

# INTRODUCTION

The Climate & Sustainability Annual Report examines achievements, initiatives, and other sustainability-related activities that the McGill community accomplished during the 2023-2024 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
- 圆 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 progress<sup>1</sup>, 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 2023-2024 academic year or are as of August 2024; 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.

<sup>1</sup>The 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.

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# RECOGNITION

#### **STARS Platinum Rating**

In March 2024, McGill earned a Platinum rating under the Sustainability Tracking, Assessment & Rating System (STARS®). At the time of submission, only 14 institutions worldwide and five in Canada had received the STARS program's highest sustainability rating. This achievement fulfills a commitment made by the University in 2017 to achieve a Platinum rating by 2030, six years in advance.

#### 13th in QS World University Sustainability Rankings

McGill is the fifth most sustainable institution in North America, according to the second annual QS World University Rankings: Sustainability. Across the globe, the University is 13th among 1,403 institutions. Evaluated by three categories – environmental impact, social impact, and governance – key metrics include institutions' academic reputation in earth and environmental sciences, their research impact on the United Nations' Sustainable Development Goals (SDGs), and the dissemination of their research.

#### **Nationally Recognized by CAUBO**

In June 2024, the Canadian Association of University Business Officers (CAUBO) conferred its Quality and Productivity Award on Envisioning a More Sustainable McGill, the online sustainability learning module for faculty and staff. The module, developed by the McGill Office of Sustainability and Teaching and Learning Services, offers a crash course on how to practice sustainability on the university's campuses.





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



#### **KEY ACCOMPLISHMENTS**

The University established a **new research chair in Northern Climate Change and Sustainability**, thanks to a philanthropic gift from McGill graduates Marc and Marie Bieler, longtime stewards and supporters of McGill and its efforts to better understand climate change and environmental degradation through focused research and enhanced teaching programs.

- McGill's online staff sustainability module, Envisioning a More Sustainable McGill, was launched in December 2023. Available to all McGill staff and faculty, the module aims to increase awareness about sustainability and to encourage staff engagement with sustainability topics and initiatives. Over 575 staff have enrolled in the module on MyCourses.
- In 2023-2024, the **Sustainability Education Fellows** program ran for a second year, bringing together faculty and students to advance sustainability in the curriculum and pedagogy at McGill. During the program, **11 Faculty Fellows from 6 faculties** (re)designed courses to infuse sustainability principles into the curriculum, pedagogical practices, and assessments.

In September 2023, a McGill-led research team received a **\$3.75M NSERC**Alliance Grant to support research at a new Global Climate Center on
Artificial Intelligence for Biodiversity Change. With the funding, the McGill team will improve models that map critical habitat for biodiversity and that predict biodiversity changes into the future.

**88% IMPLEMENTED** 

4% since 2022-2023

#### **RESEARCH & EDUCATION AT-A-GLANCE**



\$70,000

in faculty funding awarded by the McGill Sustainability Systems Initiative (FY24)



600+

Sustainability Courses Offered in AY2023



75%+

of Academic Departments with Sustainability Course Offerings in AY2023



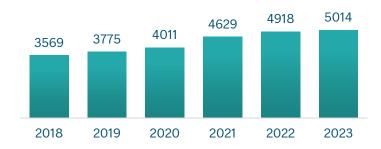
\$17M +
NSERC funding for
Sustainability
Research in FY2023\*



5,000+

SDG-Related Research Publications in CY2023

#### **KEY METRICS**



Number of SDG-Related Research Publications by Calendar Year



The Sustainability Education Fellows program ran for a second year, bringing together faculty and students to advance sustainability in the curriculum and pedagogy at McGill.











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



#### **KEY ACCOMPLISHMENTS**

The McGill University Collections Centre, a new off-campus storage facility housing a significant portion of the McGill Library's collections, was awarded **LEED® Gold certification** in June 2024. The building earned its certification thanks to its energy conservation, water-use reduction, enhanced indoor air quality and reduced impact on the surrounding environment.

