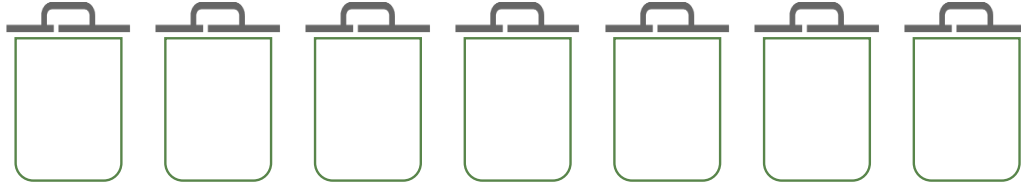




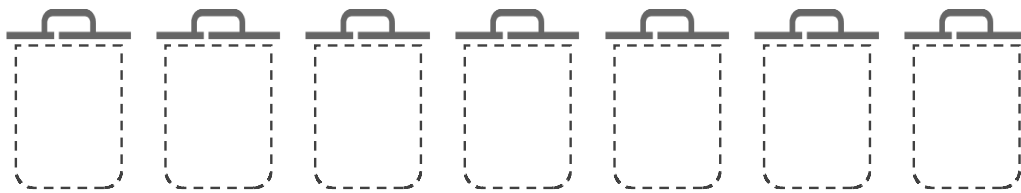
## Graphical summary:

### ► Current state

Recycling Bins:



Trash Bins:



□ Recycling Bin   □ Trash Bin

### ► Contamination

Recycling Bins (Average weight per bin= 10 kg)



Trash Bins (Average weight per bin= 18 kg)

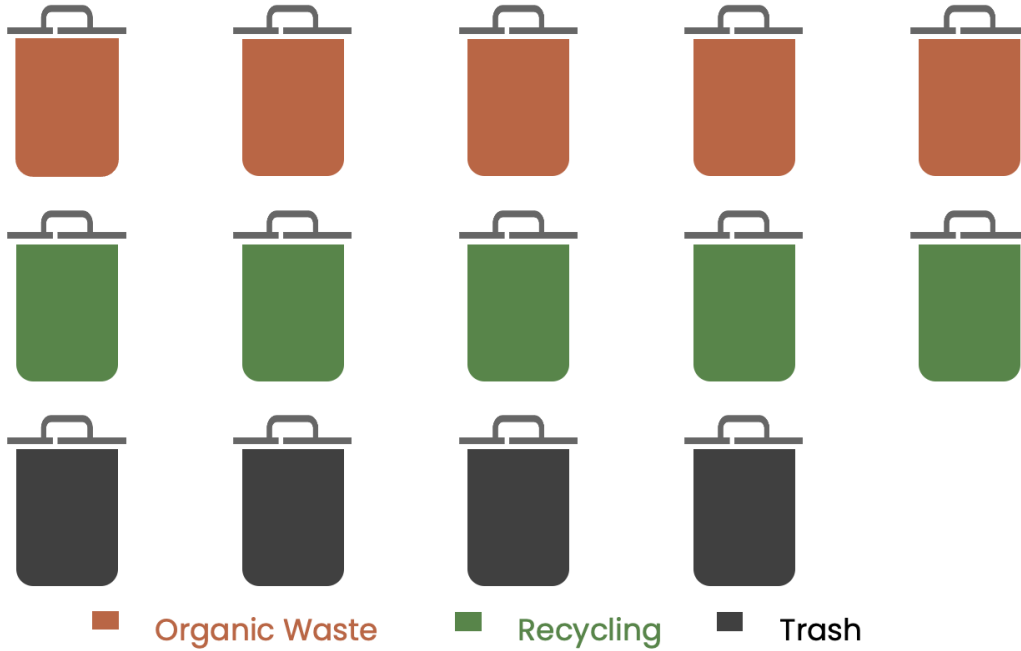


□ Recycling Bin   □ Trash Bin



## Overall waste composition per week

Total weight/week= 230 kg, Average weight/bin=16.5 kg



## Proposal

Turn two landfill and two recycling bins into compost bins



## ► About enuf

**enuf** is a spin-off 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 are in the process of certifying as a B-Corp. A “Benefit Corporation” (B-Corp) is a distinct legal status in the United States but is currently only a certification in Canada. We are pursuing the certification to ensure that **enuf** is founded with 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 risking being sued by 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 Woodnote cooperative on the 5<sup>th</sup> and 12<sup>th</sup> of December 2021. We were able to conduct a thorough and deep assessment of the waste sorting conditions in the Woodnote where we went through **12 days'** worth of waste totalling **395.1 kg**.

