

A Strategic Plan for Embedding Sustainability into Carleton University Operations

Facilities Management and Planning

Carleton University

April 2013

SUSTAINABILITY BALANCING THE NEEDS OF TODAY WITH THE NEEDS OF TOMORROW

Background

Sustainable operations have a long history at Carleton University, although for many years it was known by other names. For example, Carleton University has had a recycling program since the early 1990s and has collected organics for composting in Residence Commons since 1998. Carleton University implemented major energy conservation measures in the 1990s, including comprehensive lighting retrofits.

In 2004, Carleton University signed on to the Talloires Declaration which defined 10 action items that Carleton and the other signatories agreed to follow. As of May 2012, the Talloires Declaration has been signed by more than 440 university presidents and chancellors at institutions in over 52 countries, across five continents. A group of 35 Canadian universities has signed the Talloires Declaration. The report itself stressed the importance of the university as a role model for society: *"The university is a microcosm of the larger community, and the manner in which it carries out its daily activities is an important demonstration of the ways to achieve environmentally responsible living."*

In 2008, a multi-stakeholder task force was established with a broad mission to review where Carleton University was regarding sustainability and to make recommendations. The task force provided a report in December 2008 to the Vice-President (Finance and Administration) and the Vice-President (Research and International). The report recommended, among other things, the creation of a full-time position that would co-ordinate sustainability initiatives at Carleton University. Carleton's first Sustainability Officer was hired in March 2009, reporting to the Assistant Vice-President (Facilities Management and Planning). The other primary recommendation from the task force was to focus on the operations side of the university to ensure that it was "walking the walk." In the longer term, there were recommendations to establish a high-level, multi-stakeholder committee and develop a strategic plan for sustainability with clear targets and goals.

Since March 2009, a number of initiatives have been put in place or enhanced to further sustainability at Carleton University. For example, waste at Carleton has been carefully tracked since 2008 and with a variety of strategic investments, waste audits and program improvements the diversion rate has increased from 42 per cent to 56 per cent. The Green Globes building assessment program is being used to design and assess all new buildings and major renovations on campus, ensuring sustainable buildings are a part of the campus portfolio. Carleton's strategic plan, *Defining Dreams*, was released in 2009 and sustainability was highlighted in many aspects of the plan. The president further committed Carleton on the path to greater sustainability by signing the Council of Ontario University's (COU) Green Commitment.

Carleton University has embraced sustainability in many forms and in many aspects of operations - in research and academic programs. To ensure a cohesive and structured approach that will - in itself - be sustainable, the next step is a sustainability strategic plan for campus operations.

At Carleton University, we believe that sustainability means to live, learn and grow within our campus community in a manner that protects and strengthens our physical and social environments such that the students, staff and faculty of future generations can continue to develop and enjoy our campus community. There are three facets to sustainability – environmental, social and economic. All three are important and must not be looked at in isolation. An impact in one area will generally affect the other two. Best practice today has established sustainability as simply a sound business practice where one considers the triple bottom line – often summed up as - people, planet and profit.

Recommendations

1. Develop a Green Revolving Fund

A fund should be established which will allow for the funding of sustainability focused projects that meet specific cost-savings criteria and have a positive environmental impact on campus life. The fund will be managed by Financial Services. Funding sources could be Carleton University operating funds, with potential future options of accepting donations from staff, students, alumni and other community members.

Actions:

• Establish a Green Revolving Fund valued at \$1 million, with the potential to grow the fund through other means as described above. Please refer to the document "*Recommending a Green Revolving Fund at Carleton University*."

2. Create a multi-stakeholder sustainability advisory committee on campus operations that would report and make recommendations to the Vice-President (Finance and Administration)

Effective implementation of this plan will require input and engagement from a wide variety of people at Carleton University.

