

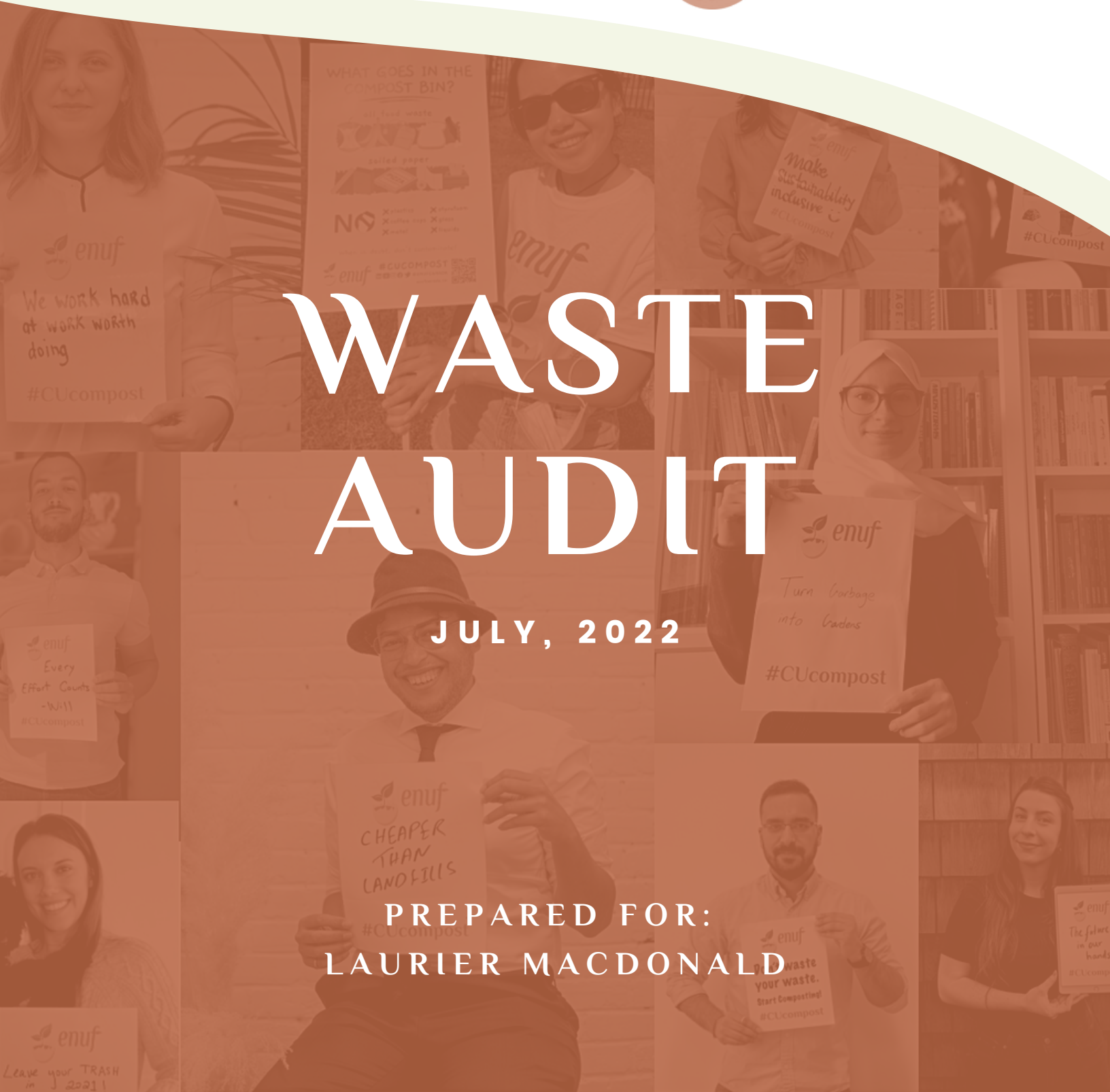


enuf

WASTE AUDIT

JULY, 2022

PREPARED FOR:
LAURIER MACDONALD



► About enuf

enuf is a spin-off B-Corp from the student initiative, “Waste Not, Want Not” (WNWN), that started at Concordia University in 2016. Since then, the Concordia community doubled its annual composting, and each Concordia reduced their annual overall waste by 16%- that is two months’ worth of garbage that disappeared per person every year. Our goal is to scale that impact via *enuf*, and our mission is to do whatever it takes to fix the waste crisis.