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

- 1) Conduct a waste audit of waste at the Woodnote cooperative,
- 2) Identify non-compliance in waste disposal
- 3) Develop and provide a plan to implement organic waste collection (composting), and reduce contamination.

## ► 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 the Woodnote. The *enuf* auditors 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 and metals,
- 4) Organic waste,
- 5) Trash.

The total weight from the sorted bins was matched to the total initial weight. A discrepancy of 5% was allowed, however, almost none of the bins sorted and weighed reached that threshold. We then proceeded to return the waste to their proper containers. During the waste sorting process, observations on the quality of the waste, the different types of waste in the bags, and any additional information were noted by the waste auditors.

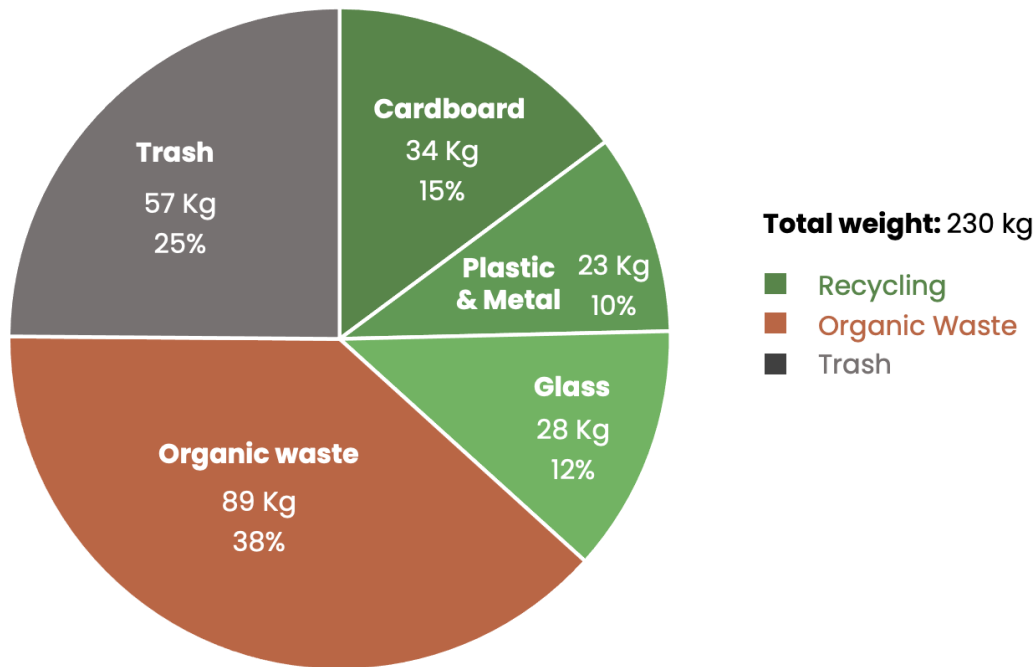
## ► Waste audit parameters:

*enuf* is committed to providing the best quality of waste audit for the best price. Our processes adhere to general waste audit guidelines. Sampling is usually done in two parts: sampling days and quantity. We chose two days in two separate weeks. The amount of waste generated by the Woodnote 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:**

About **14** waste bins (240L) are used every week: 7 recycling and 7 landfills. The total weight of weekly waste is **230 Kg**, and of the composition shown in **Figure 1**. On average, each resident generates **235 grams** of waste every day. Only a **quarter** of the waste generated has to go to landfills. About **38%** of the waste produced is organic and can be composted.