In 2023, **over 90 tonnes** of construction and demolition waste was sent to **recycling facilities**. The McGill Design Standards objective is to divert a minimum of 75% (by weight or volume) of non-hazardous waste generated by construction, renovation, and demolition, from going into landfills.

Design Services and Project Management units integrated **sustainable design elements** into the newly renovated Burnside Hall basement. These included increasing light levels to mimic daylight and to support indoor plant growth, as well as **improving classroom accessibility** for those with reduced mobility. The project also saw the installation a large gender-inclusive washroom, which **promotes inclusivity** and respect for individual identities.

With support from the Sustainability Projects Fund, Facilities Management and Ancillary Services (FMAS) led a collaborative effort to develop an innovative building **design standard to minimize carbon emissions associated with concrete**. McGill's new design standard sets ambitious yet achievable carbon reduction requirements for onsite poured concrete.

An **electric boiler** was delivered in September to the downtown Powerhouse for the Boiler Replacement and Heat Recovery Project. As previously reported, the boiler is expected to **reduce annual GHG emissions by 9,000 metric tonnes** of carbon dioxide equivalent.



92% IMPLEMENTED

35% since 2022-2023

#### **BUILDINGS & UTILITIES AT-A-GLANCE**



-17%

in Institutional Greenhouse Gas Emissions between 2015 and 2023



100%

Eligible new construction built to LEED® Certification specifications



4,000+

Square meters of LEED Gold-certified space at the Valleyfield library collections centre



90+

Tonnes of renovation and construction waste sent to recyclers

#### **KEY METRICS**



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

## RELATED SDGS











In September 2023, an electric boiler was delivered to the downtown Powerhouse for the Boiler Replacement and Heat Recovery Project.



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



#### **KEY ACCOMPLISHMENTS**

- In Fall 2023, students in research course ENVR 401 created a baseline for waste production across McGill's wet research and teaching labs. In cooperation with Buildings and Grounds, the students established an auditing methodology that can be easily re-implemented for future audits. In relation to McGill's Zero-Waste initiative, this project laid the foundation for the recommendation and implementation of waste recycling and diverging strategies for labs.
- Organizers at the McGill Neurological Institute's Green Lab Initiative (GLI) initiated a project to donate ice packs and coolers to local non-profit organizations to divert waste from landfill. Both Moisson Montreal and Mission Bon Accueil received ice packs and Styrofoam containers thanks to the GLI's efforts.
- McGill's food service provider, Dana Hospitality, reported that 100% of all dining hall kitchen food waste and plate waste were diverted from landfills, for a total of 227 tonnes of organic material, the equivalent of 164 tonnes of GHG emissions.
- In November, the University launched its new **Sustainable Labs Certification program** that provides guidance and resources to improve sustainability in labs. Labs can measure their performance across **eight categories**, including **waste** and **procurement and asset management**.

98% IMPLEMENTED

**32%** since 2022-2023

#### **WASTE MANAGEMENT AT-A-GLANCE**



5,261

Single-use containers avoided by the Cano reuse program at Redpath Cafe



900+

Kilograms of ice packs diverted from landfill to community organizations



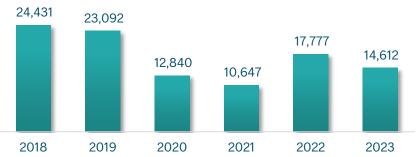
39% of McGill's Waste was Diverted from the Landfill in CY2023



40%

Decrease in McGillbranded Paper Products from 2018 to 2023

#### **KEY METRICS**



Kilograms of McGill-branded Paper Products produced by Calendar Year



researchers at the Montreal Neurological Institute-Hospital, initiated a project to donate ice packs and coolers to local non-profit organizations.









