

FACILITIES



Facilities Management Annual Report

Volume 1, June 2016

Sustainability at the Mount

A Facility Improvement Program (FIP) encompasses three key initiatives; Sustainability, Energy Efficiency and Deferred Maintenance. These key initiatives are interrelated and when combined can dramatically impact our environment and the community at large.



Mount Saint Vincent University is developing an environmentally sustainable campus that is economically viable and reflects our core values of engagement and accountability, as outlined in our strategic plan. To achieve this goal, we will:

- ◇ Encourage, support and promote student, faculty and staff initiatives and create an institutional culture of sustainability.
- ◇ In cooperation with our sister institutions and government agencies, ensure ecological, economic and social considerations form the foundation of our planning and operations.
- ◇ Educate our community to become more environmentally responsible by promoting initiatives and involving all our stakeholders.
- ◇ Set an example of environmental stewardship in our community through the establishment of best practices and by instilling sustainable development values in our graduates and our employees.
- ◇ Develop an action plan and monitoring systems that track our progress and promote our successes.

Energy Consumption

The graph to the right is a comparison of our energy consumption on campus over the past five years.

This demonstrates the fact that our utilities are typically two-thirds fuel (natural gas & furnace oil) and one-third electricity in any given year.

ENERGY USAGE ALL BUILDINGS



Small steps. Big impact.
The Mount's path to a sustainable campus.



The Margaret Norrie McCain Centre

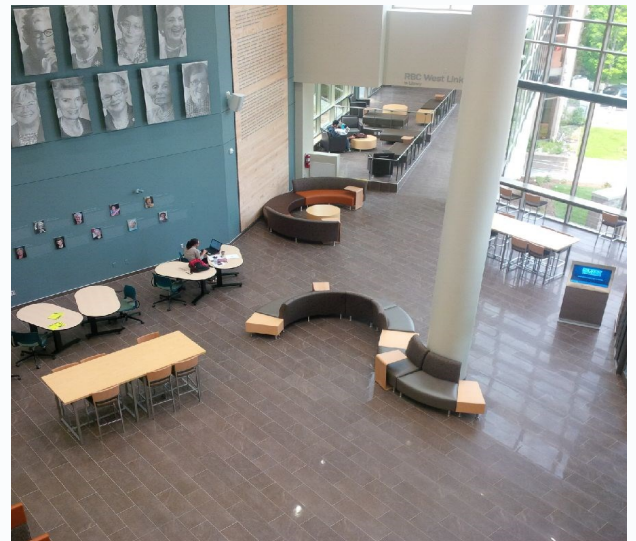
McCain Centre

When the McCain Centre was in the conceptual design phase, the university partnered with Efficiency Nova Scotia to ensure the energy, heating and cooling costs for the building were kept to a minimum.

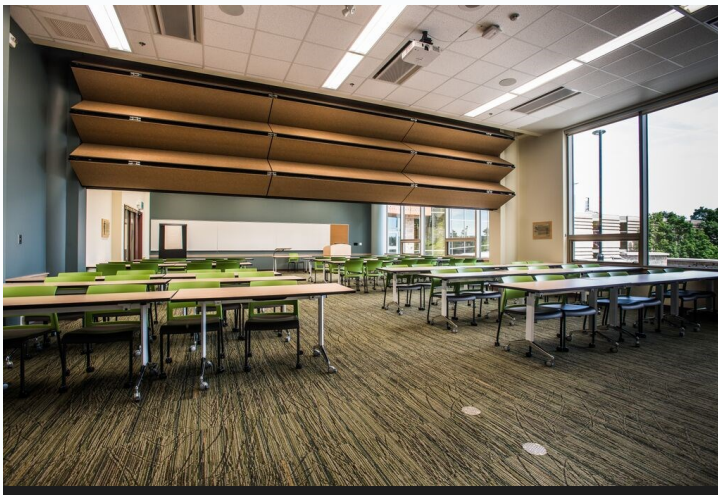
Building controls, monitoring systems and building materials were all selected with the environment and sustainability features in mind.