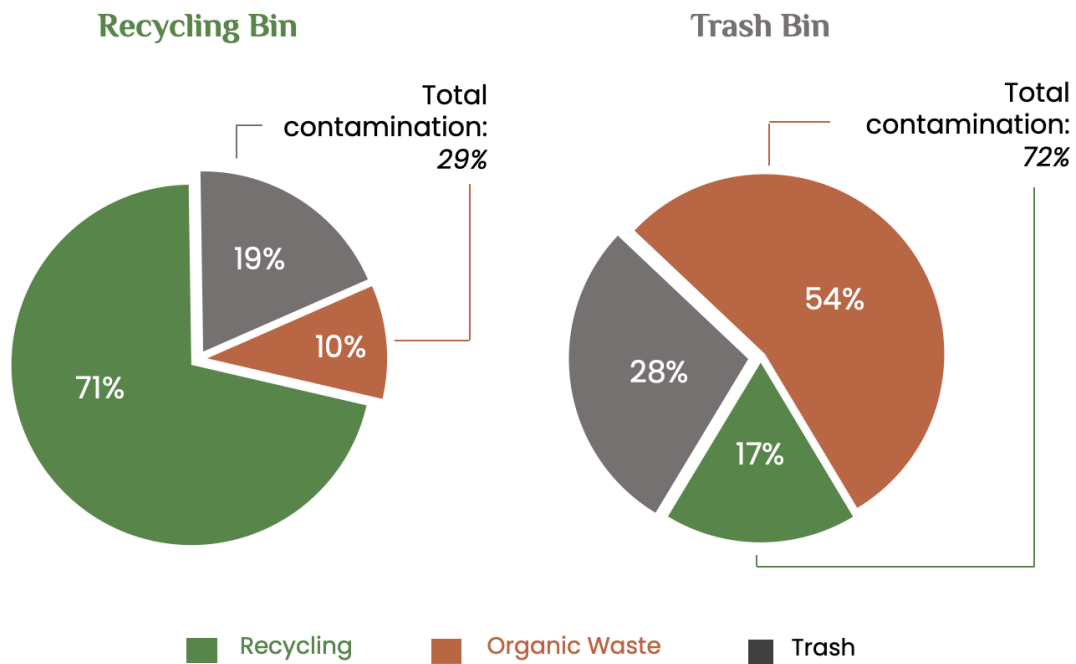


**Figure 1: Overall waste composition per week**

**Takeaway:** Implementing organic waste collection (composting) can effectively *double* the waste diversion rate of the Woodnote cooperative.



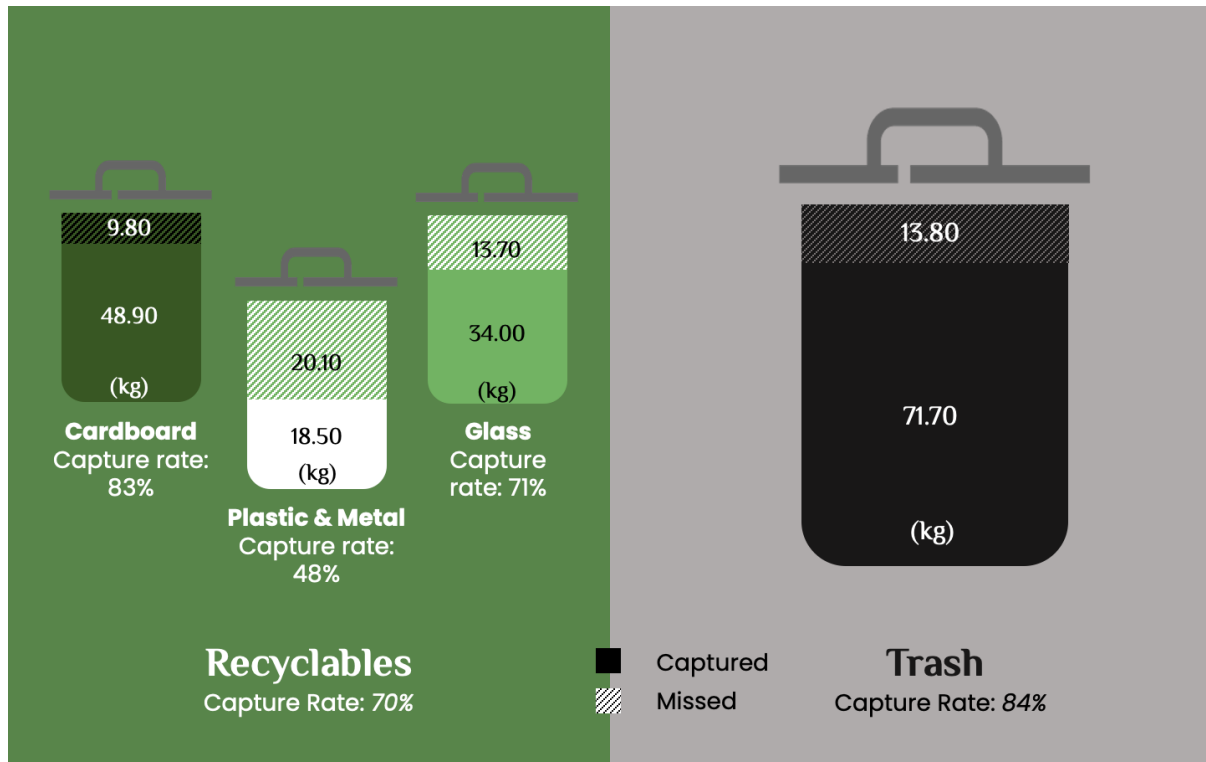
About **29%** of what is in the 7 recycling bins is not actually recyclable. Further, only **28%** of what is in the 7 landfill bins is actually trash. **Figure 2** shows the composition of the contamination observed in both the recycling and landfill streams.