enuf is co-founded by three equal partners: one woman and two immigrant people of colour. We benefit greatly from a broad range of diverse perspectives within our team. We have recently become a “Benefit Corporation” (B-Corp), which we pursued to ensure that we are anchoring our organization in sustainability best practices from the get-go. For example, our legal incorporation articles include the following text to ensure that executive officers can make decisions for social good, even if such decisions do not maximize profit, without being liable shareholders:

“The purpose of the Company shall include, but is not in any way limited to or restricted by, the creation of a positive impact on society and the environment, taken as a whole, from the business and operations of the Company, which impact is material in view of the size and nature of the Company’s business”



► Introduction:

We conducted a waste audit for the Laurier Macdonald on the 25th of March 2022. We were able to conduct a thorough and deep assessment of the waste sorting conditions, where we went through **4 days'** worth of recycling and **1 day** worth of landfills totalling **132.7 kg**.

The objectives of the work conducted by *enuf* are:

- 1) Conduct a waste audit of waste at Laurier Macdonald,
- 2) Identify non-compliance in waste disposal to inform the logistics of organic waste integration, and waste sorting education.

► Waste audit process summary:

This section outlines the process that the *enuf* auditors undertook in conducting the waste audit. All bins were sorted. The auditors first canvassed the waste disposal area and noted down the signage, number of bins and layout of the area. All the bins were moved to a staging area provided by Laurier Macdonald. The *enuf* auditors, **with the help of the school's student green team**, then proceeded to weigh each bin full, then weigh it empty to identify an initial quantity of waste in each one of the bins. Then we safely extracted and separated items into separate containers for each waste stream:

- 1) Glass,
- 2) Cardboard,
- 3) Plastics,
- 4) metals,
- 5) Organic waste,
- 6) Trash.



► Waste audit parameters:

enuf is committed to providing the best quality of waste audit for the best price. Our processes adhere to general waste audit guidelines. The amount of waste generated by Laurier Macdonald allowed *enuf* to conduct a full waste audit without the need to sample the waste bins. These parameters give us a high confidence in the representativeness of our data and analysis.



► **Current state:**

The total weight of waste captured in recycling bins in the audited four days is **57.3 Kg**. The total wait of waste captured in landfill bins in the audited day is **75.4 Kg**. The composition of the audited waste is shown in **Figure 1**. On average, each student generates **159 grams** of trash and **71 grams** of recyclable waste every day, assuming a 200 student population. Less than a **quarter** of the waste generated has to go to landfills. About **36%** of the waste produced is organic and can be composted.