Lighting and Controls

The McCain Centre's building design incorporates natural lighting throughout, decreasing the amount of electricity needed to light the space. Climate controls are designed to ensure occupant comfort and to avoid simultaneous heating and cooling.



McCain Centre Atrium



McCain Centre Classroom

Classroom and Office Design

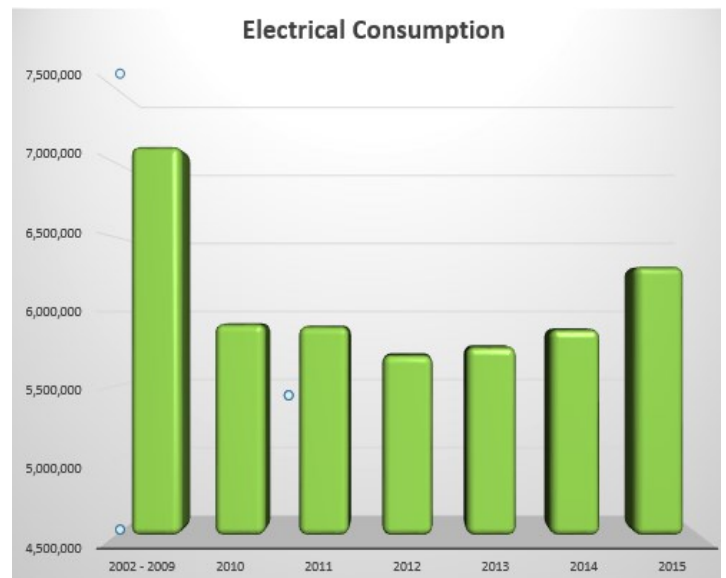
Folding walls, portable furniture and even flooring materials were chosen by combining the latest in technology with energy and labor saving initiatives in mind.

Energy Conservation

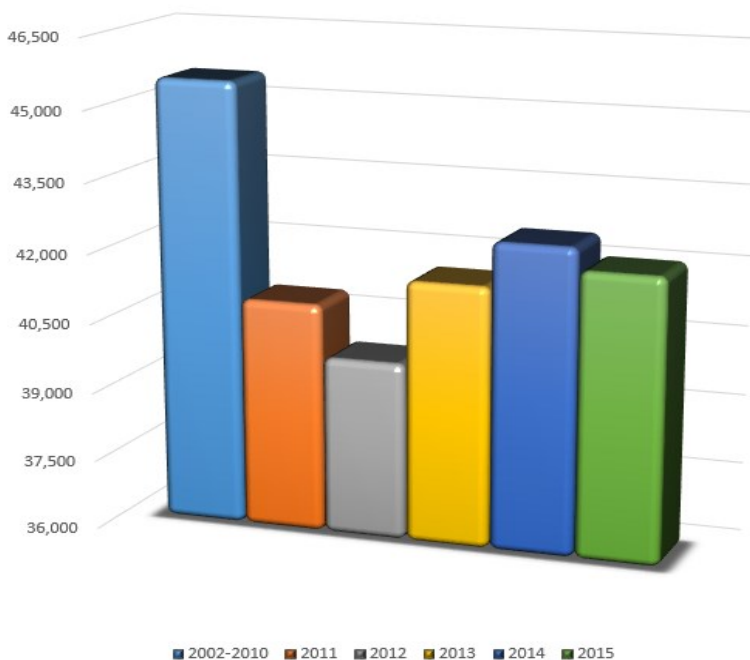
Electrical Consumption

The graph to the right is a comparison of our electrical consumption on campus over the past six years versus the pre Facilities Improvement Plan (FIP) period from 2002-09. Check out how our campus is doing!

The average home uses 12,000 KWH of power a year. Prior to 2010, our annual electrical consumption for the campus was the equivalent of 583 three-bedroom bungalows. Since 2010, we have lowered that number to 500 homes per year, effectively removing the equivalent of 83 houses from the power grid annually.



Fuel Consumption



Fuel Consumption

The graph to the left is a comparison of our fuel consumption on campus over the past six years versus the pre Facilities Improvement Plan (FIP) period from 2002-09.

