UNIVERSITY STUDENTS' COUNCIL POSITION PAPER ON

SUSTAINABILITY POSITION PAPERS

Legislative History

This Position Paper was commissioned by the USC to update previous papers:

Environmental Sustainability Policy Paper, Approved by Council November 2021

Approved by Council (date)

To be reviewed by Council in its 2027-2028 sitting

TABLE OF CONTENTS

LAND ACKNOWLEDGEMENT

As an organization created to empower and support our students throughout their educational experience, it is particularly important to acknowledge and recognize the power of education as a tool for healing and reconciliation. The USC always seeks to empower students on our campus to voice their perspectives on the issues that matter most to them, but we must recognize that there is still immense work to be done, at the USC and across Western's campus. We must remain active in our process of learning and unlearning to ensure that we take responsibility for educating ourselves on the history of the lands that we are situated upon and their impacts on those that lived upon them first.

With this, we wish to acknowledge that Western University and our Affiliate Colleges are located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum.

INTRODUCTION

We are faced with a constant barrage of news feeds showing us scenes of environmental devastation as a result of climate change and human greed: deforestation, resource mining, corporate farming, pollution of the oceans by chemical spills and plastic contamination, species extinction, massive fires, severe weather events. It's not surprising that many of us experience some form of Eco Anxiety. While not yet recognized as a mental health disorder, fear about the environment impacts youth to a greater extent than adults, and can cause severe feelings of distress and anxiety, even leading to forms of dysfunction.[1] In a study of Canadian youth aged 16- 25 years of age, 78 percent reported that issues surrounding the climate affected their mental health, 37 percent said that negative feelings about climate change impacted their day to day functioning, and 73 percent perceived the future to be frightening.[2] In some cases, Eco Anxiety can result in doomsday type thinking, causing people to simply give up trying to act sustainably because total destruction is inevitable. However, experts suggest reframing the feelings of helplessness and using them as motivation to take action on things you can change[3] such as recycling your waste, choosing products with less packaging, using active or public transportation, or participating in community environmental events.

To that end, the University Students' Council would like to encourage students and the greater community to harness the collective power of action and advocacy to make a direct impact on the environment. We ask Western University to commit to an expanded recycling program on campus, ensuring that organic waste is repurposed and tonnes of lab materials, plastics, and other difficult to recycle items are diverted from landfill. We recognize that the promotion and use of generative AI in educational platforms comes at an environmental cost and wish to establish mandates requiring mitigation strategies to offset those effects. We want the City of London to establish an effective active-transportation infrastructure so that we can move ourselves from place to place in a way that reduces the carbon imprint associated with personal vehicle use.

Every choice we make and every action we take, regardless of how small it may seem, carries with it the seeds of change. In this way, students and the wider campus community can have a positive impact on our environment.

1 "Understanding and Coping with Eco-Anxiety," Mental Health Commission of Canada, April 21, 2023, https://mentalhealthcommission.ca/resource/understanding-and-coping-with-eco-anxiety/.

2 Lindsay Galway, Ellen Filed, "Climate emotions and anxiety among young people in Canada: A national survey and call to action," The Journal of Climate Change and Health, Volume 9 (2023). https://www.yorku.ca/unsdgs/toolkit/wp-content/uploads/sites/617/2023/05/1-s2.0-S2667278223000032-main.pdf

3 "Understanding and Coping" Mental Health Commission

RECOMMENDATIONS

1. WESTERN UNIVERSITY SHOULD DEMONSTRATE LEADERSHIP GOALS IN WASTE REDUCTION THROUGH THE CONTINUAL EXPANSION OF ITS WASTE DIVERSION AND RECYCLING PROGRAMS.

The USC recognizes that Western University has taken environmental concerns seriously and has not only received numerous awards recognizing their actions,[4] but is also consistently ranked as one of the top universities in the world for its sustainability efforts.[5] However, we know that there is always more that can be done to make an even greater impact both locally and internationally.

Western University is seeking feedback from campus stakeholders in the creation of a new sustainability strategic plan, and the USC would like to ensure that an expanded recycling program is included. Currently, Western University only diverts about 50% of its waste from landfill,[6] and cross-contamination (the incorrect disposal of recyclable materials) prevents them from being able to recycle more. We recognize that individuals are responsible for choosing to reduce, reuse and recycle items properly, but also understand that students arrive on campus from municipalities and regions with diverse recycling programs. Part of the welcoming program for new students to residences should include an introduction to recycling practices in London and on campus with instruction on where recycling facilities and supplies can be found. We encourage Western University to promote the benefits of recycling, and provide clear instructions on how to sort recyclables properly ensuring that students receive consistent messaging about the recycling streams that are available throughout London.

