

Sustainability Projects Fund

2010-2013

Three Year Report:
Supporting Documents

Office of Sustainability



McGill

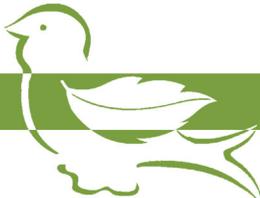


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Supporting Document 1:

Application Process, Working Group & Methodology

The Sustainability Projects Fund Working Group (WG) is a parity committee responsible for reviewing & approving project applications by consensus, and providing feedback & guidance to project teams. The WG is comprised of four student representatives and four administrative representatives at any given time. Representatives are chosen based on their experience with and commitment to sustainability efforts at McGill.

The Sustainability Projects Fund Administrator acts as a liaison between the WG and project teams. They are also responsible for ensuring that approved projects are executed as planned, advising on all SPF processes, and reporting on the challenges and achievement of SPF projects.

During review meetings, any working group member in conflict of interest with the project being reviewed does not take part in the review process for that project.

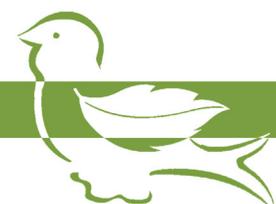
Eligibility Criteria:

- ⇒ Contribute to the advancement of sustainability at McGill, from a life-cycle perspective
- ⇒ Primarily impact the McGill campus community
- ⇒ Be led by a current McGill student or (academic or administrative) staff member
- ⇒ Not be normally funded within an existing University operating budget
- ⇒ Not be eligible for research grants (evaluated case-by-case)
- ⇒ Have S.M.A.R.T. objectives: specific, measurable, agreed-upon, realistic, and time-limited

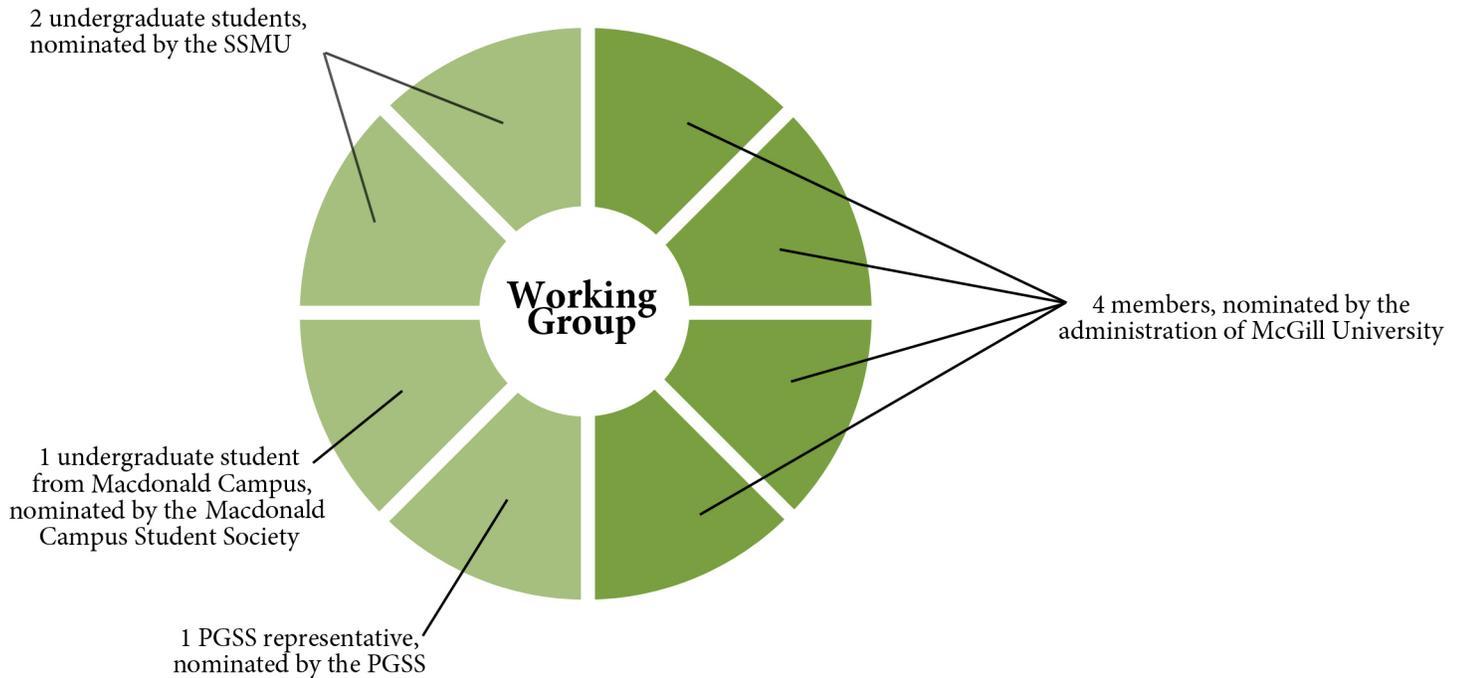
Decision-Making Process:

Once a month, the Working Group meets to evaluate all project proposals that have been submitted in the preceding month. The Working Group is a parity committee charged with providing feedback on project applications by consensus. It consists of:

- 2 Undergraduate students (nominated by SSMU)
- 1 Undergraduate student (nominated by the Macdonald Campus Student Society)
- 1 Graduate student (nominated by PGSS)
- 4 Academic or Administrative Staff (nominated by the Administration)



1: Application Process, Working Group, & Methodology



Evaluation Criteria:

- ⇒ Shift business as usual towards sustainability at McGill
- ⇒ Engage the McGill community at large, one community segment, or key decision makers
- ⇒ Effectively communicate why the project is being undertaken
- ⇒ Nurture learning and change in behaviour with a plan to evaluate success
- ⇒ Demonstrate clear commitment from project team members and all necessary partners
- ⇒ Be comprehensive and well thought-out
- ⇒ Demonstrate that the positive impact of the project is worth the investment
- ⇒ Address the potential for institutionalization by providing a long-term vision, which may include identifying leaders and funding sources
- ⇒ Provide a plan to evaluate the project's success and impact
- ⇒ Identify other potential benefits, such as applied student research, innovation, etc.

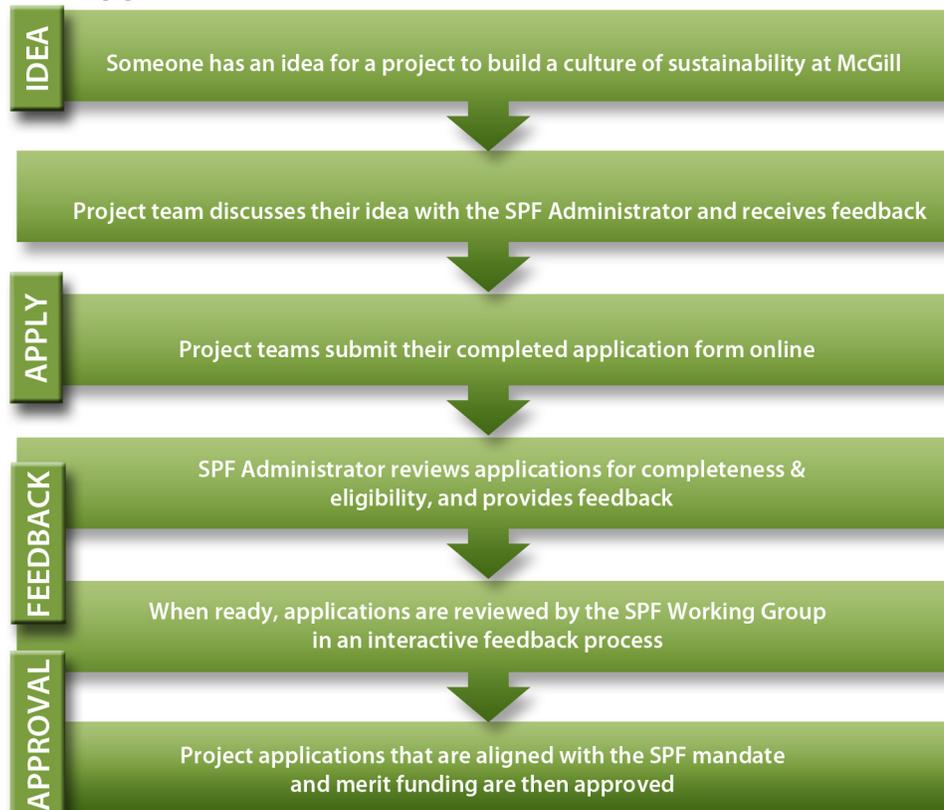


1: Application Process, Working Group, & Methodology

The meeting is chaired by the Associate Vice-Principal and Stewarded by the SPF Administrator, whom are both non-voting members. Clear and transparent guidelines are laid out so that both applicants and the Working Group are aware of what each application will be evaluated on.