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



#### **KEY ACCOMPLISHMENTS**

- Approved in Summer 2024, McGill's **new Travel Guidelines promote sustainable practices**. The updated guidelines include such sustainable travel tips as reducing air travel whenever possible, purchasing carbon offsets, and encouraging alternative communication and virtual methods like web conferencing. The guidelines also suggest that travellers seek out sustainable lodging and prioritize renting fuel-efficient and alternative fuel models, such as electric and hybrid vehicles.
- McGill's Ride & Refresh program was offered for a second year, allowing subscribed students and staff access to on-campus shower and locker room facilities at the McGill Sports Complex, as well as a towel and basket service, on-site bike parking, and community events.
- New **indoor bike racks were** installed at New Residence Hall, with support from the **Sustainability Projects Fund**. The racks provide additional parking for 16 bikes. New bike racks were also installed at Solin Hall graduate residence.

During the Adaptation Futures conference, organized by climate-change non-profit Ouranos, participants took a field trip to **the Communications** and External Relations remote studio, to promote hybrid conferencing models. The conference also featured a session by McGill faculty and researchers on the unsustainability of fly-in-fly-out conferencing practices and discussed new models of knowledge exchange.

94% IMPLEMENTED

18% since 2022-2023

#### TRAVEL & COMMUTING AT-A-GLANCE



**8,200+**Social Media Interactions on Summer and Winter Biking Tips



33
Ride & Refresh
Participants to Date



2 New Bike Parking Structures Installed Downtown



#### **KEY METRICS**



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



A new indoor bike rack, purchased through the Sustainability Projects Fund, was installed in New Residence Hall in Fall 2023.







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



#### **KEY ACCOMPLISHMENTS**

- In March 2024, McGill received **Silver certification** under the **Fair Trade Campus** program. While the Silver certification is new this year, the downtown campus has been Fair Trade certified for over a decade (since 2013), while the Macdonald Campus has been certified since 2019. McGill is the first campus in Quebec and the second in Canada to receive this designation.
- The Macdonald Campus Farm provided the downtown campus dining halls with **over 10 tonnes of fresh produce** in 2023 including 1.3 tonnes of corn, 1.6 tonnes of onions, and 1.7 tonnes of tomatoes. **Local Food Days** at the residence dining halls feature produce from the Mac Farm, as well as food from other local providers.
- Dana Hospitality, the University's food service provider, donated over 900 kilograms of food-insecure people in the community by partnering with the student-run organization, **MealCare**. Dana also uses a food waste management software to track, measure, and monitor food waste in the dining halls.

With support from the SPF, the Student Nutrition Accessibility Club (SNAC) hosted **20 successful free grocery distributions**, 4 educational nutrition workshops, 2 farmer's market trips, and 1 trivia night community engagement event. Through its programs, SNAC has been able to provide **free fresh fruits and vegetables to over 1,180 members of the McGill community**.

90% IMPLEMENTED

58% since 2021-2022

#### **FOOD SYSTEMS AT-A-GLANCE**



#### 10 tonnes

of Produce Grown at Macdonald Campus served Downtown (2023)



16%

of Food and Beverage Purchases are Plant-Based



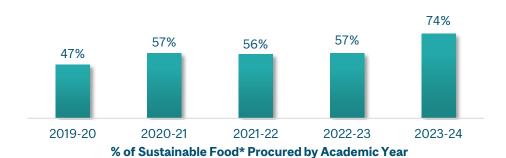
### **Silver Certification**

From the Canadian Fair Trade
Campus program



**6%** of Food Purchases are 3<sup>rd</sup>-Party Certified

#### **KEY METRICS**



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



In March 2024, McGill's downtown campus achieved a Silver certification under the Fair Trade Campus program, in recognition of the University's efforts to improve the availability of Fair Trade products.









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



#### **KEY ACCOMPLISHMENTS**

Procurement Services aligned its practices with the provincial government's 21 SEAO (système électronique d'appel d'offres) **responsible procurement indicators**. These indicators guide public institutions in accounting for social, economic, and environmental considerations in during the contract awarding process.

