio is a new space on campus dedicated to delivering high-quality presentations and keynote lectures. The studio offers an alternative to air travel to international conferences.







By 2025, enrich sustainable food offerings by promoting local, third-party certified, and plant-based options.



KEY ACCOMPLISHMENTS

In March 2023, students launched the **Margaret A. Gilliam Institute for Global Food Security Student Nexus**, a new hub to advocate for global food security. Open to students in any field of study, the group's goal is to raise awareness about the topic of food security, while also giving its members a place to come together and learn from one another.

- The SPF awarded close to \$100K in funding for a Zero-Waste Dining Halls project. This project aims to reduce single-use items and improve waste infrastructure in campus dining halls.
- The Macdonald Campus Farm provided the downtown campus dining halls with **over 15 tonnes of fresh produce** in 2022 a 6% increase from 2021 including 1.4t of apples, 3.8t of onions, and 5t of tomatoes.

McGill's downtown campus renewed its **Fair Trade Campus certification** in 2022 for the **10**th **year in a row**. Macdonald Campus received its **5**th **consecutive** Fair Trade Campus certification.

32% IMPLEMENTED

3% since 2021-2022

FOOD SYSTEMS AT-A-GLANCE



15 tonnes

of Produce Grown at Macdonald Campus served Downtown (2022)



22%
of Food Purchases





KEY METRICS



% of Sustainable Food* Procured by Academic Year

*Sustainable (local, Fair Trade, organic, and sustainable seafood) food procured for locations managed by provider Dana Hospitality.



Environmental Residence Council hosted a Fair Trade Baking Night at La Citadelle residence. The brownies were made with Fair Trade cocoa, cane sugar, and chocolate chips.

RELATED SDGS









By 2025, raise awareness on sustainable procurement and contribute to the development of a circular economy.



KEY ACCOMPLISHMENTS

- In Spring 2023, Procurement Services released a revised Supplier Code of Conduct that was updated in collaboration with other Québec universities and which is also gradually being adopted by other institutions. This Common Supplier Code of Conduct has been filed with the Bureau de la Coopération Interuniversitaire (BCI), and is available to all Quebec universities, with the expectation that it will continue to be updated and/or improved over time.
- Following new asset management procedures, the SPF-supported Facilities Management project, FMAS Sustainability Push, resulted in the reuse and/or donation of **over 2,000 articles of furniture and building materials**. Similarly, more than 580 IT assets were redeployed internally or sent to our certified, non-profit, refurbishing partner, creating employment opportunities for at-risk youth.
- Procurement Services **offered the "Sustainable Procurement 101" workshop** to 175 staff and faculty members in 2022-2023. The team also developed a more advanced Sustainable Procurement 3-hour training for its staff and offered this training to 90 people in procurement departments across all Québec universities.

McGill **joined the <u>Fair Labor Association</u>** in Spring 2023 further demonstrating its commitment to fair labor conditions and upholding human rights.

93% IMPLEMENTED

9% since 2021-2022

PROCUREMENT AT-A-GLANCE



130+

Indigenous and Social Economy
Businesses in McGill Marketplace



265
People Trained on
Sustainable Procurement



2,000+

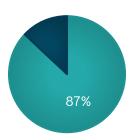
Articles of Furniture and Building Materials Reused or Donated



500+

IT Assets Sent to a Non-Profit for At-Risk Youth

KEY METRICS



% of IT Assets that meet specific sustainability criteria (Total Spend) with Sustainability Elements Included in FY2022



Facilities Management and Ancillary Services supports units with their requests concerning the removal or reuse of furniture, finding internal or external takers and helping the unit to coordinate with McGill-approved movers.









By 2025, develop landscaping projects that reduce the heat island effect, increase biodiversity, and foster well-being.



KEY ACCOMPLISHMENTS

McGill joined a global community of universities who have **committed to the Nature Positive Pledge** in Fall 2022. Launched by the UN Environment Programme and the University of Oxford to coincide with COP15 in December 2022, the Nature Positive Pledge commits higher education institutions to taking action on biodiversity preservation. McGill is one of only 14 Canadian universities to sign the Pledge.

- The University **completed its first Biodiversity Plan** that identifies and promotes key initiatives in support of biodiversity on McGill's campuses. The Plan was endorsed by the University's governing bodies in Summer 2023 and will be launched the following Fall. People from 15 different units, groups, and faculties were consulted during the plan's development.
- McGill undertook its **first climate risk assessment** in Winter 2023, with collaboration and input from several internal units. The results will be used to inform adaptation and resilience measures, which will be incorporated into the next Climate & Sustainability Strategy (2025-2030).

The **Staff Gardens urban agriculture program** was popular once again in Summer 2023. 138 individuals registered to the program, representing 32 units across campus.

7 projects focused on improving landscapes and ecosystems were approved for funding by the SPF. These included the Sanctuary for Native Medicinal Plants at McGill, The Lab Garden, and the MORSL Interfaith Peace Garden.