**Figure 2: Composition of the recycling and landfill bins.**

About **70%** of recyclable material is captured in the 7 recycling bins, while **84%** of the trash is captured in the 7 landfill bins. **Figure 3** shows the capture rate of different waste streams. The highest capture rates are of the trash and cardboard at **~83%**. On the other hand, the capture rate of glass is **71%**. Lastly, **less than half** of plastic and metal is captured in the recycling bin.





**Figure 3: Capture rates of different waste streams.**

**Takeaway:** In the recycling stream, plastic and metal have the lowest capture rate, and therefore the biggest opportunity for improvement through *education*.

Finally, we noted the following miscellaneous considerations:

- The Woodnote has **17** units with a total of **140** residents.
- Currently, there are two drop off days (Tuesday and Thursday) for city pick-up. The Woodnote uses one of them to drop off the landfill bins, and use the other to drop off the recycling bins. This allows a “safety valve” in case either of the landfill or the recycling bins overflows during the transition to replacing some of the bins with composting.
- The common room is equipped with a projector and has a capacity of **30** people.
- The Woodnote organizes **18-24** events/year, 2-3 hours long. That is **36-72** event hours per year.





## ► Recommendations for the Woodnote cooperative:

### 1) Organic waste collection:

- a. Switch two landfill and two recycling bins into composting bins.
- b. Turn bathroom bins into compost bins.
  - i. Consider also having a second bin for landfill in units' bathrooms.
- c. The waste station in the common room has three bins and should be designated: landfills, recycling and composting.
- d. Ensure that the pet litter used is compostable (i.e. does not contain silicate). Natural pet litter can contain wood chips, clay, vegetable composition and/or paper.
  - i. Note: Pet feces are accepted by our composting facilities so long as the litter used does not contain silicate.

### 2) Waste reduction:

- a. Equip the common room kitchen with reusable dishware and cutlery that can be used during events.

### 3) Education:

- a. Introductory workshops on waste sorting.
- b. A door knocking tour two weeks after to answer questions about waste sorting.
- c. Waste ambassadors standing next to waste stations in events.
- d. Waste sorting signs:
  - i. 1 big sign for the waste station in the common room,
  - ii. Signs for the two common room bathrooms,
  - iii. We will direct residents to the toolkit page on our website (launching this month) where they can print waste sorting signs for free to use in their units if they need.
- e. Use the Woodnote social media channels:
  - i. Add us to the Facebook group and we will share educational, and community building posts.
  - ii. Participate in the [#CUcompost picture campaign](#). Everyone (board members and residents) is welcome, all according to their personal comfort level.

### 4) Data:

- a. Put a paper in the waste bin room where the concierge can track the number of full bins put outside for collection per stream.
- b. Conduct an annual waste audit.