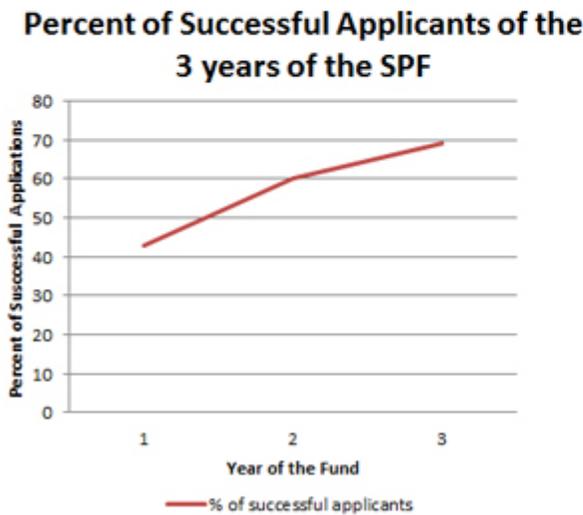
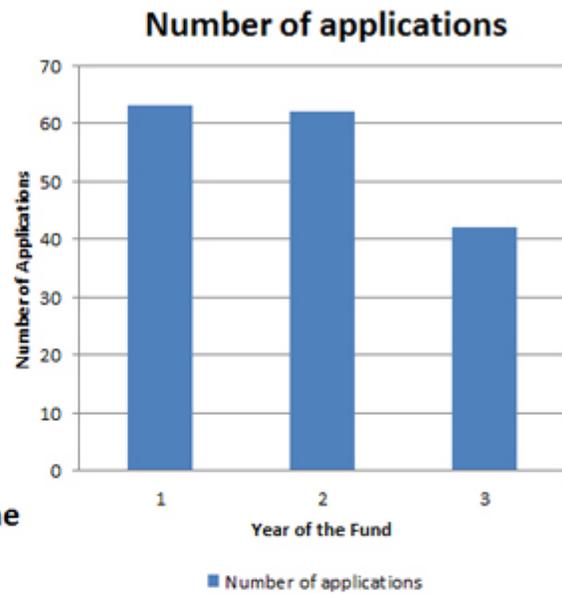
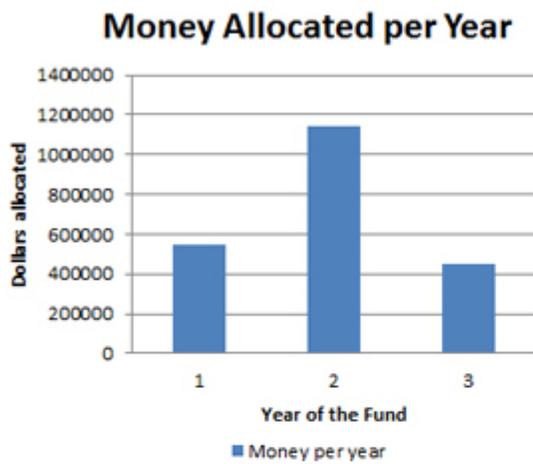
Projects which are approved then receive funding and will move on to the implementation stage. Projects that do not receive approval will be given feedback and the opportunity to re-submit their application in time for subsequent Working Group meetings. As of March 2013, all applicants who have met the eligibility and evaluation criteria have received funding.

SPF Application Process



1: Application Process, Working Group, & Methodology

Over the past three and a half years, the SPF has received 167 applications. Of these, 93 were approved, and 74 not approved. That means 56% of all applicants have been successful. The number of received applications was highest in the first year, indicative of the need that existed for funding of sustainable initiatives on campus. The application process has evolved over the past three years, and while current trends show a slightly lower rate of application, there is also a significantly higher rate of approval. This is reflective of the guidance that the SPF administrator now offers to applicants prior to the submission of their application.



1: Application Process, Working Group, & Methodology

Past & Present Working Group Members:

CHAIR

Jim Nicell

Martin Kraye von Krauss

Steward

Lilith Wyatt

Academic Staff Representatives

Steve Maguire, Prof

George McCourt

Administrative Staff Representatives

Marcy Slapcoff

Emmanuelle Lapointe, Mrs.

Jerome Conraud

SSMU Representatives

Jonathan Glencross

Max Luke

Devon Willis

Susanna Klassen

Kari Ostevik

Tyler Lawson

Maggie Knight

Allison Louise Jones

Emily Clare

Talitha Calder

Shaina Agbayani

MCSS Representatives

Christopher Wolf

Mohsin bin Latheef

Joyce Mak

Kerry Blake-Savery

Jaaved Singh

Clemence Briand-Racine

PGSS Representatives

Christopher Wrobel

Alexis Goulet-Hanssens



Supporting Document 2:

Project Summaries

SP0000: SPF Budget

Status: Ongoing

The Sustainability Projects Fund budget was allocated to fund three interns per year to help carry out the activities of the SPF. These interns help to organize events, create applied student research opportunities, and produce annual reports.

- 3 videos created
 - 5 studies conducted
 - 12 student positions created
-

SP0001: Apartment Gardens

<http://apartmentgardensmcgill.blogspot.ca/>

Status: Complete

Apartment Gardens gave individuals in the downtown McGill community an opportunity to have a small home garden. The service provided 50 people with leafy vegetable seedlings, and allowed McGill community members to learn basic gardening techniques without the need for a backyard or the time-consuming acquisition of materials and preparation of seedlings. The SPF provided the funding for the cost of the bins and the seedlings.

- 75 organic plants given to participants
-

SP0002, SP0038, SP0074: McGill Feeding McGill 1, 2 & 3

Status (all): Complete

McGill Feeding McGill 1, 2, and 3 is a partnership between the Sustainability Projects Fund and the Plant Science department in order to provide McGill's downtown residences with McGill-grown fruits and vegetables. Grown at the Macdonald Campus Horticultural Center, McGill Feeding McGill has fed thousands of students hundreds of thousands of meals each year. The use of locally grown food directly contributes to the sustainability of food services in our community.

- 50 000 m² used to grow food
 - 353 students now learning from McGill Feeding McGill through their courses
 - 48,529 kg of food grown
 - \$85,000 in sales of produce
 - \$100,000 paid out in student wages
 - Certified as "local sustainable" by Local Food Plus (the first in Quebec)
 - Food donations made to 25 conferences
 - Contributed to Guinness Book of Record's "World's largest fruit salad" (2012)
-



2: Project Summaries

SP0004, SP0042, SP0071: Macdonald Student-Run Ecological Garden (MSEG) 1, 2 & 3

<http://macdonaldstudentgarden.blogspot.ca/>

Status (all): Complete

The McGill Student-run Ecological Gardens (MSEG) is a project initiated and run by students, with the support of McGill professors and staff, local organic crop producers, and student volunteers. The project aims to establish a continuing structure for student-run gardens, while creating a link between academia, our local community, and our shared environment. Furthermore, it brings forth ecological agriculture into the McGill food system through curricula, farmers' markets, and social spheres. MSEG has grown into a 1.25 acre ecological vegetable farm and has created student opportunities for volunteering, internships and employment.

- 1 award won
 - 1 medicinal herb garden
 - 24 students received credit for research
 - 25 student jobs created
 - 85 events held
 - At least 12,500 kg of vegetables (worth \$45,000) grown
 - Multiple donations to Happy Belly
-

SP0003, SP0036: Edible Campus 1 & 2

Status: 1, Complete 2, Ongoing

The Edible Campus Garden – a collaborative project between the McGill School of Architecture's Minimum Cost Housing Group, Alternatives, and Santropol Roulant – seeks to involve citizens in the creation of green, edible community spaces by demonstrating how productive planting can be woven into urban spaces without diminishing their utility or functionality. The Burnside Terrace serves as the motor of this ambitious project demonstrating strategies for increasing urban food production and forming a part of the sustainable food cycle that includes food production, preparation, food delivery, and composting. Volunteers and community members break intergenerational barriers to come together to grow fresh produce, learn about urban agriculture and food security, and distribute the fruits of their labour to the Meals on Wheels program for mobility-limited low-income homes.

- 1 tonne annual harvest of produce from 505 m²
- 1 Visit from His Excellency, the Right Honourable David Johnson (Governor General of Canada)
- 1 feature with David Suzuki's *The Suzuki Diaries*
- 1.1 m³ of rainwater collected each rainfall
- 2 beehives in use and 112 people educated in apiculture
- 2 awards received
- 5 students received credit from research
- 5 peer-reviewed papers published or under review
- 45 children from Montreal City Mission's Camp Cosmos reconnected with origins of their food and experienced hands-on gardening for 8 weeks throughout the summer of 2012
- 50 L of honey collected
- 600 clients weekly served through Santropol Roulant's Meals on Wheels program
- 1000+ participants educated about food politics and social justice



2: Project Summaries

SP0008, SP0035, SP0072: Campus Crops 1, 2 & 3

<http://campuscropsmcgill.blogspot.ca/>

Status (all): Complete

Campus Crops is a non-hierarchical student-run urban gardening collective at McGill University's downtown campus. With a primary purpose to engage the community in alternative food production and politics through open garden hours and regular workshops, Campus Crops is more about learning and knowledge sharing than about food production outputs. They donate almost all of their produce during the school year to Midnight Kitchen, a give-what-you-can food service in SSMU. Campus Crops aims to improve the autonomy of students regarding food, to foster discussion and action concerning food-related issues around the world, and to provide students with local organic food. All students and staff are welcome to participate and Campus Crops seeks to achieve a safe space for all those who come. The James Administration Building terrace is even wheel-chair accessible!

- 1 feature in the Montreal Mirror
 - 1 documentary screening party with pizzas made from produce
 - 1 invasive weed species eradicated
 - 3 "Tour and Tastings" lunch events for the staff in the James Administration Building
 - 5 zines produced
 - 25 different types of vegetables grown
 - 36 cans of apple butter produced
 - 170 kg of food produced
-

SP0005: La Cave Bike Collective

<http://www.tvmcgill.com/2010/09/23/la-cave-bicycle-collective/>

Status: Complete

La Cave is a volunteer-run bike collective located at McGill University's Solin Hall Residence. Established in August 2010, La Cave continues to independently provide Solin Hall residents, students, and community members with free access to tools and expertise for bike maintenance and repair, and promotes cycling as a sustainable, affordable, and fun way to travel in Montreal. The goal of La Cave is to make it as easy as possible for Solin residents to acquire, maintain, and enjoy using bikes as their primary mode of transportation to McGill and around Montreal.

- 12 skills-training workshops held
 - 150 students serviced
 - Estimated 5.2 tonnes of Greenhouse Gas (GHG) emissions eliminated
-



2: Project Summaries

SP0006: Meatless Mondays McGill

Status: Complete

With its origins in applied student research, Meatless Mondays McGill (MMM) is an education campaign and a weekly menu shift towards more vegetarian options in the McGill residence dining halls. MMM asked students to pledge not to eat meat on Mondays and held events to inform the McGill community on the carbon footprint of eating meat. Since 2010, Meatless Mondays has now been integrated into the McGill Food and Dining Services weekly routine.

- 1 student received credit for research
 - 30 volunteers
 - 400+ pledges to reduce meat consumption
 - 3000 students affected annually
-

SP0007, SP0034: Food Systems Administrators 1 & 2

Status (all): Complete

The SPF and McGill Food and Dining Services (MFDS) collaborated to hire a Food Systems Administrator to provide information about more sustainable & local food purchasing in the McGill residences dining halls. The goal of this two-year project was to help build a more sustainable food system for the McGill community.