In April 2024, the McGill Board of Governors approved a new **Policy for the Management of Moveable Assets**, the purpose of which is to "establish a framework for the lifecycle management of McGill University's moveable assets that promotes health and safety, sustainability and economic efficiency objectives."

In Fall 2023, students in research course ENVR 401 conducted an accounting project in collaboration with Procurement Services focused on **quantifying Scope 3 emissions** for fiscal year 2023. The project included an extensive literature review and defined the importance of Scope 3 emissions accounting for large institutions.

McGill co-founded the impactful **CAUBO-ACPAU Sustainable Procurement-Approvisionnement Responsible (CASPAR) working group**. The group facilitates communication between senior level supply management and purchasing staff at Canadian universities. It promotes the sharing of best practices in sustainable procurement through open discussions, tips, and resources on topics of national interest.

**100% IMPLEMENTED** 

7% since 2022-2023

#### **PROCUREMENT AT-A-GLANCE**



94%

Cleaning products meet recognized 3<sup>rd</sup>-party sustainability standards



2/3

of all contracts contain at least one sustainability criterion



100%

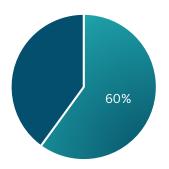
uPrint paper is postconsumer recycled



100+

Pieces of office furniture available for reuse on internal inventory

#### **KEY METRICS**



Value of contracts signed with sustainability clauses, over total contract spend (FY24)

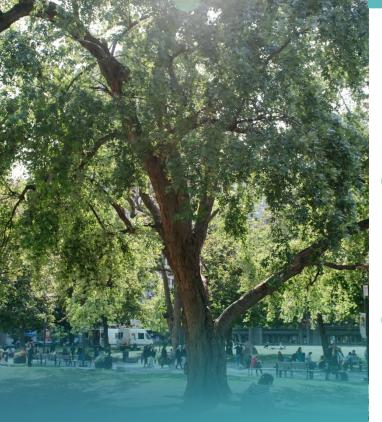


Facilities Management and Ancillary Services supports units with their requests concerning the removal or reuse of furniture and other items, finding internal or external takers and helping the unit to coordinate with McGill-approved movers.









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



# LANDSCAPES & ECOSYSTEMS

#### **KEY ACCOMPLISHMENTS**

- The University **launched its inaugural Biodiversity Plan 2030** in September 2023 with a dedicated festival. The plan marked a milestone in McGill's commitment in biodiversity preservation and will guide future efforts. Key progress to date includes initiating footprint calculations, planning engagement activities, as well as securing funding and planning projects to implement on campus.
- The baseline inventory of species for McGill's Biodiversity Plan got well underway during the academic year. Over **225 species** identified through over **400 iNaturalist observations** during the 2023 Bioblitz on the downtown, Macdonald, and Gault campuses. These are in addition to observations recorded during course and research activities.
- Renovation work on the Upper Main Road began in Summer 2024. Plans include **increasing permeable surfaces and greenery**, as well as creating an underground reservoir for water retention.

The **Staff Gardens urban agriculture program** was popular once again in Summer 2024. 163 individuals registered to the program (an increase of 25 participants from the previous year), representing 41 units across campus.

# LANDSCAPES & ECOSYSTEMS

#### **CLIMATE & SUSTAINABILITY STRATEGY 2020-2025 IMPLEMENTATION PROGRESS**

98% IMPLEMENTED

20% since 2022-2023

#### LANDSCAPES & ECOSYSTEMS AT-A-GLANCE



180
Documented Tree Species on the Downtown Campus



400+
iNaturalist Observations
Recorded during the 2023
McGill University Bioblitz



225

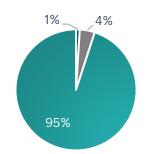
Species Observed during the 2023 McGill University BioBlitz



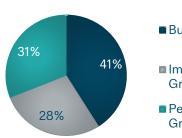
~20%

Anticipated increase in Green Space from reconstruction of the Upper Main Road on the Downtown Campus

#### **KEY METRICS**



% of Permeable Surface Type on Macdonald Campus



Buildings

■ Impermeable Ground

Permeable Ground

% of Permeable Surface Type on Downtown Campus



The reconstruction of the Upper Main Road, from the Y-intersection up to the area in front of the McCall MacBain Arts Building, will increase vegetation and include new lighting, paving, site furniture, and rainwater management infrastructure.