Actions:

The advisory committee could be structured as follows:

- One Undergraduate student representative
- One Graduate student representative
- Three Faculty (with direct research/interest in sustainability)
- Four Staff (University Services (Food), Residence, Research, Facilities Management and Planning)
- One Sustainability Officer (support)
- Assistant Vice-President (Facilities Management and Planning) Chair

The committee would report to the Vice-President (Finance and Administration) and would meet quarterly. The recommended mandate is as follows:

- To foster a culture focused on sustainability and work to ensure that it is embedded into all operations of the university
- To enhance the development and implementation of sustainability goals, policies and targets
- To promote university community input into the vision and direction of sustainability at Carleton University
- To promote and support sustainability programs with students, staff and faculty
- To assist with the development of communication and awareness programs
- To assist with the review and prioritization of sustainability initiatives
- To facilitate the development of a strategy to integrate sustainability into all aspects of the university including all academic programs, administration and operations

3. Develop a Green Team Program across campus

A Green Team Program is an effective means to build a network of sustainability-focused individuals across the university. Green teams work by tapping into individuals that are already engaged in sustainability initiatives in different departments. The individuals form a green team for that department or office. They would meet on a regular basis and commit to working to "green" their office space by engaging their co-workers in various initiatives. The Sustainability Office would support the green teams with an online resource site, various educational materials and a recognition program. This network is critical to engage the university community in all facets of sustainability.

Actions:

• Pilot a Green Team program by November 2013 and expand across campus by April 2015.

4. Measure progress and evaluate programs using key sustainability metrics

To effectively develop and manage any program, you need to measure the current state and continue to measure the key indicators to ensure that the program is providing the desired results. For areas related to facility design and operations, the Green Globes Assessment System is the most effective tool. For general university operations, the Association for the Advancement of Sustainability in Higher Education (AASHE) has developed a set of metrics that can be used to assess and measure sustainability.

Actions:

- The Sustainability Tracking and Reporting System (STARS), developed by AASHE, should be adopted by Carleton University to track progress in sustainability.
- The Sustainability Assessment and Reporting System, Green Globes, should continue to be used to assess progress in sustainability at the building level.

5. Conduct public consultation and engage the community to establish buy-in for the Strategic Plan

Best practice indicates that the success of the sustainability strategic plan will depend on the level of engagement and buy-in from the staff, faculty and students involved. It will be critical to have the engagement of senior administrators to ensure that resources are made available and support is allocated where needed. Buy-in will be established by involving people in the decision-making process.

- Develop a comprehensive communications strategy for sustainability. It will serve to engage and educate participants, share successes and build commitment.
- An annual report outlining the progress of the program should be prepared for the community and posted on the website.

CAMPUS PLANNING, BUILDING DESIGN AND CONSTRUCTION

Carleton University is made up of 44 buildings with 374,000 square meters of built space on 62 hectares of land. The campus supports a community of 31,000 students, staff and faculty, of which almost 3,500 students live on campus eight months of the year. In many respects, the campus functions like a small city and has many of the opportunities and challenges that face a mid-sized municipality.

Carleton University conducts a regular master planning process which engages the community to develop a long-term plan for the development of university facilities. The latest Campus Master Plan was adopted in early 2010. The Campus Master Plan reinforces many aspects of sustainability. Green spaces are to be maintained and highlighted through careful planning. Growth will be achieved through densification of the existing property and – for the first time – the Campus Master Plan notes that replacement of existing buildings will be considered so that more efficient use can be made of a building footprint. A network of safe, navigable paths for pedestrians and cyclists will be enhanced. There will be no increase in parking spaces per capita with the new growth on campus; in fact, a decrease in per capita parking is foreseen over several years, as more transportation alternatives are promoted and developed.

Carleton University has committed to ensuring that all new construction and major renovations achieve a minimum rating of 3 out of 5 globes with the Green Globes Rating system (www.greenglobe.com). The Frontenac residence achieved a three globe rating although the green globe process was engaged after the design had already been completed. The Canal Building, River Building and Lennox-Addington residence achieved 5, 4 and 3 globes respectively. The first major renovation to be assessed was the renovation of Russell-Grenville houses in the summer of 2010. As an example of the positive impact – there has been a 69 per cent drop in the water consumption in those two residences. Going forward, as more buildings are renovated and new buildings added, the overall impact of the built environment will continue to be reduced.