- 1 “Appetite for Sustainability” Strategic Plan developed for 2010-2013 for MFDS
 - 2 people employed in the position over two years
 - 13 students receiving credit for research
 - 7 partners
 - 2500 event attendees
-

SP0009: Food Waste Processing for In-Vessel Composting

Status: Ongoing

The proposal for this project consisted of three pilot devices to macerate and de-water food scraps to increase the annual capacity of the Big Hanna composter from 60 to 200 tonnes. However, the equipment specifications did not meet the needs of the food service locations. The lessons learned are being documented and shared and next steps are being explored.

SP0010: SPF Website Re-Vamper

Status: Complete

Shortly after its inception, the SPF found itself in need of a logo and a branding theme. To that purpose they hired Steve Roy, a graphic designer. Roy created the iconic SPF bird logo, as well as a short video clip that appears at the end of every SPF video.

- 1 logo created
- 1 animation for inclusion in SPF videos created
- 1 student employed



2: Project Summaries

SP0011: Electric Low-Speed Vehicle

Status: On hold

The purchase of a zero emission electric powered utility vehicle would be a beneficial compliment to McGill's existing fleet of heavy-duty vehicles, especially when displacing a hydrocarbon vehicle. This vehicle would be used as a prototype vehicle; an example for all departments on the downtown campus that could demonstrate that an e-vehicle can meet their needs, in the hopes of encouraging more e-vehicle purchases. However, this project is currently on hold while it awaits certification from the Quebec government.

SP0012, SP0037, SP0076: Farmer's Market 1, 2 & 3

Status (all): Complete

The McGill Farmers' Market (MFM) projects 1, 2, and 3 have brought delicious, local, seasonal produce to McGill's downtown campus, with weekly Farmers' Markets throughout September and October, and a weekly Community Supported Agriculture (CSA) vegetable box program each year from July to October. Since it was founded in 2008, the MFM has been an educational community forum for students, administration, faculty and the nearby residents to learn about eating locally, staying healthy and promoting sustainable food choices. Now entering the preparation stage for its 5th year of operation, the McGill Farmers' Market has experienced significant growth and has started to establish its role in the wider McGill community.

- 2 students receiving credit for research
 - 10 vendors annually
 - 12 student jobs created over three years
 - 50 volunteers
-

SP0013: Sustainable Eating

<http://www.mcgill.ca/fitatmcgill/sustainable/5-steps-sustainable-eating>

Status: Ongoing

The main goal of the Sustainable Eating Project is the promotion of healthy, sustainable eating to students living off-campus. To achieve this, the project acts as a catalyst to bring together Dietetic stagiaires and graduate students from the School of Dietetics and Human Nutrition, the Fit@McGill Health Promotion team at Student Health Services, and the Food and Dining Services team. Together, with a unified definition of sustainable eating, these groups align to offer education and promotion of sustainable food. Strategies for choosing sustainably grown foods and planning and preparing healthy, balanced meals are disseminated through information kiosks, website education tools, cooking demonstrations, and cooking workshops throughout the McGill student community.

- 1 Master's thesis
- 5 videos produced
- 9 student interns
- 9 wellness workshops at the McGill Farmers' Market that educated students about healthy sustainable eating and provided samples served on cabbage leaves to reduce waste
- 410 students in courses with integrated SPF learning materials



2: Project Summaries

SP0014: Water is Life!

<http://www.mcgill.ca/redpath/whatsnew>

<http://ecolibriumfm.wordpress.com/2012/05/08/water-is-life-and-the-rainwater-harvesting-system-jacqueline-farrell-and-sadman-islam-on-ckut-90-3-fm/>

<http://www.mcgill.ca/waterislife/>

Status: Complete

Water is Life! Is a traveling exhibit that summarizes the extent of the water issues that affect McGill. It also asks the the question of how best to use water for our needs and those of the planet. Produced by the Science outreach team at Redpath Museum, it ran from April 2011 to December 2012. The posters will now travel around campus for long-term placement in various buildings.

- 1 website launched
- 1 thesis in preparation
- 1 podcast completed
- 2nd most popular Radio Residences Ecolibrium CKUT show for 2012
- 3 jobs created
- 22,000 exhibit visitors

SP0015: Water Collection System

Status: Complete

The design of a water collection system, for sustainable irrigation and education at Macdonald campus, was proposed as part of a class project in Bioresource Engineering in order to educate the university on sustainable water recovery. It includes steps for filtering, storage and delivery of the water for use in the greenhouses and the surrounding gardens. The design consists of eavestroughs circling the building, three collection tanks, a final storage tank, pipes, and a monitoring system. This project provides water for the Horticulture Research Center and is used as a hands-on sustainable teaching tool for students to use in order to learn about water conservation and rainwater harvesting in particular.

- Met 95% of the irrigation needs of 2 Horticultural Centre greenhouses and student gardens
- 954 m³ of rainwater collected
- 1 water study conducted
- 1 peer reviewed paper
- 2 awards (including Forces L'Avenir)
- 3 students receiving credit for research
- 4 media interviews



2: Project Summaries

SP0016, SP0075: Gault Electric ATV 1 & 2

Status (all): Complete

The Gault Nature Reserve (GNR) in Mont-Saint-Hilaire of McGill University is a private conservation reserve that protects the primeval forests of the St. Lawrence Valley. The GNR wishes to promote its environmental awareness on the reserve by using electric ATV's as opposed to gas-powered vehicles. The ultimate goal of this project was to use applied student research in order to provide the GNR with a functioning converted electric ATV that is capable of performing the daily maintenance tasks year round. Yet, as with many pilot projects that are experimenting with new technologies, success is never certain. Though two years of hard work from seven students has created a valuable base from which future students can build, the prototype is still non-functioning.

- 1 prototype developed
- 7 students in Applied Student Research (ASR)
- Collaboration with Bombardier, Faculty of Engineering, and the Gault Nature Reserve

SP0017, SP0063: Sustainability Symposiums 1 & 2

Status (all): Complete

The Sustainability Symposium 1 and 2 have, for the past two years, organized and executed a symposium on sustainability research and innovation at McGill. The purpose of the symposium is to bring together academics at the forefront of sustainability research, graduate and undergraduate students, and other members of the McGill community to encourage and facilitate networking, conversations, and create new research opportunities for students. We hope that this event continues at McGill as an annual event at which students can present their research in the rapidly expanding field of sustainability.

- 9 student jobs created over two years
- 250 event attendees

SP0018: Campus Big Hanna Composter

Status: Complete

This student-initiated and coordinated Campus Big Hanna Composter project offers practical learning opportunities for McGill students and the urban community. The composter serves as a pilot for a larger innovative approaches to organic waste utilization in urban areas. Since its creation in 2009, the Campus Big Hanna Composter has composted food waste from the McGill residences and reused them as fertilizer for McGill Feeding McGill and for flower beds all around campus.

- 30,000+ kg composted (waste diverted)
- \$2,541 saved by diverting this waste from landfills
- 2 papers published
- 2 certifications received



2: Project Summaries

SP0019: SSMU Sustainability Research Coordinator

Status: Complete

This research project, conducted by U3 Management student Arielle Jaffe in winter 2011, explored how SSMU can better support a culture of sustainability at McGill. The first outcome was a website of sustainability resources, including information, contacts, and past projects as well as a forum to ask sustainability questions to other students. Final outcomes included a set of recommendations (e.g., stakeholder relationships to strengthen, areas of potential collaboration, strategies for institutionalization) and the hiring of a SSMU Sustainability Coordinator, David Gray-Donald.

- 1 Applied Student Research
 - 1 event held
 - 1 full-time position created
-

SP0020: Outdoor Frosh

<http://www.outdoorfrosh.com/>

Status: Complete

Created in 2010, Outdoor Frosh is a 3-day outdoor experiential education program for incoming McGill students run by the McGill Student Outdoors Club. Outdoor Frosh (OF) fosters an appreciation for nature and its resources, as well as an understanding of 'Leave-No-Trace' sustainable camping, while introducing students to the Quebec wilderness. Through multi-day trips with interactive workshops, OF gives students a chance to learn how to rock climb, hike, raft, and swim without leaving an ecological footprint. In its first three years, OF has grown from 60 participants to 120 participants and has now expanded to include more outdoor options such as canoeing, whitewater kayaking, and cycling.

- 1 composting system implemented in Prevest, Quebec
 - 56 volunteers
 - 70 seeds planted in a partnership with MSEG
 - 350+ participants instructed to use 'Leave-No-Trace' camping practices
 - 350+ first year students introduced to Quebec wilderness
-

SP0021: High Density Bike Racks

<http://www.velocyko.com/>

Status: Complete

In April 2011, four undergraduate engineering students designed a prototype high density bike rack to be modular and space efficient in collaboration with McGill's Campus & Space Planning. After the original prototype was met with popular acclaim, these students decided to commercialize their product and make a difference in the existing bike storage industry. They founded VeloCyko Products Inc., a bicycle storage solutions company. These four students have since improved upon the original design and their prototype is now located by the Redpath Museum.

- 1 prototype high density bike rack built
- 1 company formed
- 4 students received credit for Applied Student Research (ASR)



2: Project Summaries

SP0022: Transport Survey

Status: Complete

In winter 2011 the inter-disciplinary research group, Transportation Research at McGill (TRAM) conducted a travel survey to assess the environmental impact of travel to and from McGill University and to develop a better understanding of the use of sustainable transportation for commuting to McGill. The targeted population of the survey included McGill students, staff, and faculty. The results of the survey have now gone into 4 different peer-reviewed publications and have informed other studies at McGill, such as the Business Travel Behaviour Survey (Project #61).

- 4 peer-reviewed publications
 - 10 students employed
 - 5016 survey responses about commuter behaviour
 - Findings presented at 5 peer-reviewed conferences
-

SP0023: Hitting the Benchmark

Status: Complete

Hitting the Benchmark was a project by two undergraduate architecture students who repurposed materials discarded by McGill and Eco-centres, and made them into unique outdoor furniture. These pieces of furniture are currently located in the SSMU Green Corner and on the Ferrier Terrace. They have been enjoyed by many students and staff. By providing street furniture made of reclaimed waste, Hitting the Benchmark engaged the student body and community at large to interact with campus space and think about the creative reusability of waste.