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**

- **35 students** were recruited under the **Sustainability Ambassador Program** (SAP) in the 2023-2024 academic year. This program provides students with the opportunity to develop leadership skills and to introduce the McGill community to sustainability initiatives across the campuses. There are three SAP streams: the Sustainability Projects Fund stream, the Sustainable Lab stream, and the Sustainable Events stream.
- 50 workplaces were certified through the Sustainable Workplace Certification program in CY2023, for a cumulative total of over 150 workplaces certified over the past six years. 4 workplaces have achieved Platinum workplace certification in AY2023-2024.
- Over 150 small, medium, large in-person events and online events were certified through the Sustainable Event Certification program in AY2023-2024.
- More than **4,000 McGill community members** participated in **sustainability-related workshops, trainings, meetings, and presentations** hosted by the Office of Sustainability in AY2023-2024, and more than **6,800 volunteers** have been mobilized to date to assist with **sustainability projects** on campus.

**100% IMPLEMENTED** 

19% since 2022-2023

#### **COMMUNITY BUILDING AT-A-GLANCE**



700+
Certified Sustainable
Events since 2017



Staff became Sustainable Workplace Ambassadors



150+
Workplaces Certified
Sustainable since 2018



42
Sustainable Event Consultants,
Sustainability Projects Fund
Ambassadors, Sustainable Labs
Ambassadors and SHHS

**Sustainability Educators** 

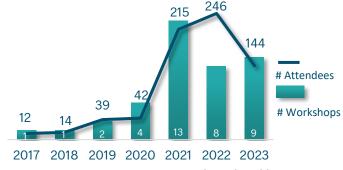


Climate & Sustainability Strategy 2025-2030 community consultation, downtown campus

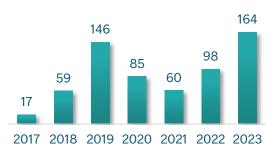
#### **KEY METRICS**



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











## **MANDATE**

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



#### **KEY ACCOMPLISHMENTS**

In March 2024, two SPF project leads received the **Emerald Key Award**, an award that recognizes **student leaders** who go above and beyond what is expected of them, and **who demonstrate outstanding dedication to advance sustainability on campus**. These students were recognized as leaders for their projects related to food basket distribution and growing oyster mushrooms from discarded coffee grounds, respectively.

Student group **McGill Robotics** has been working on an SPF project to **improve the visibility of sustainable technological innovation** at McGill by building robots and using them for environmental data collection. So far, the project has resulted in improvements on an **underwater autonomous vehicle** and the creation of a **drone**, both of which are to be used for environmental monitoring and data collection.

- To forge fruitful partnerships and promote awareness of approved projects, the SPF hosted **two student-focused events**: **the Sustainability Soirée** (September 12) showcased 10 funded projects; and the **SPF Gala** brought student groups together for an evening of **networking and brainstorming potential SPF projects** (March 27).
- Notable SPF applications approved in FY24 include a big wave project to implement the **McGill Biodiversity Plan** (SP0344), an engineering **hackathon** to find **waste reduction solutions** (SP0361), a project to **create a culture of**
- sustainability in the Faculty of Dental Medicine and Oral Health Sciences (SP0360), and two projects to improve sustainability in the University's construction practices (SP0357 & SP0365).