In 2009, Carleton University also conducted a pilot project with Green Globes to develop an Environmental Assessment tool for university campuses. The result was a detailed report for each of the 44 buildings at Carleton University, identifying such things as water consumption, energy usage, electricity usage, and waste management. The report also provided a list of recommendations for improvements that would result in a more sustainable operation.

- 1. Continue to use the Green Globes environmental assessment system for all major construction on campus with a focus on continual improvement.
- 2. Continue to use Green Globes to assess all new construction and major renovations with a minimum target standard of 3 out of 5 globes.
- 3. Continue to pursue opportunities to maximize how Carleton University currently allocates and uses space.
- 4. Ensure a waste management/recycling strategy is utilized for all construction and renovation projects.
- 5. Ensure that all renovations and new construction follow the sustainability principles in the Design Guidelines and the Sustainability Assessment Program.

6. Ensure that the campus development is consistent with the Sustainability principles contained in the current Campus Master Plan.

WASTE MANAGEMENT

In 2011-'12, Carleton University produced approximately 2,360 metric tons of waste or approximately 83 kg per capita. This does not include construction or large scale renovation waste. Of that 2,360 metric tons of waste, 1,332 metric tons or 56 per cent, were diverted through reuse, composting and recycling. This is an increase of 13 per cent over 2008-'09 – achieved through various initiatives, including adding more recycling containers on campus, producing consistent signage and education materials, and diverting other materials such as unwanted furniture. Just the recycling of the blue box-type materials at Carleton saved the university approximately \$74,500.

To better understand the waste streams, building level waste audits were conducted in 2010. The results were used to evaluate where improvements were needed (reallocating recycling or garbage bins), as well as engaging the community (meetings with the cleaning staff in order to educate/engage them in the program). Special waste depots were established in 2009 to collect batteries, printer cartridges and cellular phones. To date, Carleton has shipped three large 45-gallon drums of batteries for recycling and disposal and many printer cartridges.

Also established in 2009, the furniture reuse program diverts used furniture and other items from landfill. In the three years this program has operated, it has diverted approximately 43 metric tons of waste from landfill and saved the university more than \$10,000. Moreover, it has seen library shelving get a new life in the Bancroft Public Library, 400 school chairs shipped to a school in the Sudan, and other chairs have been diverted to a local county fair.

The Sustainability Office also worked with Housing and Conference Services to pilot two special waste programs. When students move into residence, several metric tons of cardboard is generated from all of the moving boxes. For two years now, dumpsters have been designated for cardboard and student co-ordinators help ensure that the waste and cardboard are placed in the appropriate bins. The two-week period of move out is even more critical in terms of waste diversion as much more waste is created in the rush to get away for the summer. In 2010, student co-ordinators and volunteers managed to collect three truck loads of clothing, bedding, food and kitchenware and send it to charity. The total amount diverted was more than four-and-a-half metric tons.

In 2011, Carleton also began to recycle and safely dispose of all fluorescent light tubes generated on campus. While not required by law, safe disposal of these tubes contributes to a cleaner environment as each tube contains a small amount of mercury.

- 1. Increase the diversion of waste to 60 per cent by 2015.
- 2. Continue to work with Housing and Conference Services to focus on diversion (reuse and recycling) for move-in and move-out. These two relatively short periods generate a large amount of waste that can be relatively easily diverted. The move-in period is also critical as it serves as an introduction to sustainability programs at Carleton University for new students and parents. Move-out is critical as it results in a lot of good items being diverted to charity. Housing has been committed to refurbishing older, solid furniture for reuse whenever possible and plan to continue to do so.