- 2 student jobs created
 - 10 pieces of waste repurposed into furniture
 - 1 unveiling event
 - 1 TVMcGill feature
-

SP0024: Fluorescent Lamps Disposal

Status: Ongoing

The Fluorescent Lamp Disposal project facilitates responsible recycling of fluorescent tubes by providing storage and redirecting the mercury-filled tubes to a processing facility. Fluorescent tubes are the principal source of lighting at our university and every year McGill buys 82,000 linear feet. Each lamp contains around 17 mg of mercury per kg, which is well above the Quebec regulation of 0.1 mg/kg, which as a result of this project is being properly recycled instead of going to a landfill.

- 2571 kg of waste diverted from landfill (recycled)
 - 66 g of mercury diverted from landfill
 - Service is offered on both campuses
-



2: Project Summaries

SP0025: Hazardous Waste Minimization

Status: Ongoing

Hazardous Waste Minimization is a project to identify and reduce the amount of laboratory waste through three stages: by converting solvent based Liquid Scintillation Cocktail (LSC) users to Eco-friendly cocktail users, by minimizing biomedical waste by autoclaving and diverting non-hazardous waste from the bio box to the proper waste stream, and by minimizing chemical waste produced by repetitive procedures.

- 1 audit conducted to identify top three producers of waste on campus
 - 5 hazardous chemicals replaced with more environmentally friendly ones
 - 77 labs were surveyed and / or visited
-

SP0026: Pulse Energy Dashboard

Status: Complete

Pulse Energy Dashboard was a project in 2011 to hire a student as a temporary McGill Energy Dashboard Information Assistant to assist with development and maintenance of this Dashboard module. As a result, the University's Pulse Energy database now provides real-time information about energy consumption of approximately fifty major buildings on the downtown and Macdonald Campus.

- 1 real-time website detailing campus energy consumption by building
 - 2 student jobs created
 - 3 presentations given
-

SP0027: Sustainable Thomson House

Status: Ongoing

Sustainable Thomson House is a joint post-graduate student and staff initiative to audit Thomson House, identify ways in which the physical impact of the building (energy, water, and waste) can be reduced and the sustainability of its operations can be increased. The final reports from the contracted architecture and engineering firms, and the dozens of student volunteers involved (using the AASHE STARS framework), will provide an assessment and recommendations. Ongoing since 2011, the Sustainable Thomson House project will conclude in spring 2013 with a long-term plan for how to make the Post-Graduate Students' Society building more sustainable.

- One Sustainability Coordinator job created
 - Five PGSS community building events to engage members in the project
 - One ENVR401 group (9 students) received credit for Applied Student Research (ASR)
 - 60 student volunteers working to assess Thomson House's sustainability
-



2: Project Summaries

SP0028: Desautels Business Conference on Sustainability

Status: Complete

The Desautels Business Conference on Sustainability (DBCS) is an annual student-run conference to connect students, specifically business students, and businesses with a focus on sustainability. In 2011, the SPF built a partnership with DBCS and purchased sustainably sourced food for the event in exchange for a report documenting their lessons learned in reducing the impact of the event. This project has ensured the constant improvement of the conference and knowledge transfer of best practices year-to-year and to other events on campus. The conference was exemplary of how to act and consume responsibly: composting services were available, re-usable plates were rented, paper usage was minimized, and the use of re-fillable water bottles was encouraged.

SP0029: Mac Water Bottle Refill Station

Status: Complete

The Mac Water Bottle Refill Station was a pilot project put in the Macdonald Stewart building on Macdonald Campus in 2010 to encourage students to bring their own water bottles for refill in a more convenient station. The pilot was so successful that there are now several more refill stations of this very kind all over both McGill campuses.

- 56,601 water bottles diverted from landfill from this station alone (as of January 31, 2013)
-

SP0030: Bellairs Recycling Program

Status: Complete

Located at McGill's Bellairs Research Institute in Barbados, the Bellairs Recycling Program project was a collaborative effort between students and staff at Bellairs to create a functioning recycling system. As Barbados does not have a centralized recycling system, this program allows those living at and near the Bellairs Research Institute to significantly reduce their environmental footprint.

- 13 students received credit for applied student research (ASR)
 - 1,000+ participants
 - 10 other universities engaged
 - Extended the reach of sustainability initiatives all the way to the McGill community in Barbados
 - 9.5 kg of waste diverted daily (recycled)
 - 23,000 items recycled
-



2: Project Summaries

SP0031: Materials Analysis Tool

<http://www.materialanalysis.ca/>

Status: Ongoing

The Materials Analysis Tool (MAT) is a free online ranking system that distills manufacturer information to assist in the selection of building products that are more cost effective, healthy and environmentally responsible. MAT was developed by McGill University's University Services as a shortcut through the mountains of information provided by manufacturers to designers about their products. MAT isn't a certification for products, but is rather a database of manufacturer information seen through the lens of sustainability and a way for McGill University staff and contractors to choose products that best reflect the values of the University. It will inform the purchasing decisions of materials for the hundreds of millions of dollars worth of construction and renovation projects that McGill undertakes every year.

- 210+ materials analyzed
 - 5 people employed
 - 3 promotional videos produced
 - 79 product manufacturers registered on their site
-

SP0032: Hazardous Chemical Disposal Campaign

Status: Ongoing

The Hazardous Chemical Disposal Campaign is helping to both properly dispose of hazardous chemicals and also educate research lab members of disposal protocol. This project took advantage of the Hazardous Materials Management System (HMMS) project which ventured to inventory all chemicals in campus labs, by helping clean out unneeded and potentially dangerous chemicals at the same time. At McGill, thousands of hazardous materials (chemicals, biohazards and radioisotopes) are used by over 800 laboratories for teaching and research purposes. This project is one piece of McGill's obligation under federal and provincial legislation to account for all of its hazardous materials and maintain up-to-date material safety data sheets (MSDS) for each one of them.

- 46 departments involved
 - 445 chemical inventories
 - 15 kg of reactive materials collected
 - 3 m³ of hazardous waste collected
 - \$17,000 worth of waste collected
-



2: Project Summaries

SP0033: The Law Plate Club

Status: Ongoing

The Faculty of Law holds many events, such as weekly cocktails, wine and cheese gatherings, presentations, where food and drink are offered and many other events where plates, utensils and glasses are used. Our aim with a dish rental service is to reduce and eliminate the use of disposable dishware which, once disposed of and buried, decomposes and produces methane, a major greenhouse gas. The project provides 100 sets of dishware for rental by student and staff from the Faculty of Law and surrounding departments. This project aims to ensure that no more disposable plastic items are used at events.

- 800 kg waste diverted from landfills
 - 100 dinnerware, cutlery, and wine glass sets acquired to replace disposable plates
 - 20 events already employed re-usable instead of disposable dishware
-

SP0034: see SP0007

SP0035: See SP0008

SP0036: see SP0003

SP0037: see SP0012

SP0038: see SP0002

SP0039: Aboriginal Awareness Project

<http://www.mcgill.ca/sustainability/aboriginal-awareness-project-sp0039>

<http://aboriginalnetwork.mcgill.ca/aaw.html>

Status: Ongoing

Over the last year, the Aboriginal Sustainability Project has become a hub for Aboriginal projects and initiatives and has succeeded in creating much greater visibility and importance within the campus community. Establishing partnerships and building on existing ones has contributed to the success. As a result, there has been an integration of values and perspectives on Aboriginal sustainability in well-being and in culture into the wider community.

- 1 pilot internship programme
 - 1 forthcoming First People's study program for Undergraduates
 - 1 partnership with a tutoring program linking McGill students with high schoolers from Kahnawake
 - 34 events and workshops
 - 35% of event attendees for Aboriginal Awareness week reported that their participation helped with their academic program
 - 38 collaborative partners
 - 1,103 event attendees
-



2: Project Summaries

SP0040: EnGage

Status: Ongoing

EnGage is a community-based social marketing pilot project in Upper Residence (McConnell, Molson, Gardner, and Douglas Halls) aimed at decreasing electricity-wasting habits. Through the collaborative work of first-year students, upper-year students, and residence directors, we are thrilled to see the effect of collective action for improved energy practices in residential buildings on McGill University campus. The installation of screens that stream live from MyPulse Energy Dashboard has prompted students to be aware of their personal energy consumption. It has been paired with active commitments from students as well as relevant reminders, thus engaging students in their individual and collective impact on energy consumption.

- 1 student job created
- 1 student in Applied Student Research (ASR)
- Projected 680 participants across 3 residences

SP0041: Shut Your Sash

Status: Complete

For the safety of students and researchers, fume hoods pump air out from lab work stations. Like leaving your door open during winter with a fan blowing outside, fume hoods use a lot of excess energy when unnecessarily left open. Shut Your Sash was a pilot campaign to promote awareness about energy consumption in McGill laboratories and reduce it by implementing sustainable fume hood height practices. By running an awareness campaign in the Life Science Complex outlining how much energy and money could be saved each year through simple changes in practice, along with reminder stickers, the Shut Your Sash team was able to successfully institutionalize behaviour change among fume hood users.

- 1 study conducted
- 57 fume hoods audited
- 86% reduction in energy consumption and Greenhouse Gas (GHG) emission of the fume hoods
- \$77,000 saved in annual energy costs
- 43,800 kWh of energy reduced annually

SP0042: see SP0004



2: Project Summaries

SP0043: Thomson House Permaculture Garden

Status: Complete

Thomson House Permaculture Garden was a project to make the Thomson House Post-Graduate building more sustainable, to interest Thomson House users in urban agriculture, to attract pollinators to the associated container garden, and to add to the biodiversity of the surroundings around the building. The projects' outcomes include an increased knowledge by Thomson House members about project elements such as rainwater management, container gardening, composting, as well as the significance of incorporating native perennials into outside green spaces. Thomson House also benefits from sourcing some of their food supply requirements from the container garden. Finally, the garden provides space for urban horticulture workshops to apply and promote permaculture techniques around the McGill campus.

- 2 McGill classes contributed to design of the urban permaculture garden
- 12 gardening workshops held

SP044: Pulse Check

Status: Complete

This project synthesized important dimensions related to energy issues at McGill, such as the cost structure, consumption sources and key stakeholders, from the angle of how the Pulse dashboard could be optimized. The team also categorized different building profiles and targeted within each of them recommended practices specific to the students, the administrative staff, the specialized workers and the management. The project helped spread awareness about energy efficiency and encourage a sustainable culture within the McGill community.