## ► Proposal for the Woodnote x enuf

### 1) Organic waste collection:

- a. Weekly pick-ups for organic waste collection: **\$150/pick-up**
- b. Buy compostable bags for 10 L kitchen and bathroom bins from us at **\$6/box** (45 bags/box), to benefit from bulk prices. That is about \$1 cheaper than market price per box.
  - i. Note that compostable bags expire 9 months after a box is open.
- c. We recommend using 10 L bins for organic waste in kitchens and bathrooms. The cheapest we were able to find are those bins from Rona.



### 2) Education:

- a. Workshops during orientation: **\$200**
  - i. For a 140 people, we will need 5 workshops (~30 people each).
  - ii. Ideally the 5 workshops are grouped into one day.
  - iii. If organic waste collection start in the upcoming months, say March, we will do the first round of workshops prior to collection **for free**.
- b. Waste ambassadors for events: **\$1,900/year**, for **85** waste ambassador hours.
  - i. *enuf* commits to providing at least **two** part-time jobs/internships to residents of the Woodnote. We do this for the following reasons: in our experience, peer-to-peer education is the most effective. The second reason is that we are determined to better connect like-minded communities by having waste ambassadors from various communities work alongside each other.
  - ii. We assume an average of 40 event hours per year.
  - iii. Typically, we send one ambassador per waste station, with a minimum of **two** waste ambassadors to events for safety.
  - iv. We will add 5 hours for a door knocking for the 17 units, two weeks after the workshops to answer questions about composting and waste sorting.
  - v. In the case that the ambassador is a resident of the Woodnote, and there is only one waste station, we may consider removing the minimum of two ambassadors' criteria, to cover an above average number of events.
- c. Signage: If the Woodnote hires our waste ambassadors, we will provide the signage for the waste station and the two bathrooms in the common room **for free**.

### 3) Data:

- a. Annual waste audit: **\$900/year**



## ► Budget summary

Collection items	\$/unit	Annual cost estimation (\$/y)
Organic waste weekly pick-ups	150/pick-up	7,800
Compostable bags for 10L bins	6/box (45 bags per box)	480
<b>Total for collection (\$/y) (Not including sales tax)</b>		<b>8,280</b>

Education & data items	\$/y	Notes
Introductory workshops	\$200	5 workshops
Waste ambassadors* (Note 1 & 2)	\$1,900	# of ambassador hours   85
Waste audit	\$900	
Total services	\$3,000	
Social media and overhead contribution (20% of total services)	\$600	
<b>Total for education and data (\$/y) (Not including sales tax)</b>	<b>\$3,600</b>	

### Notes:

- 1) We commit to hiring 2 Woodnote residents part-time.
- 2) We will provide signage for the common room (waste stations and bathrooms) for free.
- 3) Prices do not include tax.
- 4) Prices are for 2022, and can be subject to factors including inflation in the following years.



*enuf*

What do  
you see  
when  
you look  
at this  
picture?



16%

Overall waste reduced  
per person since 2016

*enuf*



35,000

people attended events where  
our ambassadors were present  
in 2019-2020

2.0x

Annual composting since 2016

4,800

people reached via in class  
presentations in 2019-2020

# ● The problem



**Half** of what institutions send to landfills every year could be composted instead.



Canada is the **largest** generator of waste per capita in the world.



Landfills are the **fifth** leading emitter of methane in Quebec (traps 70 times more heat than CO<sub>2</sub>).





David Lametti- Federal Minister of  
Justice, Canada

**Waste reduction  
and composting  
should become  
priority #1 !**



# SERVICES

WASTE AUDITS,  
DATA  
TRACKING &  
CONSULTING



COLLECT  
SURPLUS FOOD &  
ORGANIC WASTE  
(IN DEVELOPMENT)