- 3. Create a comprehensive management plan for paper on campus the largest individual stream of waste. The plan will include targets for overall reduction of paper use as well as recycling targets. A reduction in paper use will generate significant cost savings for Carleton as well. Aspects of the strategy may include: all computers on campus having double-sided printing as a default setting; requiring the use of centralized printers where possible (eliminate or reduce support for individual printers which are less efficient in many ways); promoting the use of electronic course packs (provide training); track the amount of paper each department uses and set reduction targets; require all theses to be double-sided (they are currently required to be single-sided); ensure that all mailings are targeted and that only the number needed are produced.
- 4. Hardware Services to develop a comprehensive strategy for dealing with all electronic waste or ewaste (by May 2014 and implemented by December 2014). E-waste such as computer monitors, hard drives, printers, etc. have components that are hazardous when not disposed of properly so a strategy ensuring proper disposal is an important step to achieving a more sustainable campus.
- 5. Work with Carleton's main vendors such as Unisource and Grand and Toy to minimize the waste generated from regular deliveries (reusable shipping containers, combining shipments, etc.).
- 6. Purchasing and Facilities Management and Planning to explore the possibility of expanding the surplus goods process and establishing a permanent system for furniture reuse/recycling/disposal (June 2014).
- 7. Ensure that opportunities for minimizing waste and maximizing diversion are pursued for all construction and renovation jobs at Carleton. Comply with the ASHRAE standard 189.1 for construction and demolition waste.

TRANSPORTATION

In general, the transportation sector is a major contributor to greenhouse gas production. However, Carleton University has a relatively small fleet of vehicles of which the majority is already electric thus considerably reducing emissions. While not included in the first carbon audit done in 2009, as they were not within the scope that most institutions consider, emissions associated with travel to and from Carleton University are a significant source of greenhouse gases. While the Carleton fleet contributes little in the way of emissions, there exists an opportunity to improve the larger impact of emissions from commuters.

- 1. Parking Services to develop a long-term Demand Transportation Plan by June 2014 which will ensure that the way students, staff and faculty get to and from Carleton University is as sustainable as possible. A Demand Transportation Plan simply looks at all of the different ways the Carleton community gets to campus and how many people use each method respectively. The plan will encourage public transit, cycling, walking and carpooling with clear targets to be established for these more sustainable alternatives. Ensure that the parking strategy responds to the strategies documented within the current Campus Master Plan.
- 2. While not a major contributor to Carleton's carbon footprint, fleet vehicles are still a visible part of the university infrastructure, so a strategy should be developed by October 2013 for ensuring that fleet vehicles are as efficient as possible. Components of the strategy could include:
 - a. Purchasing hybrid vehicles when appropriate
 - b. Smaller, more fuel-efficient vehicles

- c. Fleet vehicles are shared as much as possible so that less vehicles are needed
- d. For departments with limited needs for vehicles, car-sharing services such as *Vrtucar* can be a more sustainable option. It operates similar to a rental agency with different fees based on time used and/or kilometres. There is currently a *Vrtucar* available on campus and available for registered users. Once a user is registered for a monthly fee, they simply book the car through an online site and use the car for whatever they need to do. This can be a much more economical choice when a department uses a car for mostly local trips.

ENVIRONMENTAL HEALTH AND SAFETY

Environmental Health and Safety has the responsibility of ensuring compliance with a number of regulatory and legal requirements for health and safety, as well as environmental issues. Moving beyond strict compliance to best practices will ensure Environmental Health and Safety is a major contributor to Carleton's sustainability efforts, and strive for reducing Carleton's environmental impacts beyond those required by provincial and federal regulations

Through the consistent implementation of a risk assessment methodology, laboratory activities can be evaluated for risk as well as operational efficiencies in consumables, waste generation as well as energy consumption. Currently, no centralized chemical inventory exists to avoid duplication of purchases with resultant waste generation. Such an initiative will be developed with support both centrally and from the faculties and services involved (Science, Engineering and Design and Social Sciences).

Actions:

- 1. By June 2014, implement a plan to reduce laboratory-related waste and energy use, and to promote the use of safer research materials.
- 2. Develop a Green Labs Certification program by December 2015. Get 25 per cent of labs certified by December 2016 and 100 per cent by June 2018. Complete energy consumption testing on representative laboratory equipment. Revise key Environmental Health and Safety training modules to incorporate sustainable lab practices, where feasible.
- 3. Develop a chemical inventory system by December 2013.