# **SUSTAINABILITY PROJECTS FUND**

#### SUSTAINABILITY PROJECTS FUND AT-A-GLANCE (FY2024)



\$12M +
Allocated to Sustainability
Projects since 2010



6,600+
Volunteers Mobilized since 2010



Partnerships/Collaborations
Developed



16,000+
People Trained through
Projects since 2010



**370**Sustainability Projects
Approved since 2010



\$16K Received by SPF Teams from other Sources of Funding

#### **KEY METRICS**



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









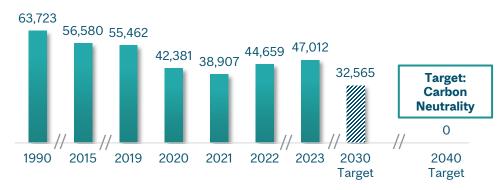
# **KEY PERFORMANCE INDICATORS**

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.

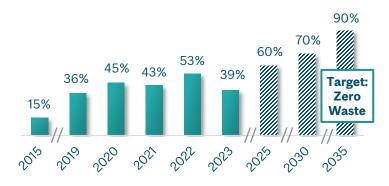
#### **KEY PERFORMANCE INDICATORS**



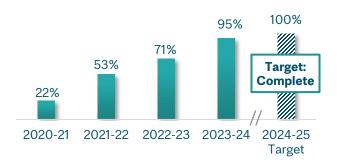
STARS® Sustainability Score and Rating by Submission Year<sup>1</sup>



Net Tonnes of Institutional Greenhouse Gas Emissions by Calendar Year



% of Waste Diverted from Landfill by Calendar Year<sup>2</sup>



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



# **LOOKING FORWARD**

### **CLIMATE & SUSTAINABILITY STRATEGY (2025-2030)**

The new Climate & Sustainability Strategy sets the framework to achieve meaningful changes on our campuses for the next five years. The Strategy is aligned with global sustainability priorities and is organized to make steady progress towards McGill's long-term sustainability commitments by setting intermediary targets for the end of its five-year timeline.

#### **MAINTAINING STARS® PLATINUM**

The Climate & Sustainability Strategy 2025-2030 is aligned with the STARS® credits in a manner that will ensure the maintenance of our Platinum rating. Working towards the full implementation of the Strategy has the dual purpose of improving our score under the STARS® framework.

#### **EMISSIONS IMPACTS OF NEW ELECTRIC BOILER**

The new electric boiler became operational in Summer 2024. The positive impacts on greenhouse gas emissions will become evident over the course of the following years, with a predicted reduction of 9,000 tonnes of CO<sub>2</sub> equivalent each year.

#### **UPPER MAIN ROAD CONSTRUCTION PROJECT**

This two-year project entails the reconstruction of the Upper Main Road to celebrate Main Road as a pedestrian zone, offering space for congregation, socialization, and events. The Y-intersection was redesigned in collaboration with an Indigenous designer and an Indigenous artist. The project will result in approximately 20% more green space and increased universal accessibility, as the slopes near the building will be reduced.



Thank you to all 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:

- Analysis, Planning & Budget
- Buildings & Grounds
- Bieler School of Environment
- Campus Planning & Development
- Communications & Institutional Relations
- Dana Hospitality (Dexterra)
- Design Services
- Environmental Health & Safety
- Equity at McGill
- Faculty Froshes
- Food & Dining Services
- Gault Nature Reserve
- Green Labs Initiative
- Office of Indigenous Initiatives
- Internal Audit
- Macdonald Campus Farm
- McGill Sustainability Systems Initiative
- New Vic Project team
- Office of the President and Vice-Chancellor
- Office of the Deputy Provost (Student Life and Learning)

- Office of the Provost and Executive Vice-President (Academic)
- Office of the Vice-President (Administration and Finance)
- Office of the Vice-President (Research and Innovation)
- Office of the Vice-President (Human Resources)
- Organizational Development
- Parking & Transportation
- Procurement Services
- Project Management
- Redpath Museum
- Secretariat
- Student Housing & Hospitality Services
- Student Societies (SSMU, MCSS, PGSS)
- Teaching & Learning Services
- University Advancement
- Utilities & Energy Management