The average home consumes 65 gigajoules (gj's) a year in energy for heating purposes. Prior to 2010 our annual heating consumption for the campus was the equivalent of 708 three-bedroom bungalows. Since 2010 we have reduced that number to 638 homes per year. This has reduced the demand for fossil fuels by the equivalent of 77 homes annually.



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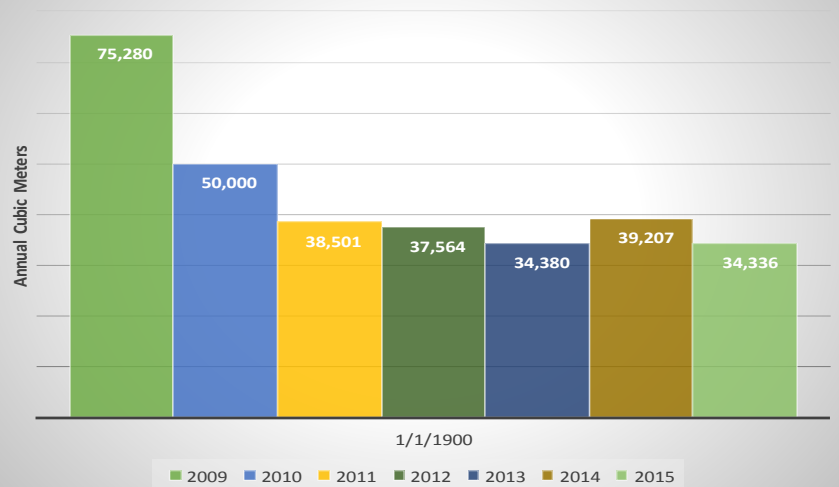
Water Consumption

The Mount continues to be more efficient in how we use our resources. Through the implementation of several initiatives, the Mount has reduced overall water consumption by 37,500 cubic meters annually. A cubic meter of water will fill 4.4 bathtubs. Based on this assumption the Mount will save 168,000 bath tub fills, or 275,000 ten minute showers, each year.

Since 2010 we have reduced the demand for water by an average of 155 houses annually.



Water Consumption



Annual Water Usage

Campus Climate Challenge

Mount Saint Vincent participates annually in a Campus Climate Challenge (formerly the Residence Energy Challenge), competing against several other universities and community colleges in Atlantic Canada.

The challenge runs for two weeks each winter, with goals of raising awareness on the impact of energy consumption and to promote conservation efforts to reduce our carbon footprint.

This year the Mount's Birches residences cracked the top 5 in energy conservation among participating campuses. They saved over 2700 kwh in the two week period.



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JANUARY 23 – FEBRUARY 6, 2015

RESIDENCE ENERGY CHALLENGE

Attention all residence students!

Mount Saint Vincent will be participating in a Residence Energy Challenge along with several other universities in Atlantic Canada. The challenge will run for two weeks, with the goal being to raise awareness of the impact of energy consumption and to promote conservation.

While we want you to conserve, we want you to do so safely and responsibly.

In addition to competing against other institutions, we are also competing internally, between Assisi, the Birches (as a group) and Westwood.

If you have any questions, feel free to contact Rick Walkden, Manager of Environmental Services & Sustainability, at rick.walkden@msvu.ca

Turn your thermostat down to 18°C

Turn off lights and unplug any unnecessary appliances

Take shorter showers

Don't overload the washer and dryer

Take the stairs

So have some fun, put on a sweater, and conserve. Oh, and there are prizes - both for the winning University and for the winning residence on our campus. Also, we'll be giving a prize to the most innovative way to save energy.