ENERGY AND GREENHOUSE GAS EMISSIONS

Carleton University currently emits approximately 36,560 metric tons of carbon dioxide equivalents (MTCO2e), reflective of Carleton's heating, cooling, electricity and use of fleet vehicles. It has now been recognized that greenhouse gas emissions are having a huge impact on the environment at a global level. Reducing Carleton's emissions and use of energy in general (adjusted to a per square metre or Full-Time Equivalent (FTE) student) is a key component of a sustainability strategy. Furthermore, it is also a component where reductions will lead to positive outcomes in all three areas of sustainability – environmental, economic and social.

The university continues to upgrade technologies and use automation where possible. The Canal Building, which opened in January 2011, employs many new building automation technologies which are being piloted for future application on the campus. The pilot results will be monitored to assess success and maximize gains. The university is home to faculty, researchers, and research centers that

are seeking to augment our understanding of climate change and the actions that will positively impact this global issue.

Actions:

1. Develop an Energy Master Plan by May 2014 which would have a major energy conservation component.

Possible points for inclusion:

- An energy conservation policy encouraging all students, staff and faculty to participate.
- Ongoing building energy audits using audit consultants and/or students to conduct the audits.
- Life Cycle analysis for all new projects to consider the long-term costs of major energy infrastructure (chillers, etc.).
- All new equipment purchased through the Purchasing Department should be Energy Star or better.
- An action-based, targeted education and awareness program to engage students, staff and faculty in energy conservation at Carleton.
- Encourage individual departments to have specific policies or guidelines that encourage energy conservation.
- Initiate and promote the installation of power bars to feed computing peripherals and that it is shut off at the end of each day. Move to using centralized printers to reduce the high cost of personal printers (electricity, lack of double-sided printing, more costly ink cartridges, less durable, etc.). Ensure that appropriate sleep settings are enabled on all networked computers (most likely need to work with departmental IT support staff). All networked computers at Carleton have software that automatically shuts them down (all lab computers do now). Ensure that energy efficiency is a key criterion for the purchase of all computers going forward.
- Consolidate server areas on campus. Continually consider the long-term benefits of new technologies and applications (i.e. Cloud Computing).
- Work with ancillaries to have them set up revolving loan funds for their own departments whereby savings from energy or water conservation projects are reinvested in more sustainability-related projects.
- 2. Develop a Climate Action Plan by June 2015 with clear, real targets for reduction. Climate change is arguably one of the largest global threats to the environment and humankind. While planning for energy conservation and establishing other general sustainability targets, a comprehensive carbon reduction plan should be created.
- 3. Computing is a growing use of electricity at Carleton University as it is in the rest of society. Develop specific strategy to reduce workstation electricity consumption by February 2014 with key components being implemented by September 2014. Once again, new buildings such as the Canal Building and the River Building can serve as excellent sites to pilot new technologies and practices.

WATER USE

Carleton University uses approximately 420,000 cubic metres of water a year at a cost of approximately \$1.1 million. The largest demands are for use in residences, athletics, power plant cooling systems, laboratories and food preparation and serving. Carleton University has invested

substantially over the years in metering potable water by building. As a result, the university is in the enviable position of being able to assess where water is consumed and target specific areas where additional conservation is possible. The Canal Building is sub-metered to provide even more specific information on how and where potable water is consumed. As with all resources, the production of potable water consumes other resources such as energy so a reduction in use has positive environmental and financial impacts.

To better understand where water is consumed on campus, the sustainability office conducted a water audit of Carleton University. The data collected will allow for specific targeting of high-use areas. The Sustainability Office has also worked with Housing and Conference Services to ensure that the renovation of the Russell Grenville residence in 2010 established a new level of water conservation at Carleton. There has been a drop in water consumption in Russell Grenville of 65 per cent which will save Carleton's Housing and Conference Services \$44,000 a year in utility costs alone.