EDUCATION





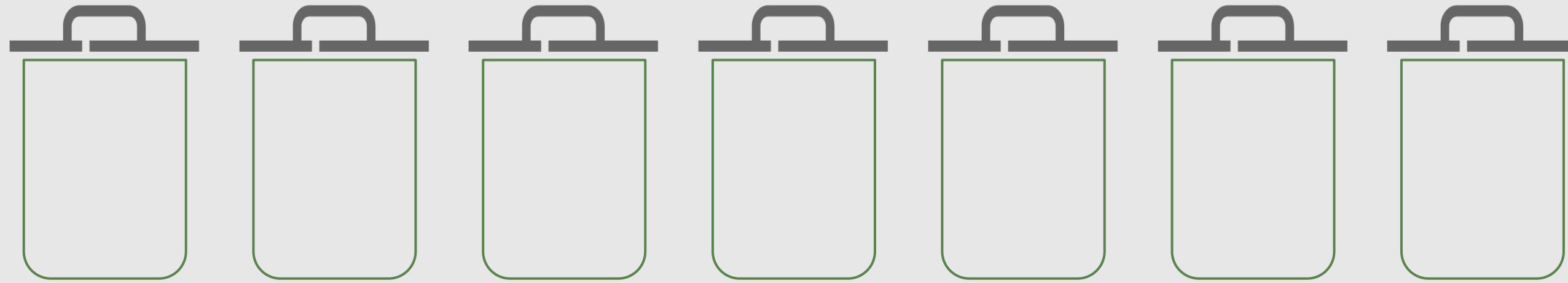
# Waste audits

*What is a*  
**WASTE  
AUDIT?**

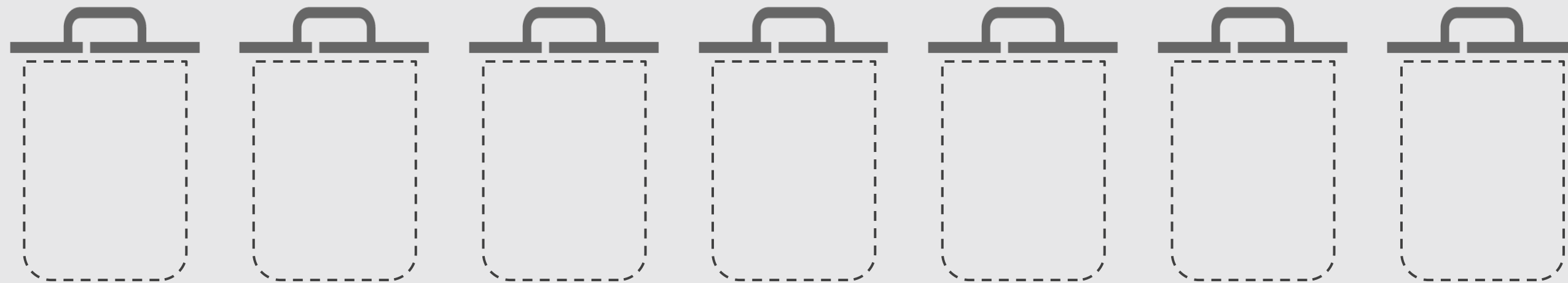


# Current state

*Recycling Bins:*



*Trash Bins:*