- Collaboration with ENVR 401 and MBA students
- 600 students surveyed

SP0045, SP0056: McGill Food Systems Project Interns 1 & 2

Status: Complete

Over two years, two internships positions with organization Local Food Plus assisted with certifying Quebec farm to help McGill increase our share of the Certified Local Sustainable suppliers for our campus food services.

- Reduced pesticide use at the apple orchards of Mac campus and chemical use in machinery cleaners
- Linked the Horticultural Centre from Mac Campus with Local Food Days, which greatly increased their revenue
- Educated chefs and administrators about the McGill mission to support sustainable and local food systems and suppliers
- Facilitated the sale of seasonal and local food, which is both more sustainable and more cost-effective
- GEO 302, AGRI 499 classes involved
- 17 partners across Quebec
- 2 awards won
- 2 certifications received
- 6,000 students have access to local food every day
- 20% of food served by MFDS is sustainably sourced



2: Project Summaries

SP0046: Campus Swaps

<http://campusswaps.com>

Status: Complete

Campus Swaps is a project started by Shira Abramowitz and Christian D'Andrea to recycle goods from graduating students to incoming students, thereby creating sustainable cycles of ownership on campuses across North America. They provide affordable prices to new students, responsible recycling options for recent grads, and substantial, measurable waste reduction within entire student communities. They have now expanded to campuses all across North America.

- 1 company formed
- 4,889 kg of waste diverted
- 13,242 items collected and re-used

SP0047: Out of the Garden

Status: Ongoing

Macdonald campus is a cultural and educational hub with horticultural riches that need to be showcased. Students and many dedicated staff, at the heart of this campus, collectively grow a bounty of organic and local produce. This community provides an opportunity to integrate Macdonald produce into Macdonald campus food services. Through engaging the campus community, this project will develop a proposal for an Alternative Café to be run by students, and to feature seasonal Macdonald campus produce (MSEG, Horticultural Centre, etc.) as well as other local produce. All ingredients will be sourced using the criteria of sustainability, locality, as well as organic farming practices, and fair trade. The menu will reflect the limitless possibilities inherent in cooking with the most nutritious ingredients available, in addition to the cultural variety for which Montreal is famous. It is also our mission to create a space where students can relax and enjoy time away from formal studies and engage in student-organized educational activities.

- 1 applied student research (ASR) project which started this project
- 1 student-run café started (Ceilidh Kitchen)



2: Project Summaries

SP0048: Butterfly Gardens

Status: Complete

The objective of the Butterfly Gardens project was to create a place for people to experience the interactions between plants and insects and to understand how gardens can be designed in such a way that endangered species can be re-integrated into our backyards in urban areas. Perennial gardens utilizing native nectar-bearing plants serve to increase insect biodiversity and enhance bird life on the campus. As well, the butterflies and other pollinators aid in the pollination needs of the neighbouring Macdonald Campus community garden. The gardens will be used to teach students (BSc and college level) about ecosystem services, insect-plant interactions and the importance of these insects in producing food.

- 426 web hits
- 4 butterfly species present
- 100% perennial plants planted

SP0049: Off-campus Residence Energy Dashboard

Status: Ongoing

Through this project, the three main off-campus residences became connected to the McGill Pulse Energy Dashboard, displayed on screens in residence lobbies and available online. Having real-time information available allows for student initiatives, and targeting the residence student community has a much wider impact than just the residences, thus fostering change campus-wide.

- 1,568 students in residence now able to monitor their daily energy usage using Pulse Dashboard software

SP0050: Sustainability Fair

Status: Complete

The Sustainability Fair was a country-style fair aiming to provide opportunity for members of the community to find out what is happening on campus and how they could get involved in sustainability initiatives. It provided visibility for ongoing sustainability work, promoted collaboration both within McGill and the greater Montreal community, strengthened relationships between groups, and provided many opportunities for learning.

- 30 sustainability groups presented their initiatives
- 500 visitors attended



2: Project Summaries

SP0051: Green Biobanking

<http://www.biomatrica.com/>

Status: Ongoing

Green Biobanking is an initiative that was launched in order to create new procurement policies at McGill. This pilot program is initially gathered information about the needs of our investigators, discussed the pros and cons for different biobanking and lab information management systems (LIMS) options, ran test cases, and now is about to embark on a campus wide education phase.

It has since grown into something much larger. Reduced freezer usage is resulting in energy savings for McGill, researchers are storing biological samples in a more sustainable way, and new technologies for DNA storage offer many opportunities for Applied Student Research (ASR)

- 1 partnership with Biometrica company to test new room-temperature technologies for DNA storage
- Simply by eliminating 20% of their fridges, 20 % of their freezers, and -80 °C freezers, McGill could save \$15,000 per year at the McIntyre and Bellini buildings. These savings could easily be much higher if more freezers were eliminated and/or if more buildings were included.
- 240 undergraduate students per year will be trained in ambient room temperature storage in their labs (implemented into Biochemistry curriculum)

SP0052: Egg Grader

Status: Ongoing

The Donald McQueen Poultry Unit at Macdonald Campus produces 21,000 eggs per week. Due to lack of appropriate grading equipment, in the past these eggs were shipped to Ontario to be graded. With the purchase of their own Egg Grader and in partnership with Food & Dining Services, greenhouse gas (GHG) emissions are minimized and eggs are now graded on site, providing local and affordable eggs to 5,800 students at Mac Market and at residences downtown since November 2012.

- 1 certification received
- 1 company created
- Delivers eggs to 4 downtown locations and 3 Mac Campus locations
- 67,000 eggs graded and consumed by members of the McGill community in the first three months alone!



2: Project Summaries

SP0053: Greening McTavish

Status: Complete

Debuting in the summer of 2011, this project turned McTavish Street into an oasis of green. This project piloted four asphalt replacement experiments to develop new strategies for green campus space. Lessons will be implemented as soon as the City of Montreal completes their pending construction work on the street.

- 4 different pilot projects tested
- 11 different types of plants planted
- 18 parking spots converted to green space
- 152 m² of green space created
- 208 bike spots created
- 1,212 plants added to campus

SP0054: Ecolibrium Radio Residency

<http://ecolibriumfm.wordpress.com/>

Status: Complete

CKUT's Ecolibrium Radio Residency project uses radio and podcasts to raise awareness about environmental initiatives based out of McGill University (Montreal, Canada). To this end, CKUT offers a series of training workshops in basic radio production to environmental groups, students and professors at McGill that create 1-hour radio shows discussing sustainability issues and sustainable living. Episodes are available for free to download from iTunes.

- 1 Residency Collective formed to ensure continuity
- 12 groups received radio and broadcast training
- 23 community partnerships
- 70 interviews conducted
- 2,000+ blog post views

SP0055: Teva Recycling Initiative

Status: Complete

The Teva Recycling Initiative (TRI) is a joint venture between the McGill student group 'Teva' and the McGill Libraries. This pilot project aims to replace the current trash and recycling bins in the McLennan library with large, clearly labeled receptacles with multiple compartments for both garbage and recycling. The goal was to improve recycling rates and decrease contamination through convenience of use and proper sorting.

- 1 Award Received (2012 Catalyst Award for Applied Student Research)
- 4,392 kg of original recycling now uncontaminated and truly recyclable
- 5,100 kg in total recycled annually, due to increased bin usage

SP0056: see SP0045



2: Project Summaries

SP0057: Vision 2020

<http://mcgillvision2020.com/>

Status: Ongoing

Vision 2020 is a conversation, consultation and planning process to leverage and connect sustainability initiatives across McGill by building a community-wide sustainability strategy for the next decade. Vision 2020 was born from the recognition that sustainability efforts at McGill had both grass-roots momentum and top-level support, but lacked an overarching strategy to coordinate further action. As such, it consists of three phases: a situational analysis, vision and goals, and an action plan. Vision 2020 is participatory, collaborative, and experimental. It strives to create a fun, energizing model for consultation and engagement at McGill, and to produce a Sustainability Strategy that is ambitious, realistic, and is both from and for the McGill campus community.

- 1,000+ participants
 - 1,084 newsletter subscribers
 - 6,000+ blog views (as of January 2013)
-

SP0058: Solin Hall Compost Pails

Status: Complete

When interest in composting was expressed by Solin Hall residents, a team of committed council members looked into getting a compost pail for every apartment in Solin. This project is particularly pertinent because Solin Hall possesses the ability for large-scale composting: it's one of the few McGill residences that has full control over food preparation and the resulting food scraps. Solin Hall now has the necessary funds for every apartment to have a kitchen compost pail, complete with a compost "starter-kit" which was distributed to each student-apartment.

- 50 participants at a 100-mile potluck held to celebrate local food
 - 100 permanent compost pails
 - 212 students are able to compost their waste
 - 1 permanent student staff position with a mandate to maintain this project
-

SP0059: Off-Campus Home Energy Team

Status: Complete

The Off-Campus Home Energy Team (OCHET) is a student effort to bridge the on-campus and off-campus experience of others living in the city of Montreal. The basic idea is that students living in apartments near campus sign up for a visit from a knowledgeable OCHET student team to help them reduce energy bills and live more comfortably through the winter. Arriving with an easy to follow checklist and all the needed materials to reduce the significant energy consumption resulting from heating our homes, OCHET is a tactful energy conservation program and valuable resource for McGill community members!

- 5 student jobs created
- 46 apartments winterized



2: Project Summaries

SP0060: Café Rhizae

Status: Ongoing

This project created an innovative protocol on how to grow gourmet oyster mushrooms from coffee grounds. The project members collected used coffee grounds from McGill cafeterias and local cafes, and used them for experimental research on growing edible mushrooms. Coffee grounds were composted at the end of the growing period, and the findings of their research can be disseminated to any student interested in growing mushrooms from their used coffee grounds.

- 100+ kg of used coffee grounds diverted from landfills
 - 1 student received credit for Applied Student Research (ASR)
 - 1 innovative protocol developed
 - 2 kg of mushrooms produced
-

SP0061: Addressing Business Travel Behaviour

Status: Ongoing

The Transport Survey (Project #22) revealed that the University had an impressively 'green' commuting modal share. The SPF funded an independent study in Civil Engineering (CIVE 470) to analyze expense reports and estimate Scope 3 GHG emissions from air travel. The report for the course estimates emissions for 2011 at 4,815 tons of CO₂eq. No data was available to compare this with business travel behaviour. Additionally a survey is being developed and will be sent out to faculty and staff to determine barriers and benefits to substituting videoconferencing in the place of air travel.