► **Overall waste composition**

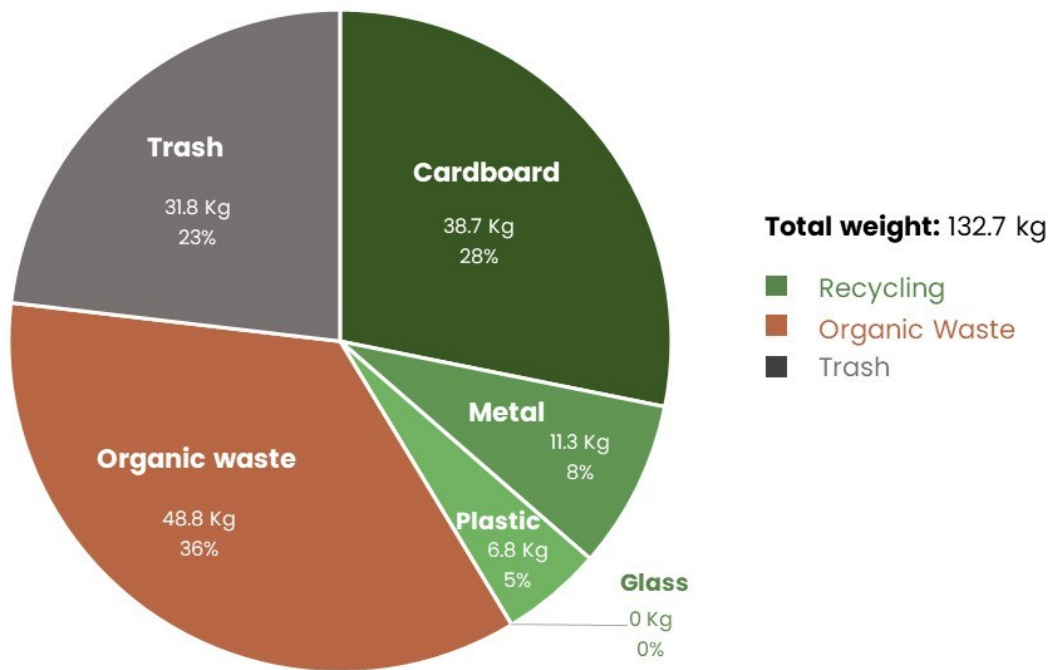


Figure 1: Overall waste composition.

Takeaway: Implementing organic waste collection (composting) effectively *doubles* the waste diversion rate of Laurier Macdonald.



About **23%** of what is in the recycling bins is not actually recyclable. Further, only **30%** of what is in the landfill bins is actually trash. **Figure 2** shows the composition of the contamination observed in both the recycling and landfill streams.

Contamination

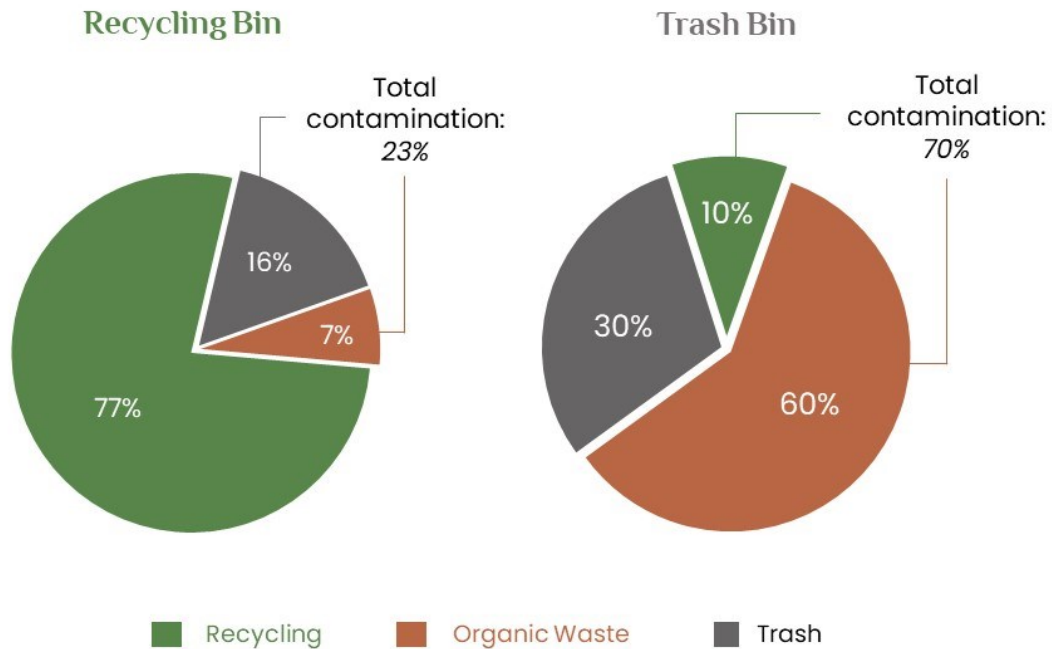


Figure 2: Composition of the recycling and landfill bins.

- Takeaways:** 1) Divert **60%** of trash to composting.
 2) Reduce the **23%** contamination in recycling.