Students would like Western University to fully commit to zero waste programming on campus and have identified a number of areas where they see inefficiencies in how waste matter is being treated.

4 For a listing of awards see the Western Sustainability website: https://sustainability.uwo.ca/about_us/awards_recognition.html

5 For a brief summary of STARS and The Times Higher Education Impact Rankings, memberships in sustainability networks, and Sustainability Commitments see: (a) https://news.westernu.ca/2025/03/western-gold-stars-sustainability/ (b) https://sustainability.uwo.ca/about_us/How%20Does%20Western%20Measure%20Up.html (c) https://sustainability.uwo.ca/about_us/sustainability_memberships.html (d) https://sustainability.uwo.ca/paces/sustainability_commitments1/index.html

6 According to Western's Waste Diversion Rates from 2022. See Western Sustainability Waste Reduction and Diversion web page:https://sustainability.uwo.ca/Campus/waste_reduction/index.html

a. Decrease Cross Contamination of Recycling Materials and Increase Organics Recycling

"In Canada, diverting one tonne of food waste through composting or anaerobic digestion reduces GHG emissions by approximately one tonne of CO2 equivalent compared to landfilling."

The provincial Environmental Protections Act 102/94 includes waste diversion goals for the university sector. Part of this mandate includes annual waste audits and reporting. Data collected in 2021 indicates that Western recycled 3.8 million pounds of waste annually including blue bin, organics and specialty items.[7]

While this may seem impressive, cross contamination due to improper sorting renders large quantities of waste matter ineligible for recycling.[8] More recent reporting numbers for Western University are not publicly available; however, we can access data from the University of Toronto's Waste Audit Assessment for 2023 and assume similar trends.[9] Significant portions (over 40 percent) of the garbage generated on their campus was made up of items that could have been recycled. Of the mis-directed waste, approximately 23% was compostable paper (paper towel, toilet paper, napkins, organic take-out containers), 17% was organic (food waste), and 12% was paper/cardboard. The report concluded that better education about recycling programs, improved signage, and the removal of stand-alone garbage cans could improve the contamination rates.

To encourage proper sorting, we suggest that Western University improve signage at recycling/waste depots. We also recommend the implementation of recycling search engines as used at other campuses; or following the example of the University of Guelph, to introduce a program such as Oscar Sort, a low-energy AI system that can identify an item via computer vision and then direct the user to which recycling stream it belongs.[10] The mis-direction and/or contamination of paper towel waste appears to be uniformly high across all post secondary institutions and Western should work to improve this through better signage in bathrooms directing students to use the green bins for paper towels only.

Almost 40 percent of garbage that ends up in landfills is actually biodegradable organic matter,[11] with each of us generating approximately 150-200 kilograms of food waste

7 Watson, Brandon. 2021. "Waste reduction at Western: 5 fast facts." Western News, November 12, 2021. https://news.westernu.ca/2021/11/waste-reduction-at-western-5-fast-facts/

8 As an example, results from the 2024 Waste Audit conducted at the University of Toronto estimates that annually over 40 000 kg of recyclable waste had to be sent to landfill due to improper sorting and contamination. University of Toronto 2024 Waste Audit Report prepared by Waste Solutions (London, ON, 2024).

9 University of Toronto 2023 Solid Non-Hazardous Waste Audit prepared by SDK Environmental Consulting & Services (Newmarket, ON, 2023).

10 University of Guelph, "Meet Oscar Sort: AI Recycling Assistant Coming to U of G," news release February 27, 2025, https://news.uoguelph.ca/2025/02/meet-oscar-sort-ai-recycling-assistant-coming-to-u-of-g/.

11 Technical Document on Municipal Solid Waste Organics Processing, prepared by Government of Canada (Ottawa, ON, 2013).

annually.[12] Diversion of organics through a recycling or reclamation program not only reduces the amount of garbage being shipped to landfills, but provides a sustainable second-life for these materials through processes such as composting which can provide nutrient dense material to enrich soil for growing food crops, or through conversion into a source of renewable energy.