Actions:

- 1. Carleton University will develop a Water Management Plan by October 2014. The plan will consider such aspects as:
 - Standards for plumbing fixtures for use at Carleton University. The standards need to be detailed and address the different typed of fixtures that may be needed in different settings at Carleton University (residence, public washroom being renovated in an existing building, washrooms in a new building).
 - Development of a Carleton University Water Conservation Policy.
 - A review of all laboratory equipment to ensure that water efficiency is considered.
 - An assessment of the sewage infrastructure that is needed to support decreased flow rates.
 - The provision and maintenance of public drinking fountains and water bottle filling stations.
 - Impact on the capacity of the sewage pumping station.
 - Exploring further opportunities for using grey water and/or rain water from roof areas.
 - Ensure that the implications of current and future sewer use bylaws and the associated cost are considered as part of the water management plan.

LAND MANAGEMENT

Carleton University is fortunate to be located in a very natural and green setting being bordered by the Rideau Canal and Rideau River. Students have long identified it as one of the most remarkable parts of the Carleton experience.

Carleton's land use and management of the 62 hectare campus impact the local ecosystem through the use of water, campus development and construction, landscaping applications such as fertilizers in summer or salt in winter, and storm water management. The university already has a policy for integrated pest management and has used no chemical pesticides on the grounds in at least five years.

Actions:

1. Review best practices and begin testing/pilot projects to adopt more sustainable land management practices that were identified through the best practices review. Establish pilot sites by May 2014 to test different products or practices.

DINING SERVICES

Dining Services is responsible for all food and drink provided at Carleton University with the exception of the three establishments run by the student unions and Treats in the CTTC. Dining Services has initiated various successful sustainability focused projects. For example, the largest dining hall at Carleton, the Fresh Food Company, switched to trayless dining in 2009. Among other benefits, this resulted in less wasted food, water and energy savings from no longer washing trays and economic and resource savings from no longer needing to provide and replace trays. The Fresh Food Company kitchen has collected organics for composting for many years. In 2009-'10, this resulted in the diversion of more than 165 metric tons of waste. In January 2011, organics collection also began in food service preparation areas in the University Centre.

There is no single solution for sustainable food. Products must be individually evaluated using a number of criteria. It can be complicated and challenging at a household level and is very challenging when considering the complexities of serving thousands of people at an institutional level. Currently, for example, cageless eggs are used by Dining Services in their Baker's location ensuring that chickens are less stressed in the production of the eggs. Fair trade coffee is available at all locations. When available, local produce is sourced and used in the kitchens. Vegetarian and vegan options have also expanded in the Fresh Food Company.

Sustainability Criteria could be summarized as:

- 1. Local: Food that is sourced within a 400-km range of Carleton University.
- 2. Eco-sensitive: Use food that is produced with a minimum of chemical input to reduce the damage to human and ecosystem health.
- 3. Humane: Be attentive to healthy, comfortable conditions for animals.
- 4. Fair: Work with suppliers that are sensitive to fair labor conditions for their employees.

- 1. Conduct an audit of all of the food and supplies purchased by Dining Services using the four criteria listed above by September 2013. Develop a plan with specific targets to ensure that a certain percentage of food and supplies purchased meet at least one of the four sustainability criteria by June 2014.
- 2. Develop and implement a comprehensive waste diversion strategy for Dining Services by December 2013. The strategy will be critical to achieving the overall waste diversion target for Carleton of 60 per cent by 2015. The strategy may include among other initiatives: recycling waste and composting organics from all dining operations and catered events; conducting waste audits to verify diversion rates and ensure contamination is minimized through ongoing education and engagement; extensively promoting reusable mugs at all outlets; conducting a review of all packaging materials used by Dining Services in an effort to reduce the use disposables when it makes sense to do so.
- 3. Development of green event options for catered events. Dining Services caters almost all events at Carleton University. A "green" option would be one way of introducing the next level of

sustainable dining to catered events. For example, reusable tableware and flatware would be used, all products and packaging at the event would be recyclable or compostable, vegan and vegetarian options would be provided, etc.). A critical component of this program would be ensuring that all Dining Services staff are aware of the more stringent "green" guidelines when catering a green event.