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Earth Day 2015

Sustainability Initiatives

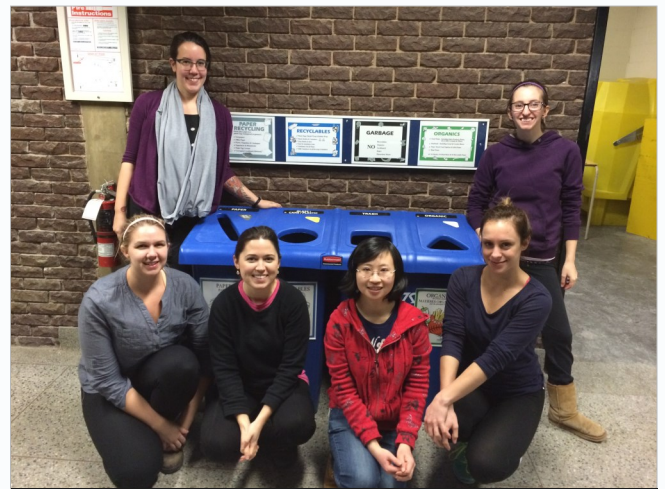
Promoting sustainability within the Mount not only encourages behavioral changes, but also supports the educational experience and raises the awareness level of our commitment to social responsibility. Check out a few examples of what we as a community are doing to promote sustainability.

Earth Day

Over fifty faculty, staff and students volunteered for Earth Day. Together, leaves were raked and composted, branches were picked up, and the Mount's Freda Wales walking trail reclamation project was begun.

Recycle Rangers

The Recycle Rangers are a group of our students dedicated to helping educate and promote the benefits of recycling around campus. Initial waste audits show we have some work to do, but we're getting better!



Recycle Rangers



Residence Earth Day

Fall Campus Clean-up

Each fall we hold a residence version of Earth Day to allow our students to participate in an event that is normally held in late April or early May each year. This past year we combined Earth Day with this event due to the two feet of snow still on the ground in late April.

Facilities Improvement Plan

The Facilities Improvement Plan (FIP) was a \$3.5 Million project that began in 2009, the single largest project of its type in the Mount's history. The plan was designed to pay for itself over a period of nine years, but actually took less than six. The Mount received significant recognition for this initiative, including winning the Efficiency Nova Scotia Shining Star Award.



Efficiency NS Shining Star Award



Furniture Removal & Recycling

This past fall we partnered with a service provider to recycle several tonnes of scrap metal and surplus furniture. Instead of ending up at the local landfill, we were able to recycle or repurpose almost 90% of this material—we saved a significant amount of labour and landfill charges and we even received a cheque from the company for the recycled metal—win, win!

Green Cleaning

From portion controlled dispensing systems, to recycled paper products, use of Eco Logo/Green Seal certified cleaning products and microfiber cleaning cloths—all contribute positively to the environment. A secondary impact is the installation of low maintenance flooring, significantly reducing the amount of annual restoration project work.



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Waste Diversion

Paper and Cardboard Recycling



Over the past nine years, the Mount has averaged 27 tonnes of paper and cardboard being recycled and diverted from the landfill annually. These totals don't include confidential paper shredding services.

Where Does it Go?

To the left is a photo of one of our outside sorting stations you can find around campus. These bins are provided to us free of charge with the supplier then selling the advertising spaces on the front panels.

When the McCain Centre opened we began a pilot project to not place garbage cans in individual offices and classrooms. The intent is to encourage people to recycle more than just paper. There are (8) 4-stream recycling stations in the building.

Be a Recycle Ranger! If you see someone who doesn't put something in the right place, take a moment to show them where it goes—we can all be a part of the Mount's waste diversion initiative.



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Working Together

Atlantic Canada Universities and Colleges Sustainability Network

The group was created in 2008 to facilitate information sharing and cooperative initiatives among post-secondary institutions in the region. Membership is open to universities and colleges located in Atlantic Canada. Institutions are represented primarily by staff responsible for sustainability initiatives on campus. Interuniversity Services Inc. (ISI) serves as the administrative partner for the organization. The Mount has been a member of this group since its inception.

Vehicle Fleet Reduction

This past year we removed one half ton truck from service and replaced it with a more fuel efficient multi-purpose Kubota (see below). We have also eliminated one security vehicle from service and down-sized our mail van to a more fuel efficient option. We have hills, but we also have options.



Atlantic Universities & Colleges



Contact Us

Bruce MacNeil
Director, Facilities Management
(902) 457-6482

bruce.macneil@msvu.ca

Rick Walkden
Manager, Environmental Services and Sustainability
(902) 457-6166

rick.walkden@msvu.ca

Kimberley Darr
Administrative Assistant, Facilities Management
(902) 457-6502

kimberley.darr@msvu.ca



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