The USC would like to see Western University expand on its current organic waste diversion program by placing additional disposal bins in student facing areas throughout campus (including in residence buildings), not just in designated dining areas. There should be bins for organic matter stationed at all recycling/garbage stations, particularly in lounge areas and study spaces where students habitually eat.

To further reduce the environmental impact of transporting organic waste across the city to the Convertus plant in South London, the USC proposes that Western University develop an on-site composting initiative with the resulting nutrient rich matter used in the campus greenhouses, food garden initiatives, or for general landscaping purposes.

b. Lab Waste

Students have identified lab-generated waste at Western University as a concern in the light of the global climate crisis. Students at McGill piloted a small-scale study of sixteen labs on their campus to measure waste, and found that a weekly average of 118 pounds of plastic and 305 pounds of glass could have been recycled.[13] They estimated that if all labs at McGill recycled their non-hazardous waste, 130 tonnes of plastic and 360 tonnes of glass could be diverted from landfill annually.[14]

The University of Toronto introduced a recycling program for non-hazardous laboratory glass and plastics including: petri dishes, test tubes, pipettes & racks, boxes, trays, bottles, and jars,[15] and expects to divert 10 tonnes of lab waste from landfills each year.[16] According to their 2023 waste audit, over 8 tonnes of lab glass was diverted from landfill along with 85 tonnes of animal bedding and 808 tonnes of organics.[17]

With the Western University campus being home to a hospital as well as health and medical programs, the amount of lab waste created is significant. By implementing a diversion program aimed at reusing or recycling materials like pipettes, slides and other non-hazardous materials such as gloves, Western could see an impactful reduction in

12 Ibid.

13 Ali Akbari, Sai Chandrasekar and Siavash Isazadeh, Laboratory sustainability initiative:recycling glass and plastic wastes from research and teaching laboratories, McGill University 2015.https://www.mcgill.ca/ehs/files/ehs/akbari_et_al_lab_sustainability_initiative_spf0131.pdf

14 Ibid.

15 University of Toronto webpage on what types of lab equipment can be recycled and what faculties are involved: https://www.fs.utoronto.ca/services/waste-management-and-recycling/non-hazardous-laboratory-glass-plastics/#:~:text=Our%20waste%20management%20and%20recycling,that%20have%20been%20triple%20rinsed

16 Program introduction notes from 2015 : https://chem-eng.utoronto.ca/wp-content/uploads/2015/08/Non-hazardous-Laboratory-Glass-and-Plastics-Recycling-Program.pdf

17 University of Toronto 2023 Solid Non-Hazardous Waste Audit prepared by SDK Environmental Consulting & Services (Newmarket, ON 2023).

waste that is destined for landfill and demonstrate a commitment to countering the environmental concerns of its students.

c. Hard to Recycle Items

Several universities have partnered with Terracycle to collect hard to recycle materials like pens and stationery supplies, face masks, disposable gloves, food packaging and coffee pods. In 2024, Western student Katarina Kukolj utilized funding from the Western Sustainable Impact Fund to install nine snack wrapper waste boxes across campus.[18] While the boxes were reported to be well used, the one located on the second floor of the UCC building is no longer there, and it is unknown if this program continues to operate elsewhere on campus. Western should review the types of waste found in their annual audits and provide appropriate Terracycle boxes throughout campus. The existence of these boxes should be promoted through signage and wayfinding maps.

When institutions adopt initiatives led by students, it allows the entire campus community to realize that they have the power to make a positive change. Engineering students at the University of Alberta collect hard-to-recycle plastics and are producing new items like furniture, tiles and climbing equipment at an in-house facility.[19] University of Calgary students implemented a Styrofoam recycling program[20] with over 2000 pounds of packaging diverted from landfill by the veterinary medicine labs alone, since 2022.[21] Western University should actively explore and incorporate student initiatives in sustainability programming to encourage good stewardship of the land and its resources, while encouraging students to take impactful actions.

d. Furnishings and Appliances

The end of May can be a contentious time between Western University and the City of London due to the sheer volume of discarded furniture, small appliances and overall waste generated as students move out of their rental properties for the summer months. While Western suggests that students in residence consider donating items to charities like GoodWill, the London Food Bank and E-Waste, coordinating pickup services during final exams can be challenging, and not all students have access to a vehicle to drop off items at their convenience. For those living off campus, it can be equally challenging to juggle a lease termination with last day exams,without having to plan ahead to make arrangements for the appropriate disposal of household items.