SP0062: Mercury Thermometer Exchange Initiative

Status: Ongoing

In this initiative, Procurement Services and Financial Services are partnering with the McGill Office of Sustainability to replace mercury thermometers with non-mercury thermometers. Under the 2011 Regulations Respecting Products Containing Certain Substances, from Environment Canada, the sale of mercury thermometers is now banned in Canada. Although mercury thermometers that are already being used are still legal, this initiative has proactively decided to implement a campus-wide thermometer exchange program at no charge, on a first-come, first-serve basis. It was launched in January 2013.

- 136 mercury thermometers to be replaced with 92 environmentally-friendly ones
 - 25 orders for replacement thermometers within the first week of operation
-

SP0063: see SP0017



2: Project Summaries

SP0064: Wood Shredder

Status: Complete

The wood shredder was purchased in order to allow Grounds to shred leaves and branches at McGill and put them directly into the Campus “Big Hanna” Composter. As opposed to sending branches and leaves to be shred at the city shredder and then paying for mulch to be delivered to McGill, the wood shredder will allow Grounds to shred branches and leaves here on campus, to then deliver them to the composter, and then to be reused as mulch. Use will begin in Fall 2013.

- Significant tonnage of wood chippings expected to be diverted from landfill

SP0065: Greening Indoor McGill Initiative

Status: Ongoing

Greening Indoor McGill Initiative promotes the use of indoor plants to improve air quality and promote a healthy aesthetic through the greening of indoor environments for McGill faculty, staff, and students. Drawing on the expertise of Department of Plant Science faculty and students, the purpose of this pilot project is to (1) propagate and distribute suitable indoor office plants, (2) hold workshops to disseminate information on plant care, (3) develop a resource website, and (4) conducting follow-up surveys to provide additional information on plant care and maintenance. The impacts of these activities will be realized in both improvements to indoor environments and the creation of a McGill network to maintain and expand such improvements.

- 154 event attendees
- 4 wellness & health workshops held
- 89 plants donated to McGill staff
- Involves 1 Plant Science Master’s student and the PLNT 310 class

SP0066: Sustainability Case Competition

<http://ifccs.wordpress.com/>

Status: Complete

The Sustainability Case Competition was a SSMU-run event to allow students to imagine and construct what a “Sustainable Café” in the SSMU building would look like. The SPF partnered with this event in order to provide food and ensure that the event and the lessons learned were documented.

- 742 event attendees
- 120+ applications received
- 6 promotional videos produced (total 3,426 views)



2: Project Summaries

SP067: McGill Energy Project

<http://mcgillenergyproject.wordpress.com/>

Status: Ongoing

The McGill Energy Project (MEP) is a student-led cooperation of students, faculty, and staff working together to find ways to use the McGill University Campus as a living laboratory. Through collaboration on applied student research projects (ASR), they work to find ways to reduce energy consumption on campus and develop energy solutions for a sustainable future. MEP is very research-oriented and seeks to create opportunities for students to conduct research focused on McGill's energy use. It aims to strengthen student-faculty-staff relationships, as well as to provide students with the skills and confidence needed to tackle energy systems outside the walls of their university.

- 9 ASR students + 2 forthcoming ASR opportunities for students
 - 2 studies completed + 4 studies underway
 - 1 speaker series
-

SP0068: Chemical Curriculum Development

Status: Ongoing

The Chemical Curriculum Development project is an initiative from the Chemistry department to redesign the curriculum of CHEM 392 in order to increase exploratory learning and eliminate waste. Ultimately, the goal of this project is to replace petroleum derived chemicals with renewable feedstocks, and to develop an undergrad curriculum where students can contribute to research by doing experiments that push the boundaries of knowledge. This project is also establishing a model for the continued development of sustainability-oriented chemistry exercises that can be exploited as a continuous, annual, mini water-, solvent-, and energy-audit of a chemistry laboratory.

- 12 studies conducted
 - 135 students now using curriculum developed through this project
 - 1 research program created
 - 6 student jobs created
-



2: Project Summaries

SP0069: Community Engagement Day

<http://cedmcgill.com/>

Status: Complete

Community Engagement Day is a new project from the Social Equity and Diversity Education Office that aims to celebrate and promote existing initiatives that connect McGill with the Montreal community and build new relationships. On Friday October 5th, 2012 about 20 group activities took place on campus and around the city to give McGill students, staff, faculty and alumni the opportunity to contribute their time and learn about the social issues that community organizations address. Activities include public discussions, community walking tours, urban gardening, youth mentorship, and more, all with a focus on topics related to equity, diversity, and social sustainability.

- 1,800 flyers distributed
- 1,000+ event attendees
- 64 partnerships with local community organizations
- 2 trainings conducted

SP0070: Biodiesel Production

Status: Complete

The Biodiesel Production project explored the possibility of creating biodiesel for McGill vehicles from the 14,000 litres of waste vegetable oil (WVO) from by McGill Food and Dining Serves (MFDS) per year. Disposal of this oil represents a loss of a valuable commodity: WVO contains an amount of chemical energy comparable to crude oil. While unsuitable for direct use in its native form, a simple chemical reaction transforms WVO into biodiesel, which offers many benefits over fossil diesel and combusts in conventional diesel engines without modification. Phase 1 was to probe the feasibility of installing a biodiesel production system using cafeteria waste vegetable oil; Phase 2 was to develop a process that was both economically feasible and environmentally friendly.

- 5 undergraduate students involved in Applied Student Research (ASR)
- Introduced as a case in the curriculum of 50 CHEM 392 students
- 1 report produced “The Optimization of Biodiesel Production”
- 14 m³ of waste vegetable oil diverted each year

SP0071: see SP0004

SP0072: see SP0008



2: Project Summaries

SP0073: Water Intern

Status: Complete

In 2011, the Ministry of Education has mandated all universities to reduce their water usage by 10% by 2015 and by 20% by 2020, relative to 2011 levels. McGill's Utilities and Energy Management hired an intern to determine the baseline water usage on the downtown campus and to help identify areas where consumption could be reduced.

- First water audit conducted at McGill
 - 1 student job created
 - 32 buildings audited for water usage
 - 4 recommendations issued (2 which have already been approved and implemented)
 - Estimated McGill's annual water consumption as 1.3–2.8 million m³, enough to flood the entire island of Montreal under 5 centimeters of water, or the equivalent of 716-935 Olympic-sized swimming pools
-

SP0074: see SP0002

SP0075: see SP0016

SP0076: see SP0012

SP0077: Waste to Resource Assessment

Status: Ongoing

The Waste to Resource Assessment project was formed in order to conduct a comprehensive assessment of current waste generation and recycling at McGill. By identifying waste practices, they intend to identify ways to improve the waste diversion rate as well as to create targeted recycling and educational initiatives. It will consist of a three-step program involving a Pre-Audit Investigation, On-Site Assessments (involving a McGill student), and the creation of an Assessment Report and Presentation. Launched February 4, 2013, the tentative completion date for the project is April 2013.

- 1 sustainable consulting company hired
 - 9 buildings on lower campus will be audited
 - 4 McGill partnerships established
 - 1 waste audit methodology develop for McGill
 - 1 student involved, replicating the methodology elsewhere
-



2: Project Summaries

SP0078: Sustainability Video Project

Status: Complete

The goal of the Sustainability Videos Project was to create a light-hearted short film that framed sustainability as a real problem that needs to be thought about in a very deep way. The film shows the common evolution of a student's attitude towards the problem: ignorance, over-zealousness, despair, and finally hope. The last scene, provoking hope, directs students to the office of sustainability 'get-involved' page, which we have also improved by highlighting applied research, collaboration and fun/engagement. We hope that this video can be put up on a number of McGill websites, but more importantly that it is passed from student to student because it is entertaining.

- 400 film viewers
- 1 promotional video produced

SP0079: Farm Fresh Truck

Status: Complete

In order to make the delivery of food grown through Macdonald Student Ecological Gardens (Project #4, 42, 71) and McGill Feeding McGill (Project #2, 38, 74) and the eggs processed through the Egg Grader (Project #52) to the downtown dining halls more efficient, this project involved the purchase of a large truck specifically for the transport of this food. This is the Farm Fresh Truck.

- 25,000 kg of seasonal local produce delivered to 4 downtown locations
- 67,000 eggs delivered (and counting!)
- An average of 500 kg of local produce is delivered per trip

SP0080: Constructive Consumerism

<http://www.mcgill.ca/mfsp/>

Status: Ongoing

In creating a food system known for sustainability, transparency, and accountability, from which we are proud to eat, the McGill Food Systems Project (MFSP) practices an exemplary model of student engagement where diverse stakeholders are able to work in collaboration towards a common goal. With this project, MFSP aims to create a student population that is actively engaged with the campus food system, an expanded range of attractive experiential learning opportunities, and a deeper integration of sustainability into the culture of the McGill community as a whole.

- 1 website launched January 2013
- Consolidation of all for-credit MFSP Applied Student Research (ASR) projects



2: Project Summaries

SP0081: SPF Support Position

Status: Ongoing

With the widespread growth of the SPF it became clear that one person (SPF Administrator) could no longer provide enough support for the SPF and its project alone. The SPF Support Position was created in order to help administer the SPF by providing critical support in processing financial transaction, tracking budgets and expenses, and coordinating reporting efforts.

- 1 four day/week position created
- Many monthly budget updates generated for every active SPF project
- 1 Three Year Report compiled

SP0082: Biodigester Feasibility

Status: Ongoing

The Biodigester Feasibility began as a study performed by a McGill graduate (inspired by her honour's thesis) to explore the possibility of using anaerobic digestion as an alternative heating solution at the Macdonald campus farms. An engineering capstone design group carried the project forward in the 2012-2013 academic year. Implementation of digestion is a great opportunity to contribute directly to McGill's own sustainability but also to the sustainability of the local and regional community through experimentation with digestion technologies in a northern climate.

- 4 students in Applied Student Research (ASR)
- 2 evaluative reports produced
- 1 prototype designed to match the specific needs of Macdonald Campus

SP0083: SPF Review

Status: Complete

This project was tasked with conducting a review of the SPF and providing recommendations to the Fund. Initiated by SSMU, the Review Committee was a collaboration between all three contributing students' societies, a staff representative, and an external reviewer. The Committee was tasked with investigating the effectiveness of the Sustainability Projects Fund (SPF), and to document recommendations (terms of reference provided by the SPF Working Group). This project hired students to conduct confidential interviews with relevant stakeholders and SPF Working Group members (past and present), to document the findings of those conversations, and to help compile a report that compliments but does not duplicate the contents of the SPF Annual Reports.