About **59%** of recyclable material is captured in recycling bins, while **91%** of the trash is captured in the landfill bins. **Figure 3** shows the capture rate of different waste streams. The highest capture rates are of the cardboard at **~95%**. On the other hand, **less than 20%** of plastic and metal is captured in the recycling bin. However, the quantities of metals (1.5 Kg) and plastic (7.33 Kg) generated during in the audited period are small relative to the 27.6 of trash. Therefore, education must focus on keeping trash out of recycling and composting to reduce contamination.



► Capture Rate

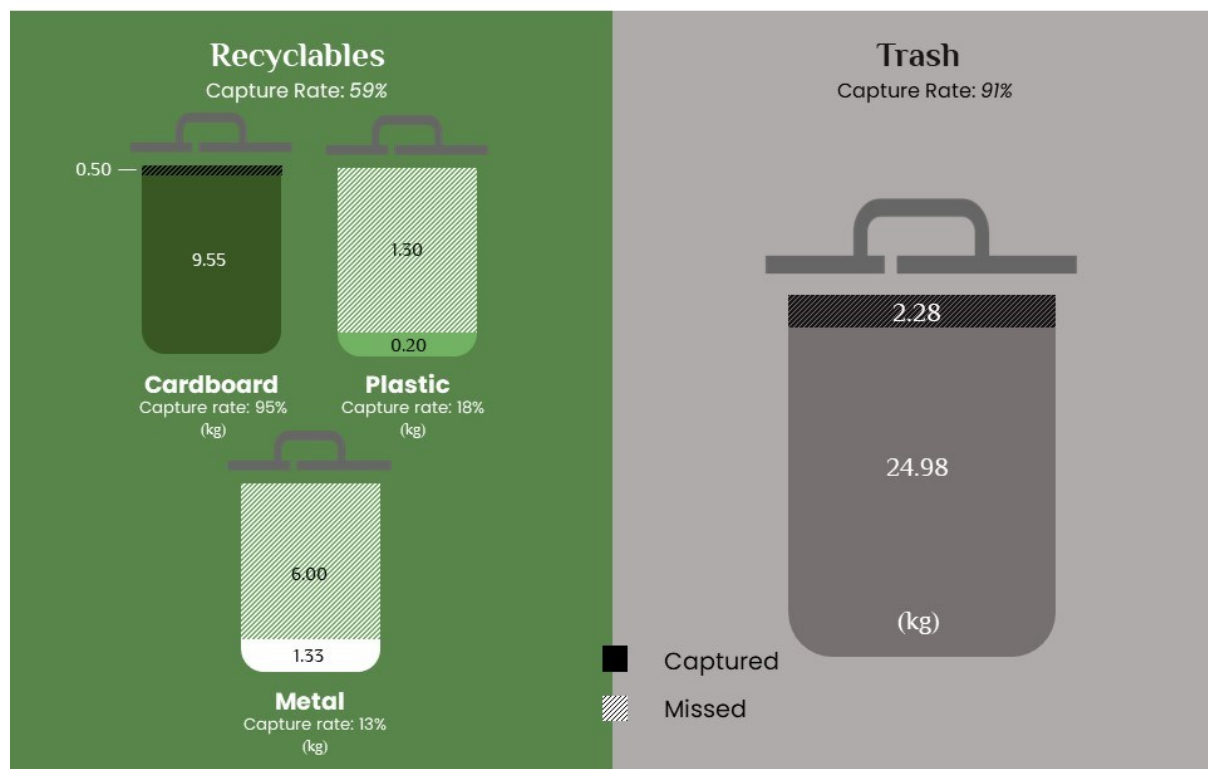


Figure 3: Capture rates of different waste streams.

Takeaway: *Education* must focus on keeping trash out of recycling and composting.

► Next steps:

- 1) August: Coordinate logistics for collection and education.
- 2) September: *enuf* trains Laurier Macdonald student green team on being waste ambassadors.
- 3) First week of October: *enuf* conducts educational activities.
- 4) November: Waste audit.
- 5) December: Final presentation to relevant committees.