Western University coordinates with the City of London to dispose of excess items that students leave behind at the end of term, but should consider a more sustainable

18 Stacey, Megan. 2024. “Ziploc, chip bag, protein bar wrapper? There’s a recycling box for that.” Western News, April, 30, 2024. https://news.westernu.ca/2024/04/snack-wrapper-recycling/

19 Mcmaster, Geoff, 2024. “Engineering students take plastic recycling to the next level,” University of Alberta, March 4, 2024. https://www.ualberta.ca/en/folio/2024/03/engineering-students-take-plastic-recycling-to-next-level.html

20 “Zero-Styrofoam Waste Initiative,”Graduate Students’ Association University of Calgary, March 22 2022, https://gsa.ucalgary.ca/zero-styrofoam-waste-initiative/

alternative to sending everything to landfill. The USC encourages Western to establish a year-end clean-out/clean-up campaign with a centralized drop off location on campus and in residence buildings for students to donate items that are in good condition. Western should consider providing a low cost service to pick up larger household items from student housing at the end of the school year.

A second-hand store front should be operated on campus during August and September where reclaimed items could be purchased for a nominal fee by incoming students, with revenues offsetting the cost of the program. This would not only reduce the amount of viable items going to landfill, but would help reduce extraneous costs for incoming students. It would also go a long way to build better relationships with community neighbours and the City of London who are often left dealing with move-out debris.

2. WESTERN UNIVERSITY MUST TAKE MEASURES TO REDUCE ITS CARBON FOOTPRINT AND MINIMIZE THE ENVIRONMENTAL IMPACTS CAUSED BY THE USE OF GENERATIVE AI.

Western University has positioned itself as a leader in generative AI use with the hiring of Mark Daley as the first Chief AI Officer at a North American university, but at what environmental cost? The entire process of generating AI; the manufacturing of the computer systems, the data mining process used to train AI, and each inquiry robs the environment of critical minerals, rare elements, and uses quantities of water and electricity (often generated by the burning of fossil fuels). Collecting data on environmental effects can be challenging due to industry secretiveness, and the wide range of elements involved in the process, but it is estimated that the generation and use of AI accounts for 2 to 4 percent of the greenhouse gases being released through technology related applications.[22] Forecasts suggest that by 2026, Ireland's data centres will use 35% of its country's energy and, internationally, data centres, cryptocurrency and generative AI could account for 4% of the global energy used annually.[23]

Western University must consider the environmental impacts associated with AI use, and ensure that they are taking measures to counteract this. While we do not expect Western to take on the entire industry and demand that more sustainable practices be used, they can work on the micro level to reduce the carbon footprint elsewhere on campus. We encourage Western to track its AI usage and move up the timeline for achieving the goal of net-zero campus emissions by 2050. As part of this strategy,

21 "UCalgary Students Launched Styrofoam Recycling Program to Create Positive Impact on Campus," GreenMax Intco Recycling, accessed February 10, 2025. https://www.intcorecycling.com/ucalgary-students-launched-styrofoam-recycling-program-to-create-positive-impact-on-campus.html

22 Spada, Alice. "ChatGPT is cool, but not that sustainable," ZeroCo2, March 7, 2023. https://zeroco2.eco/en/magazine/curiosities/chatgpt-sutainability/#:~:text=%E2%80%9CAs%20an%20AI%20language%20model,non%2Drenewable%20energy%20sources.%E2%80%9D

23 Bree Shirvell, "Can We Mitigate AI's Environmental Impact," Yale School of the Environment, October 10, 2024, https://environment.yale.edu/news/article/can-we-mitigate-ais-environmental-impacts.

Western University should fast-track the current Responsible Investing Strategy by actively decreasing investments in fossil fuel industries and increasing their contributions to Impact Funds in excess of the 10% cap that was previously determined.

Western should also heavily support internal and external research initiatives aimed at reducing the environmental impacts of AI generation, as well as overall sustainability in order to offset the damage associated with the promotion and use of generative AI.

3. TO REDUCE RELIANCE ON PERSONAL VEHICLES, THE CITY OF LONDON MUST MAKE PUBLIC AND ACTIVE TRANSPORTATION METHODS AN APPEALING AND FEASIBLE ALTERNATIVE ESPECIALLY FOR SHORT DURATION TRIPS THROUGHOUT THE CITY.