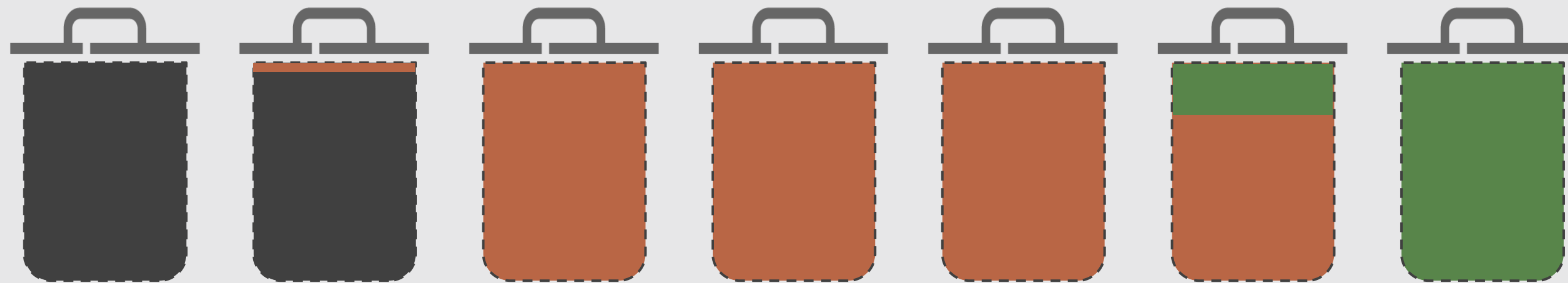
Recycling Bin     Trash Bin

# Contamination

*Recycling Bins (Average weight per bin= 10 kg)*



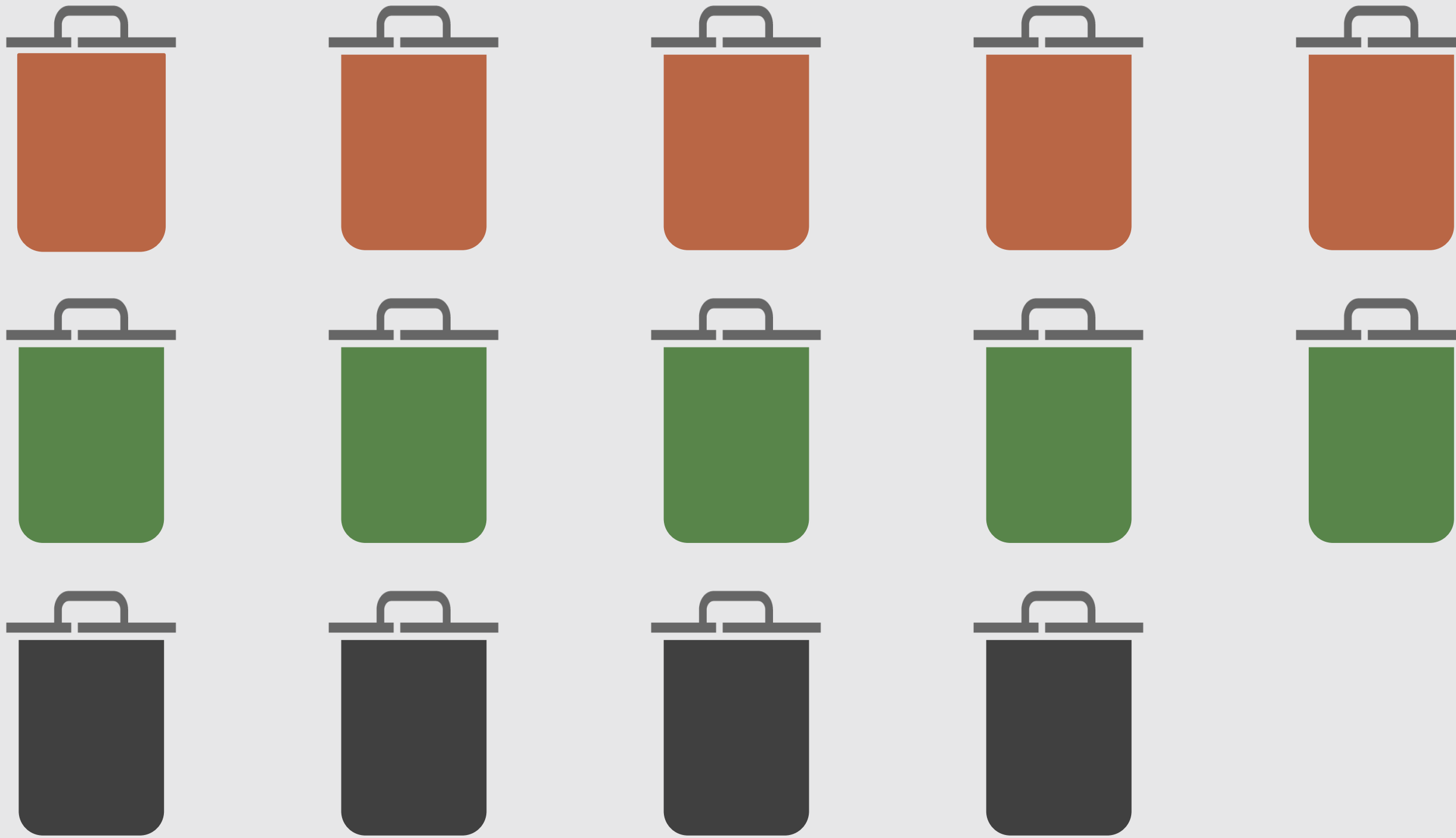
*Trash Bins (Average weight per bin= 18 kg)*