- 4. Conduct a water and energy audit of Dining Services operations by December 2013 to identify any areas where reduction can be realized and develop a plan based on the recommendations from the audit.
- 5. By December 2014, working with Purchasing, ensure that all major equipment purchased for Dining Services undergoes a life cycle analysis and be energy and water efficient.

PROCUREMENT

Carleton University currently has a preference for products and services that are shown to be better for the environment. There is a large potential for Carleton University to influence change by using the university's purchasing power to influence suppliers and service providers. For example in 2010, Carleton specified within an RFP for the provision of desk top computers that they needed to be EPEAT (Electronic Product Environmental Assessment Tool) certified – that is meet a strict set of environmental criteria for production and performance. Carleton's influence may also be multiplied by purchasing products and services as part of a purchasing pool (joining with other universities or institutions to bulk purchase items that meet environmental and economic criteria). Procurement also currently manages the surplus inventory program whereby departments that have surplus goods can sell the items through an online bid program. This is an excellent initiative that could be dramatically expanded.

- 1. Procurement and Facilities, Management and Planning to explore the possibility of expanding the surplus goods process and establish a permanent system for furniture reuse/recycling/disposal (June 2014).
- 2. Develop a Procurement Policy by September 2014 that ensures that all major purchases for products and services undergo a lifecycle analysis so that long-term costs are considered not just the short-term. It is impossible to say what that will look like for all products and services but some aspects to include will be: Life Cycle analysis so that the full cost of the product or service is understood and one is not just, for example, buying the cheapest product up front but paying huge energy bills for the next 10 years because it is an energy hog; third party environmental certifications such as Energy Star, Green-seal, Eco-choice or EPEAT which allow one to simply specify the required certification and know that you are not getting green washed.
- 3. Work with the five main product and service providers to reduce the environmental and economic costs associated with numerous deliveries. Establish standards for those relationships and implement by May 2014. For example, Grand and Toy make numerous deliveries a week to different departments around campus. One possibility would be to work with them to only have one delivery a week unless a department pays a small premium for a rush order. That would reduce their costs of delivery (and Carleton can ask for a credit or reduced service cost), reduce associated greenhouse gases and possibly waste if reusable containers were used. Another example would be for the main couriers to deliver packages and mail to only one or two locations and use the internal mail delivery system to distribute them.

CLEANING

Green cleaning products and ways of cleaning have made their way into households across Canada. At the institutional level there have also been significant strides in "green" cleaning techniques (microfiber cloths) and the "green" cleaning products. Currently, many green products are already being used by staff and contracted cleaners that clean the 44 buildings at Carleton.

Actions:

Develop clear green cleaning standards by December 2013 that specify green-certified products wherever possible and processes that result in less pollution. Critical to these standards will be an emphasis on education and training of the workers.

EDUCATING AND ENGAGING THE CARLETON UNIVERSITY COMMUNITY

Thirty one thousand people live, work, study and play at Carleton University. Success with this plan will only be achieved if a large portion of that community is engaged and participates in its implementation and shares in the successes. Policies and practices must evolve and change but, more importantly, individual behaviours must also evolve and change.

There is a large opportunity to harness the current level of awareness around sustainability and move students, staff and faculty toward real actions that will benefit Carleton University on many levels.

- 1. Launch a series of outreach programs to raise awareness about this strategic plan and to garner input and support (ongoing).
- 2. Establish a Green Team pilot program by November 2013 made up of individuals from departments/faculties across campus who would become eco-reps and work to influence change in their area or department. The structure would be similar to the successful Healthy Workplace Initiative.
- 3. Pilot a Green Workplace Certification Program by September 2013 so that departments and offices that met certain criteria would be recognized for their efforts. Roll it out to all departments and offices by June 2014.
- 4. Explore the possibility with student unions of establishing a student levy to support sustainability initiatives. Funds from the levy would be used to support student led initiatives that would have a measured impact on making the Carleton community more sustainable.
- 5. Integrate sustainability as a topic in new employee and student orientation by September 2013.