The Rural Ontario Institute estimates that 86 percent of London residents use personal vehicles to commute to work and school, with 34 percent of the trips taking less than fifteen minutes, and 43 percent between fifteen and twenty nine minutes.[24] In 2024, City Council committed to increasing active transportation (i.e. walking, cycling, skateboarding) for trips within the city to 32.5 percent and reducing single vehicle trips to 52.5 percent by 2050.[25] In order to reach these targets, the city must make improvements to the existing active transit infrastructure to provide seamless and well connected routes, and improve ease-of-use.

The City of London also launched the Smart Commute program in 2024, inviting employers to join and encourage their employees to participate in active commuting.[26] Benefits of the program include access to a route mapping app, carpool matching, bike rack program and incentives for participants. We encourage Western University to join and promote the program to staff and students, highlighting alternative forms of transportation that can be used to commute to campus and to other activities throughout the city.

Although bike-share programs in London have not been successful in the past, there is renewed interest at the community level. City staff have been directed to prepare a business case for micro-mobility services to be included in the 2024-2027 multi-year budget, and the Mobility Master Plan 2050 aims to address improvements to cycling culture. The USC fully supports all efforts to bring affordable and easily accessible bicycle share programs to the city.

While the USC has addressed specific public transit related concerns in the Pedestrian and Transit Position Paper 2024, a few items bear repetition. To encourage greater use of public transit, improvements must be made to current service levels and routes to eliminate regularly occurring delays and missed connections. Routes that connect

24 “Commuting,” Rural Ontario Institute, accessed February 13, 2024, https://www.ruralontarioinstitute.ca/wellbeing/dashboard/environment.aspx.

25 “City of London sets mode share target for future mobility network,” City of London, Ontario, April 4, 2024, https://london.ca/newsroom/city-london-sets-mode-share-target-future-mobility-network.

the city extremities (such as route 13) frequently run off-schedule as any traffic, construction, or weather issues impact stops along the entire route. Heavy use at peak times often results in full buses passing by stops, especially in University core areas. A lack of direct routes to destinations throughout the city, and neighbourhoods without bus service simply increase reliance on personal vehicles. The existence of rapid transit or an express route does little to expedite trips if connecting bus service runs infrequently, or requires multiple transfers. Until these issues are resolved, ridership will not increase as people need a reliable means of getting where they need to go in a timely fashion.

The health and environmental benefits of using modes of active transportation are well documented, and by increasing the accessibility of cycling, walking and transit routes the City of London not only plans to reduce its carbon footprint, but also hopes to increase "participation in city life, regardless of age, ability, income, or access to a personal vehicle."[27] In order for active transportation to be successful, improvements must be made to connect the current infrastructure across all areas of the city. Many of the existing walking and cycling paths are designed for highly localized leisure pursuits rather than providing a network of direct routes across the city. Bicycle paths end abruptly or merge into traffic on major arteries, often with limited protections from traffic. The recent passing of Bill 212 restricting bike lanes on main roads,[28] provides the city with the opportunity to explore the creation of a fulsome system of connected pathways on secondary roadways and make use of the extensive park system that runs throughout the city. Running routes along less congested roadways, through neighbourhoods and parkland would encourage more people to use community friendly networks to move around, enable them to avoid traffic jams, and would provide additional protection for cyclists and walkers from the dangers of high speed traffic.

Pairing pathway entrances and terminus points with bus stops would provide a seamless way to connect with mixed modes of transport for more distant destinations. Secure bike lockers at strategic bus stops would allow people living in neighborhoods without bus service to connect to public transit for a portion of their route.

Proper maintenance of all paved surfaces is a requirement for active transportation, regardless of location or season, and must become a priority for the city. Consistent and immediate snow and ice removal is critical for all pathways, sidewalks and bike lanes. A build-up of snow, slush and ice is hazardous to pedestrians and creates barriers for anyone operating devices with wheels such as wheelchairs, walkers, strollers, and bicycles. Proper drainage, regular debris removal, surface repairs, adequate lighting and wayfinder signage are essential for those relying on the routes to travel.

26 "Smart Commute London," City of London, Ontario, January 10, 2025, https://london.ca/living-london/roads-sidewalks-transportation/cycling-active-green-transportation/smart-commute.

27 "City of London mode share target"

28 For information on the Bill specifics, see https://ero.ontario.ca/notice/019-9266.

We strongly encourage the City of London to prioritize the improvement of active transportation infrastructure and the transit system in order to provide community members with viable, safe, reliable, and sustainable alternatives to personal vehicle use.

CONNECT WITH US

westernusc.ca | @westernusc

info@westernusc.ca