- Identified four major recommendations
- 1 survey conducted



2: Project Summaries

SP0084: Toolkit for Change

Status: Ongoing

The McGill Food Systems Project, initiated by a small group of students together with a few core staff members three years ago, is considered a successful example of organizational change toward sustainability using our University's mandate of learning and research. The goal of this project is to understand the MFSP past and current change process for two purposes. First, we will develop an organizational change model and toolkit, based on the experience of the McGill Food Systems Project, which could be used to guide other sustainability efforts on campus. Second, we will recommend the development of reflexive organizational systems, which may help further institutionalize the program within the McGill community.

- 1 student job created
- 1 organizational change model and toolkit being created

SP0085: Furniture and Asset Management

Status: Ongoing

This team will be developing a website to facilitate the redistribution of used furniture and other items within the McGill community, thereby diverting waste, increasing the life cycle of objects, maximizing the usage of these assets, decreasing transportation and handling, and curtailing expenses for the purchase of furniture. As such, it will have positive effects on a financial, environmental, and social level.

- The site is expected to be launched January 2014.

SP0086: DigFab Sunscreens

<http://www.arch.mcgill.ca/prof/mingallon/arch678/fall2010/ftp/Arch%20678/2012-2013/SPF%20Impact%20Analysis%20Report/Advanced%20Construction%20SPF%20Impact%20Analysis%20Report.pdf>

Status: Complete

DigFab Sunscreens is a project developed as part of the course 'Advanced Construction (ARCH678)' of the March programme at the McGill University School of Architecture. More specifically, the project consisted of the design, fabrication, and retrofitting of solar shading systems in the first year studios of the Macdonald-Harrington building.

- Integrated into the curriculum of ARCH 678 (34 students)
- 34 students received credit for Applied Student Research (ASR)
- 6 prototypes developed
- 6 studies of the embodied energy use of the design and fabrication of the prototypes, as well as an analysis of the carbon footprint incurred
- 1 forthcoming peer-reviewed paper
- 1 exhibition at the School of Architecture (February 2013)



2: Project Summaries

SP0087: Sustainable Education @ McGill

Status: Ongoing

Sus-Ed@Mcgill is creating sustainable science education training for and with the students in McGill's Faculty of Education teacher-training program. Many of these students will become teachers in elementary or high schools. They will provide students with an appreciation of the method of scientific inquiry, and further integrate sustainable practices, and lessons, into their classes. We are developing four to six of such class modules, as well as two field trips for these pre-service teachers to promote and create awareness about local sustainability issues, as well as the value of forging better relationships between humans and the environment. The same kind of lesson plans and toolkits for teachers will be available to be accessed online.

SP0088: Marine Stewardship Council Certification

Status: Complete

McGill Food and Dining Services began to change their seafood purchasing practices about two years ago, after an MSE applied student research group (ENVR 401) approached them and offered to research feasible alternatives for MFDS's seafood sourcing. Since then, MFDS has shifted to only purchasing seafood with the approved criteria. We would now like to complete the process, by receiving the Marine Stewardship Certification. This certification officially signifies that MFDS supports and rewards sustainable fisheries, sustainable seafood companies, scientists, and conservation groups. If we achieve MSC certification, McGill will be the first Canadian School to have accomplished this.

- Currently, 30-40 percent of the seafood which MFDS purchases is sustainably purchased and MSC certified. The goal is to increase this amount in the forthcoming years.
- This will affect the 2700 students in residences as well as the thousands of members of the McGill community who eat at MFDS or Aramark locations on campus.
- 1 MSC certification received 11 February 2013
- Possibility for implementation into the sustainable seafood curriculum

SP0089: Integrated Education Hub

Status: Ongoing

Our group aims make recommendations for broadening the scope and accessibility of experiential learning opportunities offered at McGill. We will work in collaboration with students, faculty, community partners, and other administrative units at the university. The Steering Group represents Student Services, the Office of Research and International Relations, the Office of Sustainability, the Social Equity and Diversity Education (SEDE) Office, the SSMU, the PGSS, the MCSS, and faculty representatives. Applied and community-based experiential learning and research is an essential component of a rich and comprehensive student experience, as well as central for McGill University to make a meaningful contribution to society.



2: Project Summaries

SP0090: Food & Dining GHG Audit

Status: Ongoing

McGill Food and Dining Services (MFDS) plans to enlist the support of seven (7) students to assess MFDS' greenhouse gas (GHG) or carbon footprint from energy, water, solid waste, and food purchasing. In turn, they will develop strategies to reduce this footprint. Utilities and Energy Management will support the project with greenhouse gas (GHG) calculating software, Carbon Solve, and also with the expertise of their Energy Manager. Building Services will support the project through expertise of their staff and by sharing the data and methodology from SPF project #77 "Waste to Resource Assessment," conducting a waste-audit of select MFDS locations from February to April 2013. Three detailed inventories of Greenhouse Gas (GHG) emissions from energy use, water use, and solid waste will be conducted in Winter 2013 (ideally as for-credit Applied Student Research 'ASR,' alternatively for pay). They will be performed by students, supervised by staff, and possibly professors too. The McGill Energy Project (SPF project #67) will help to identify keen students and professors for this project. A coordinator will be hired to oversee these three student projects during the winter. Over the summer and fall the coordinator will compile the data and develop strategies to reduce the carbon footprint and institutionalize a cyclic assessment.

SP0091: Mercury Free Microscopy

Status: Ongoing

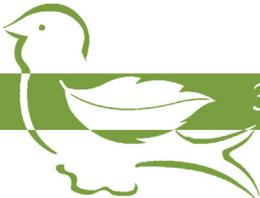
The Life Sciences Complex Imaging Facility (Department of Physiology), the Cell Imaging and Analysis Network (CIAN, Department of Biology) and the Montreal Neurological Institute (MNI) microscopy core have eleven microscopes with mercury-based light sources that they would like to eliminate. The facilities would like to migrate to newer sustainable, energy efficient, mercury free light engines. LED-based light sources offer a better image, better bulb life, less heat, lower cost, and less toxicity: a triple-win opportunity. We want to begin a new campus-wide initiative for mercury free microscopy (MFM) that provides awareness, recycling, and elimination of mercury based light sources.

- New engines will be 25 times more efficient
- Planned campus-wide education of faculty and students
- They will create and run PHGY 396 independent study courses



Supporting Document 3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
SPF Budget #0								○		
Apartment Gardens #1								○		
McGill Feeding McGill 1 #2	○				○	○		○		
Edible Campus 1 #3	○				○	○	○	○		○
Macdonald Student-run Ecological Gardens 1 #4	○					○		○		
La Cave #5								○		
Meatless Mondays #6								○		
Food Systems Administrator 1 #7	○							○		
Campus Crops 1 #8						○		○		○
Macerator #9				○						
SPF Website Revamper #10								○		
Electric Low-Speed Vehicle #11										
Farmers' Market 1 #12					○			○	○	
Sustainable Eating #13	○			○				○		



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
Water is Life! #14	○						○			
Water Collection #15	○					○				
Gault Electric ATV #16	○									
Sustainability Research Symposium 1 #17	○									
Campus "Big Hanna" Composter #18	○			○		○				
Sustainability Research Coordinator #19							○			
Outdoor Frosh #20									○	
High Density Bike Racks #21	○		○			○				
Transportation Survey #22	○							○		
Hitting the Benchmark #23						○		○		
Fluorescent Lamps #24		○								
Hazardous Waste Minimization #25								○		
Energy Dashboard #26								○		
Sustainable Thomson House #27	○	○						○		



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
Desautels Business Conference on Sustainability #28										
Mac Bottle Refill Station #29			●					●		
Bellairs Recycling #30								●		
Materials Analysis Tool #31	●				●			●		
Hazardous Chemical Disposal #32								●		
Law Plate Club #33				●				●		
Food Systems Administrator 2 #34	●							●		
Campus Crops 2 #35						●		●		●
Edible Campus 2 #36	●				●	●	●	●		●
Farmers' Market 2 #37					●			●	●	
McGill Feeding McGill 2 #38	●				●	●		●		
Aboriginal Sustainability #39								●	●	
EnGage #40								●		
Shut Your Sash #41	●		●					●		



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
Macdonald Student-run Ecological Gardens 2 #42	○					○		○		
Thomson House Permaculture Garden #43							○	○		
Pulse Dashboard #44	○									
McGill Food Systems Project 1 #45	○							○		
Campus Swaps #46								○		
Out of the Garden #47	○							○		
Butterfly Garden #48	○						○	○	○	
Off-Campus Residence Dashboard #49	○							○		
Sustainability Fair #50										
Green Biobanking #51	○		○					○		
Egg Grader #52	○									
Greening McTavish #53								○		
CKUT Ecolibrium Radio Residencies #54										○
Teva Recycling #55								○		



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
McGill Food Systems Project 2 #56	●							●		
Vision 2020 #57										
Solin Hall Compost Pails #58				●				●		
Home Energy Team #59								●		
Cafe Rhizae #60				●						
Addressing Business Travel Behaviour #61								●		
Mercury Thermometer Exchange #62					●					
Sustainability Research Symposium 2 #63	●									
Wood Shredder #64			●							
Greening Indoor McGill Initiative #65	●					●		●		
Sustainability Case Competition #66				●						
McGill Energy Project #67		●								
Chemical Curriculum Development #68			●							
Community Engagement Day #69									●	●



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
Biodiesel Production #70	○	○								
Macdonald Student-run Ecological Gardens 3 #71	○					○		○		
Campus Crops 3 #72						○		○		○
Water Intern #73	○									
McGill Feeding McGill 3 #74	○				○	○		○		
Gault Electric ATV 2 #75	○									
Farmers' Market 3 #76					○			○	○	
Waste to Resource Assessment #77										
Sustainability Videos Project #78										
Farm Fresh Truck #79		○						○		
Constructive Consumerism #80								○		
SPF Support Position #81										
Biodigester Feasibility #82	○	○		○						
SPF Review #83								○		