LANDSCAPES & ECOSYSTEMS

CLIMATE & SUSTAINABILITY STRATEGY 2020-2025 IMPLEMENTATION PROGRESS

78% IMPLEMENTED

53% since 2021-2022

LANDSCAPES & ECOSYSTEMS AT-A-GLANCE

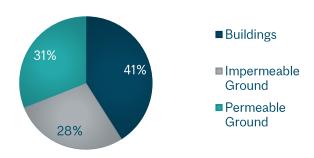








KEY METRICS



% of Permeable Surface Type on Downtown Campus CY2021



RELATED SDGS









By 2025, enhance opportunities for sustainability and well-being initiatives while increasing the representation of past and present communities on the campuses' physical spaces.



KEY ACCOMPLISHMENTS

- A record number of student Sustainability Ambassadors were recruited in the 2022-2023 academic year as part of the expanded Sustainability Ambassador Program (SAP). This program provides students with the opportunity to develop leadership skills and to introduce the McGill community to sustainability initiatives across the campuses. 57 students chose between three SAP streams: the Sustainability Projects Fund stream, the Zero-Waste stream, and the Sustainable Events stream. Collectively, the ambassadors volunteered over 3,400 hours.
- Over 200 staff and faculty attended 8 sustainability-themed workshops offered through Organizational Development in partnership with the McGill Office of Sustainability.
- 26 workplaces were certified through the Sustainable Workplace Certification program in 2022, for a cumulative total of over 120 workplaces certified over the past five years. McGill's Human Resources department led by example, with all seven HR units achieving bronze-level certification.
- Over 95 small, medium, large in-person events and online events were certified through the Sustainable Event Certification program in 2022-2023.

Over 100 people attended the Sustainable Food System Solutions Research Fair, which was held in March 2023 as part of the University Global Coalition's SDG Action and Awareness Week. The event focused on SDG 2 Zero Hunger and its main goal was to encourage research cross-collaboration between the downtown and Macdonald campuses.



81% IMPLEMENTED

11% since 2021-2022

COMMUNITY BUILDING AT-A-GLANCE



460+
Certified Sustainable
Events since 2017



55Staff became Sustainable Workplace Ambassadors

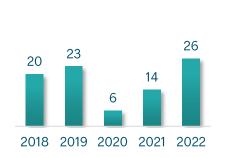


120+
Workplaces Certified
Sustainable since 2018

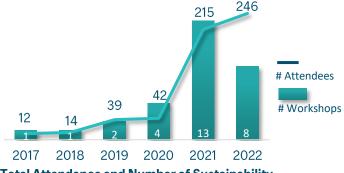


57
Student Sustainable Event
Consultants, Sustainability
Projects Fund Ambassadors,
and Zero-Waste Ambassadors

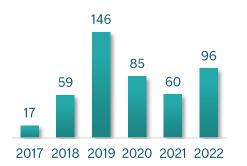
KEY METRICS



Total Number of Workplaces Certified by Calendar Year



Total Attendance and Number of Sustainabilityrelated Staff Workshops by Calendar Year



Total Number of Certified Sustainable Events by Calendar Year

RELATED SDGS











Build a culture of sustainability on McGill campuses through the development and seed-funding of interdisciplinary projects.



KEY ACCOMPLISHMENTS

The SPF was successfully **renewed for an additional five years** (FY2023-FY2028) at a fee of \$0.55 per credit for students, matched dollar-for-dollar by the University. Thanks to the support and hard work of dedicated students across campus, PGSS, SSMU, and MCSS voted to continue funding the SPF. The University also confirmed its commitment to funding its half of the SPF.

To forge fruitful partnerships and promote awareness of approved projects, the SPF hosted **two student-focused events**: **the Sustainability Soirée** (September 14) was hosted in collaboration with the McGill Sustainability Systems Initiative (MSSI) to showcase funded projects; and the Student Sustainability Network (SSN) brought student groups together for an evening of **networking and brainstorming potential SPF projects** (March 23).

- The largest SPF project approved in FY23 was a Big Wave application for "Launching Systemic Solutions to Lab Waste Management at McGill."

 The applicants will receive \$399,000 to implement systemic solutions to lab waste management challenges at McGill by developing University-level infrastructure and procedures to reduce and recycle non-hazardous waste.
- Other notable SPF applications approved in FY23 include a project to implement **organic waste collection in downtown McGill student**
- residences; a program to support faculty in infusing sustainability into their
- academic practice; and a program to encourage **sustainable commuting** to campus.



