Zero Waste Sheridan Overview for PPG Circular Economy Leaders Consortium

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Land Acknowledgement

We would like to acknowledge that the land on which we gather has been and still is the traditional territory of several Indigenous nations, including the Anishinaabe, the Haudenosaunee Confederacy, the Wendat, the Métis, and the Mississaugas of the Credit First Nation. Since time immemorial, numerous Indigenous nations and Indigenous peoples have lived and passed through this territory.

We recognize this territory is covered by the Dish with One Spoon treaty and the Two Row Wampum treaty which emphasizes the importance of joint stewardship, peace, and respectful relationships.

Sheridan affirms it is our collective responsibility to honour and respect those who have gone before us, those who are here, and those who have yet to come. We are grateful for the opportunity to be working and living on this land.

Introduction to Mission Zero



- Mission Zero is Sheridan's framework for institution-wide sustainability initiatives. It is an ambitious mandate to reenvision the College's energy future, make significant reductions in its institutional footprint, and meet breakthrough performance targets.
- Mission Zero is guided by the institution's Office for Sustainability and represents operational and cultural goals, driven by Sheridan's Sustainability Policy. Mission Zero embodies the journey toward transformational systemic change and accelerates the creation of campus-wide sustainability culture.

What is Zero Waste Sheridan About?

Sheridan's Integrated Energy and Climate Master Plan (IECMP) published in 2013 introduced the aspirational goal to become a "Zero Waste" campus (i.e., >90% diversion from landfill) and Zero Waste Sheridan was established with the following focus areas:

- Reducing waste to landfill
- Increasing reuse in the college and community
- Increasing waste diversion rate (and reducing contamination)
- Separating and processing organic waste on-site
- Reducing paper usage
- Reducing carbon emissions



Highlighted Zero Waste Sheridan Efforts

Early wins (2013-pandemic):

- Rolled out centralized three-stream zero waste bins across campus
- Removed paper towels from majority of washrooms
- Introduced Green Printing (scan to release)
- Launched Sheridan Repair Café initiative (2014)
- Established several special waste recycling programs (e.g., cardboard, metal, paper shredding, e-waste, batteries, used writing instruments, wood/wood dust, etc.)

Recent accomplishments (post-pandemic):

- Launched Mission Zero Freeuse Pop Up Shop initiative (2022)
- Re-initiated Sheridan Repair Café (after 2-year pandemic pause) (2022)
- Re-initiated annual waste audits (after 2-year pandemic pause) (2022)
- Collaborated with PPG Materials Exchange program on multiple diversion efforts including retail display fixtures from bookstore remodel (2022), waste bins sets (2023)
- Created FT permanent Project Officer, Zero Waste Initiatives role (2023)
- PaperLess project printer decommissioning project initiated (2024)

Upcoming/Ongoing Zero Waste Priorities:

- Setting updated targets/metrics related to zero waste goals
- Continued expansion of reuse initiatives
 - ✓ Mission Zero Freeuse Pop Up Shops
 - ✓ Sheridan Repair Café
- Piloting reusable food service containers with Friendlier, and exploring solutions for diverting coffee cups
- Piloting WAVsmart bin sensors with Teuls SmartWaste program
- Continue learnings and collaboration via professional networks (e.g., PPG, AASHE, OCUSP)
- Long term priority exploring feasibility for on-site waste separation and processing (e.g., organics and secondary sorting of mixed recycling), coupled with larger waste "warehouse" for staging of unwanted assets/donations, living laboratory opportunities

Mission Zero Freeuse Pop Up Shop

- Launched in Fall 2022
- To date, we've collected **over 5,000 kg of donations**, hosted **80 pop up shopping events**, and engaged with over 13,500 members of the Sheridan community as shoppers, donors, or visitors.
- Exploring potential to identify permanent "storefront" locations for Freeuse Shop at each campus, since the pilot over the last 2 years has proven the concept and value-add to the Sheridan community
- Learn more: https://missionzero.sheridancollege.ca/get-involved/reuse-at-sheridan/







FREEUSE POP-UP SHOP

CHOOSE TO REUSE, SHOP FOR FREE
AT OUR FREEUSE POP-UP EVENTS!

We aim to extend the life of goods while promoting a culture of reuse, sharing, and waste reduction on-campus and beyond.