3: Secondary Themes

	Academic	Energy	Materials	Food	Finance	Land	Water	Community	Wellness & Health	Social Justice
Toolkit for Change at McGill #84	●									
Furniture Assessment & Management #85										
DigFab Sunscreen #86			●							
Sustainable Education @ McGill #87										
Marine Stewardship Certification #88							●			
Integrated Education Hub #89								●		
Food & Dining GHG Audit #90				●						
Mercury Free Microscopy #91	●									



Supporting Document 4:

Partners

McGill Department, Faculty, & Unit Partners

1. Bellairs Research Institute
2. Campus & Space Planning
3. Centre de la Petite Enfance de McGill/McGill Childcare Centre
4. Department of Anatomy and Cell Biology
5. Department of Anesthesia
6. Department of Biochemistry
7. Department of Biology
8. Department of Bioresource Engineering
9. Department of Chemical Engineering
10. Department of Chemistry
11. Department of Civil Engineering and Applied Mechanics
12. Department of English
13. Department of Geography
14. Department of Human Genetics
15. Department of Mechanical Engineering
16. Department of Microbiology and Immunology
17. Department of Natural Resource Sciences
18. Department of Oncology
19. Department of Pathology
20. Department of Pharmacology and Therapeutics
21. Department of Physiology
22. Department of Plant Science
23. Department of Surgery
24. Desautels Faculty of Management
25. Design Services
26. Development and Alumni Relations
27. Faculty of Agricultural & Environmental Sciences
28. Faculty of Arts
29. Faculty of Education
30. Faculty of Engineering
31. Faculty of Law
32. Faculty of Medicine
33. Faculty of Science
34. Faculty for Architectural Research in Media and Mediation
35. Facilities Operations and Development
36. Financial Services
37. First People's House
38. First Year Office
39. Fit@McGill
40. Gault Nature Reserve
41. Graduate and Postdoctoral Studies
42. Grounds
43. Hazardous Waste Management
44. Horticultural Research Centre
45. Human Resources
46. Institute of Parasitology
47. IT Services
48. Library and Collections
49. Media Relations Office
50. McGill Bookstore
51. Network and Communication Services
52. Office of the Dean of Students
53. Office of the Deputy Provost
54. Office of the Provost
55. Office of the Principal and Vice-Chancellor
56. Poultry Unit
57. Parking Services
58. Printing Services
59. Procurement Services
60. Redpath Museum
61. Residences
62. Rosalind and Morris Goodman Cancer Research Centre
63. School of Architecture
64. School of Computer Science
65. School of Dietetics Human Nutrition
66. School of Environment
67. School of Continuing Studies
68. Social Equity and Diversity and Education Office
69. Student Life of Learning
70. Teaching and Learning Services
71. Translation and Written Communication Unit
72. Utilities and Energy Management



4: Partners

McGill Community Group Partners

1. Aboriginal Students' Law Association
2. Animal Liberties McGill
3. Ceilidh Kitchen
4. CKUT
5. Committee for Environmental Education, Responsibility, and Sustainability
6. Connexion McGill
7. Engineers Without Borders
8. Envirocomm
9. Environmental Res Council
10. Gerts Bar
11. Global Food Issues Club
12. Gorilla Composting
13. Green Fund
14. Greening McGill
15. Happy Belly
16. Indigenous Access McGill
17. James Administration Staff
18. KANATA
19. MacDonald College Student Society
20. Macdonald Greenhouse
21. McGill Aboriginal Health Interest Group
22. McGill Association of University Teachers
23. McGill Business Partners Consulting Group
24. McGill Dentistry 'Run for Outreach'
25. McGill Fitness Center
26. McGill Quebec Public Interest Research Group
27. McGill University Non-Academic Staff Association
28. Midnight Kitchen
29. MUGS lounge
30. Organic Campus
31. Outdoor Furniture Standards Working Group
32. Post Graduate Students' Society
33. Rad Frosh
34. ReThink McGill
35. Rez Life
36. Shaping Tomorrow's Organizational Partners
37. SSMU Community Action Engagement Committee
38. SSMU Council
39. SSMU Green Fund
40. Stewart Biology Greenhouse
41. Student Health Promotion
42. Students' Society of McGill University
43. Summer Undergraduate Research Program
44. Sustainability Coordinating Group
45. Sustainable Barbados recycling centre
46. The Flat
47. The Plate Club
48. Thomson House
49. Thomson House Restaurant

University & College Partners

1. Aurora College
2. College of the Atlantic
3. Dalhousie University
4. Duke University
5. Massachusetts Institute of Technology
6. Oxford University
7. Queens University
8. Roger Williams University
9. Stanford University
10. Simon Fraser University
11. University of Glasgow
12. University of North Carolina
13. University of Toronto
14. University of Victoria
15. University of West Indies
16. Université du Québec à Montréal
17. Vanier College
18. York University



4: Partners

Community Partners

1. ACRA (St. Gabriel's Food Bank) in Pointe St Charles
2. Action H2O
3. Alternatives
4. Anarchist Book Fair
5. Animal Liberties
6. Association des Rédacteurs en Agroalimentaire
7. B's recycling
8. Barbados Hotel and Tourism Association
9. Barriere Lake Solidarity
10. Best Story Ever Told
11. Beyond Me
12. Bombardier
13. Botanical Gardens
14. Burgundy Urban Mediation Project
15. Camp Cosmos
16. Canadian Boreal Initiative
17. Canadian Organic Growers
18. Chamber Music Without Borders
19. Climate Justice Montreal
20. Concordia Rooftop Organic Greenhouse
21. Co-op du Grand Orme
22. David Suzuki Foundation
23. École Joseph-Henricot
24. Ecomuseum
25. Eco-Quartier
26. Edible Schoolyard (Montreal West)
27. Energy Association
28. Equiterre
29. Ethnoculture
30. Ferme Zephyr
31. Folkestone Park and Marine Reserve
32. Folkestone Residential Community
33. Future Centre Trust
34. Green Living and Learning Community Residence Project
35. Heart of the City Piano Program
36. Hidden Gems
37. Homework Help
38. Homework Zone
39. Immigrant Workers Centre
40. Indigenous Student Alliance
41. Intégration Jeunesse
42. Inter-Tribal Youth Centre of Montreal
43. Kahnawake
44. Les Jardins Carya
45. Listuguj Internship Programme
46. Living Library
47. Lola Rosa
48. Lundi sans Viande
49. Marché Ste-Anne
50. Marine Stewardship Certification
51. McCord Museum
52. Métis National Council
53. Milton-Parc Citizens' Committee
54. Minimum Cost Housing Group
55. Ministry of Environment (Barbados)
56. Mont Blanc
57. Mont Sutton
58. Montreal City Mission
59. Montreal Kayak School
60. Montreal Urban Aboriginal Community Strategy Network
61. Mount Hope Farm Project
62. MushKeg Media Inc.
63. Native Friendship Centre of Montreal
64. NDG Food Depot
65. Owls Head
66. Park n Plot
67. Project 10
68. Projet Montreal
69. Rafting Montreal
70. Régroupement des écoquartiers
71. Residents of St Anne de Bellevue
72. Rezolution Works
73. Rona
74. Salvaging Activity Workshop
75. Santropol
76. Santropol Roulant
77. Sauvé Scholars Foundation
78. Seeds of Change
79. Senneville Peri-Urban Farm
80. Service d'Entraide Passerelle
81. Share the Warmth
82. South Asian Women's Community Centre
83. Soverdi
84. Speak up! Bursting the Bubble
85. St. Monica School Garden
86. Sustainable Barbados Recycling Centre
87. Suzuki Foundation
88. TD Friends of the Environment
89. Teesri Duniya Theatre
90. The Conservationists
91. Tyndale St-Georges Community Centre
92. Union de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
93. Union for Gender Empowerment
94. Union Paysanne
95. UQAM Gardening Project
96. UQAM Urban Agriculture School
97. Verdun Girl's Camp (YWCA)
98. Vitaminsport
99. Wapikoni Mobile
100. Waste Management Sustainability Services
101. Wow Lab
102. Yellow Door
103. Young Canada Work
104. YWCA
105. Zine Distro



Supporting Document 5: Survey Results

The following responses are survey results from 77 project members in January 2013 who completed the feedback questionnaire:

Q3: In which ways has your involvement in your project helped your personal growth?

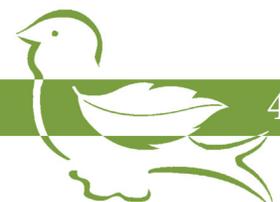
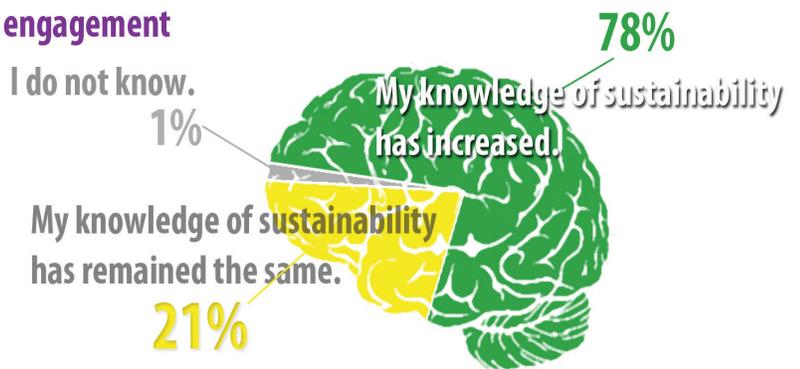
Q2: Has your involvement in your SPF-funded project positively impacted you in any of the following areas?



Q5: Since your involvement with SPF, how have your levels of civic engagement changed? Examples of civic engagement include volunteering, campaigning, letter-writing, signing petitions etc.



Q6: Since your involvement with SPF, how has your knowledge of sustainability changed?



5. Survey Results

Q4:

Which of the following skills have you improved upon through your involvement in your project?

Working in a team:

73%

Setting and meeting realistic goals:

69%

Initiative and Leadership skills:

65%

Conflict Resolution:

55%

Identifying key stake holders:

60%

Networking: 56%

Time management:

51%

Self-confidence: 46%

Budgeting: 39%

Public Speaking: 22%

None: 3%



5. Survey Results

Q7: In your opinion, which of the following impacts has your project had on the McGill community?