SUSTAINABILITY PROJECTS FUND

SUSTAINABILITY PROJECTS FUND AT-A-GLANCE (FY2023)



\$12M+ Allocated to Sustainability **Projects since 2010**



6.100+ **Volunteers Mobilized** since 2010



100+ Partnerships/Collaborations **Developed**

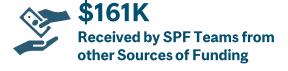


RELATED **SDGS**

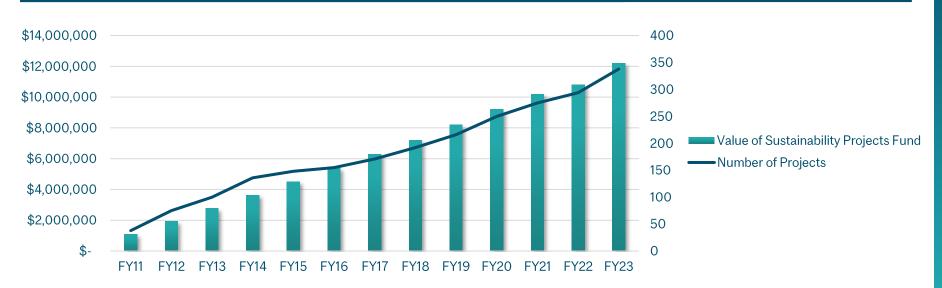


15.000+ **People Trained through Projects since 2010**





KEY METRICS



Cumulative Value of the Sustainability Projects Fund and Number of Projects Approved by the Sustainability Projects Fund

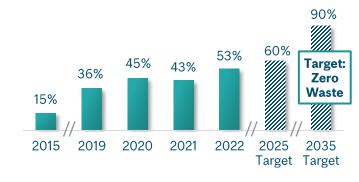
KEY PERFORMANCE INDICATORS

The University tracks several key performance indicators (KPIs) to measure the implementation of the Climate & Sustainability Strategy 2020-2025, as well as its three long-term targets: to attain a platinum sustainability rating by 2030, to become a zero-waste campus by 2035, and to achieve carbon neutrality by 2040. Progress on these KPIs is reported to the Board of Governors on an annual basis.

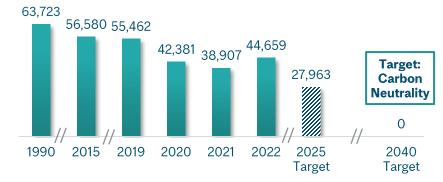
KEY PERFORMANCE INDICATORS



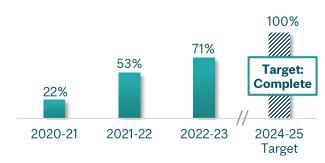
STARS® Sustainability Score and Rating by Submission Year¹



% of Waste Diverted from Landfill by Calendar Year²



Net Tonnes of Institutional Greenhouse Gas Emissions by Calendar Year



% Completion of the Climate & Sustainability Strategy 2020-2025 by Academic Year

²Construction and demolition waste diversion was included in 2022 due to newly available data.



LOOKING FORWARD

CLIMATE & SUSTAINABILITY STRATEGY (2025-2030) CONSULTATIONS

Over the next year and a half, the University will develop a new Climate & Sustainability Strategy (2025-2030) that reflects the needs of the McGill community, outlines key objectives and actions to take, and expresses the University's commitment to leadership in sustainability. The University will make the consultation process meaningful and engaging, while encouraging wide participation through in-person and online events.

NEW VIC PROJECT

The New Vic project, which aims to revitalize a portion of the site of the former Royal-Victoria Hospital, will continue to take shape over the coming years. This state-of-the-art research, teaching, and learning hub is set to play a significant role in promoting interdisciplinary connections and research around sustainability and public policy.

STARS® REPORT SUBMISSION

In Fall 2023, McGill will submit a Sustainability Tracking, Assessment, and Rating System (STARS®) report to the Association for the Advancement of Sustainability in Higher Education (AASHE). Produced every three years, the report captures a full picture of sustainability progress at McGill. As many actions in the Climate & Sustainability Strategy (2020-2025) were aligned to best practices in STARS®, the University expects an improved score, in alignment with its goal to attain a Platinum sustainability rating by 2030, one of the University's Key Performance Indicators.

SUSTAINABLE LAB CERTIFICATION LAUNCH

In the 2023-2024 academic year, the University will launch a new Sustainable Labs Certification program that will catalyze and incentivize sustainability in labs. The lab certification builds on the successful workplace and events programs and responds to requests for institutional support from the lab community.



Thank you to all of the staff, students, faculty, and alumni who have contributed to advancing sustainability on and beyond McGill's campuses this year.

SUSTAINABILITY PARTNERS

Groups, units, and departments whose efforts have greatly contributed to McGill's sustainability-related achievements include, but are not limited to:

- Buildings and Grounds
- Campus Planning & Development Office
- Communications and External Relations
- Design Services
- Environmental Health & Safety
- Equity Office
- Faculty Froshes
- Gault Nature Reserve
- Green Labs at McGill
- Office of Indigenous Initiatives
- Human Resources
- Internal Audit
- Macdonald Campus Sustainability Committee
- McGill Sustainability Systems Initiative
- New Vic Project Office
- Office of the Principal and Vice-Chancellor
- Office of the Provost and Vice-Principal (Academic)
- Office of the Vice-Principal (Administration and Finance)
- Office of the Vice-Principal (Research and Innovation)
- Office of Analysis, Planning, and Budget
- Organizational Development
- Parking & Transportation Services
- Procurement Services
- Redpath Museum
- SDG Student Hub
- Secretariat
- Student Housing & Hospitality Services
- Student Societies (SSMU, MCSS, PGSS)
- Teaching & Learning Services
- University Advancement
- Utilities & Energy Management