Sheridan Repair Café

- Sheridan launched its own Repair Café's in 2014
- Partnering with Brampton Library on collaborative events
- Next Repair Café event scheduled for October 19th at the Brampton Library – Four Corners Branch!

Our guiding principles include:

- Promote a culture of repair and reduce needless waste sent to landfills
- Offer a free meeting space where community members can come together and repair goods
- Provide an opportunity for visitors to learn from experts on how to do their own repairs
- Collaborate with community organizations and members of the community interested in furthering sustainability and fueling the initiative
- Learn more: https://missionzero.sheridancollege.ca/get-involved/repair-cafe/



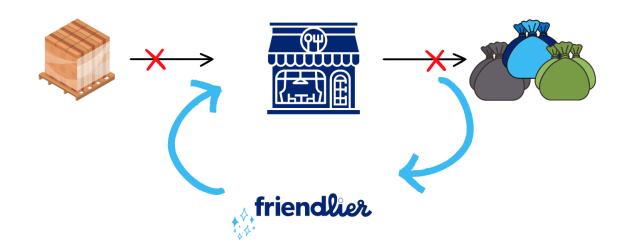
In 2023, over 180kg of items were successfully repaired!



Friendlier Reusable Food Service Containers

- Launching October 7th!
- 50 cent deposit paid at POS
- Consumer enjoys their food
- Scan unique QR code
- Return container to Friendlier bin
- Collected multiple times/week
- Washed at central Guelph facility, container QR code scanned "in"
- Account credited with deposit return

Friendlier supply chain













Telus SmartWaste Program - WAVsmart sensors

- Laser & Ultrasound sensors (adjustable)
- Installed June 2024
- Expanding to indoor bins
- Approximately \$250 per sensor (33 for pilot)
- Readings at 3 hr intervals
- Operating temp: -20 °C to +60 °C
- Will add sensors to 7 strategic indoor bins





10 sensors installed in MOLOK bins at 2 campuses



Tour Overview

Green Building Tour

Scan here for a Self-Guided Green Building Tour of Sheridan's Hazel McCallion Campus B-Wing!





GREEN BUILDING TOUR: HMC B-WING

Did you know all buildings at Sheridan's Hazel McCallion Campus are Leadership in Energy and Environmental Design (LEED) certified?

Use this Self-Guided Tour Map to explore 30+ informational signs across HMC B-Wing, highlighting sustainable features of the building's design, construction, and operation as part of Sheridan's Living Laboratory initiative!

Sheridan





LEVEL 1

1. Water Room

The water room contains the building's incoming domestic and fire water service piping and associated equipment.

2. Low Emitting Materials: Paints

On average, Canadians spend 90% of their time indoors, where pollutants are typically 2-5 times higher than they are outside. To ensure a healthy and pollutant-free environment, all paints applied to the interior of the building had a low VOC (volatile organic compound) content.

3. Acoustics & Noise Reduction

Sound-absorbing materials have been placed on the ceiling and wall surfaces of the Creativity Commons to trap acoustical energy. These assemblies reduce ambient noise levels, and help eliminate echoes and sound reflections that muddle or distort amplified music and speech.

4. Manifold Station 1

The floor of the Creativity Commons contains embedded loops of cross-linked polyethylene pipe connected back to manifolds such as this one. Intelligent building controls automatically circulate hot or chilled water through these pipes to provide highly-efficient, radiant heating or cooling of the space.

GREEN BUILDING TOUR: HMC B-WING



5. Rainwater Harvesting

Rainwater from all roof drains is collected in a 35,000-litre storage cistern buried under the service area driveway. This harvesting system captures over 90% of the average annual rainfall on the building. Collected rainwater is used for flushing tollest and urinals via the building's ore water system.

M1. Feature Stair

The feature stair is one of the main sculptural pieces of the building, winding its way through the atrium providing an intuitive way finding point and meeting space, as a sculptural piece, the HSS structure is concealed within in order to maintain the monolithic load.



A Self-Guided Green Building Tour of Sheridan's Hazel McCallion Campus B-Wing

*Located in the exterior.

Material ConneXion Library



Don't go looking for books in this library!

Can bio-leather become a lampshade?

Can skateboards turn into wall tiles?

Let your mind wander at this unique library. Discover hundreds of samples of fabric, wood, metals, and plastics. Touch samples, research how sustainable they are, and think about new uses for them.

Learn more at:

https://www.sheridancollege.ca/about/campuslocations/hmc/material-connexion-library