Recycling Bin     Trash Bin

# Overall waste composition per week

Total weight/week= 230 kg, Average weight/bin=16.5 kg



Organic Waste

Recycling

Trash

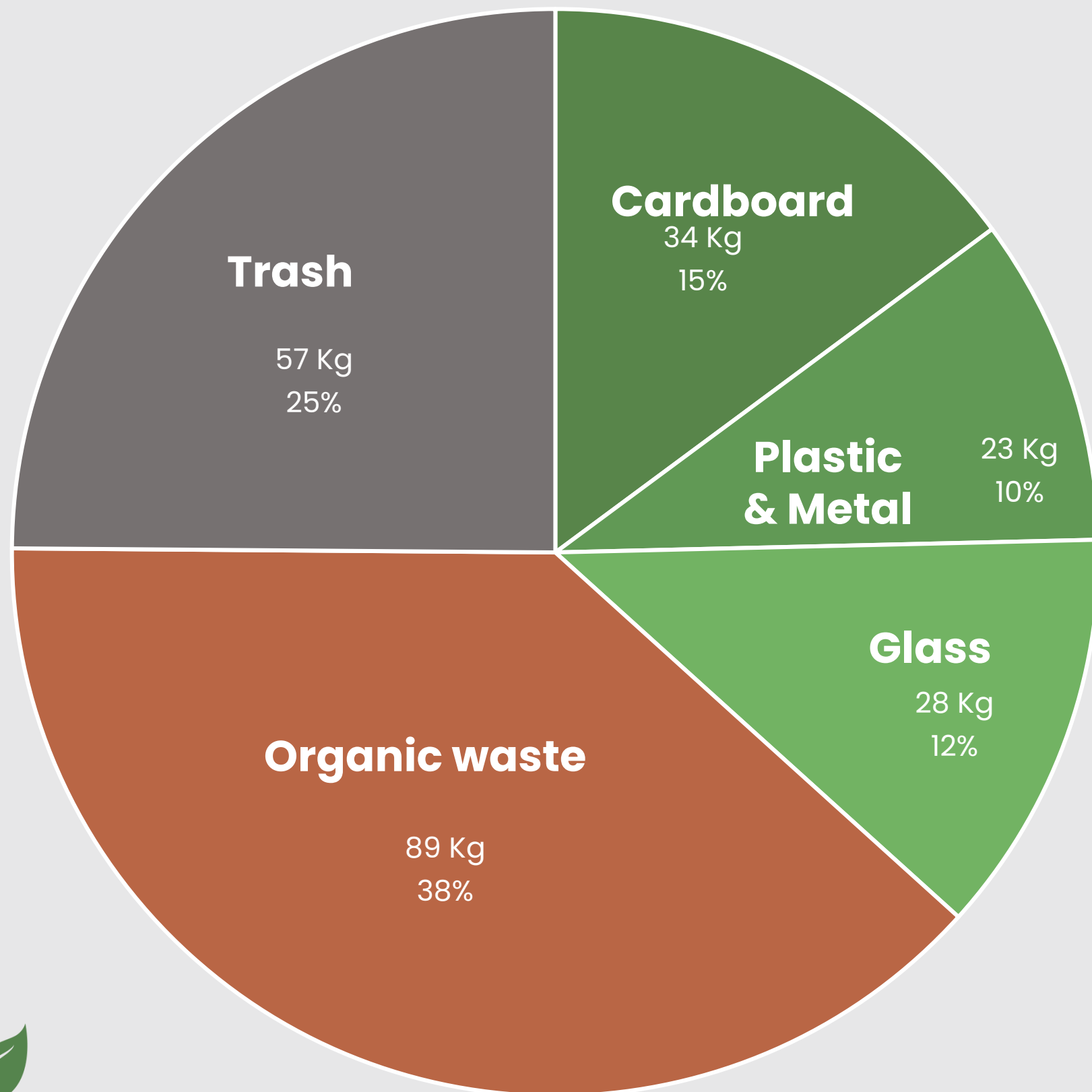
# Proposal

Turn two landfill and two recycling bins into compost bins



■ Organic Waste    ■ Recycling    ■ Trash

# Overall waste composition per week



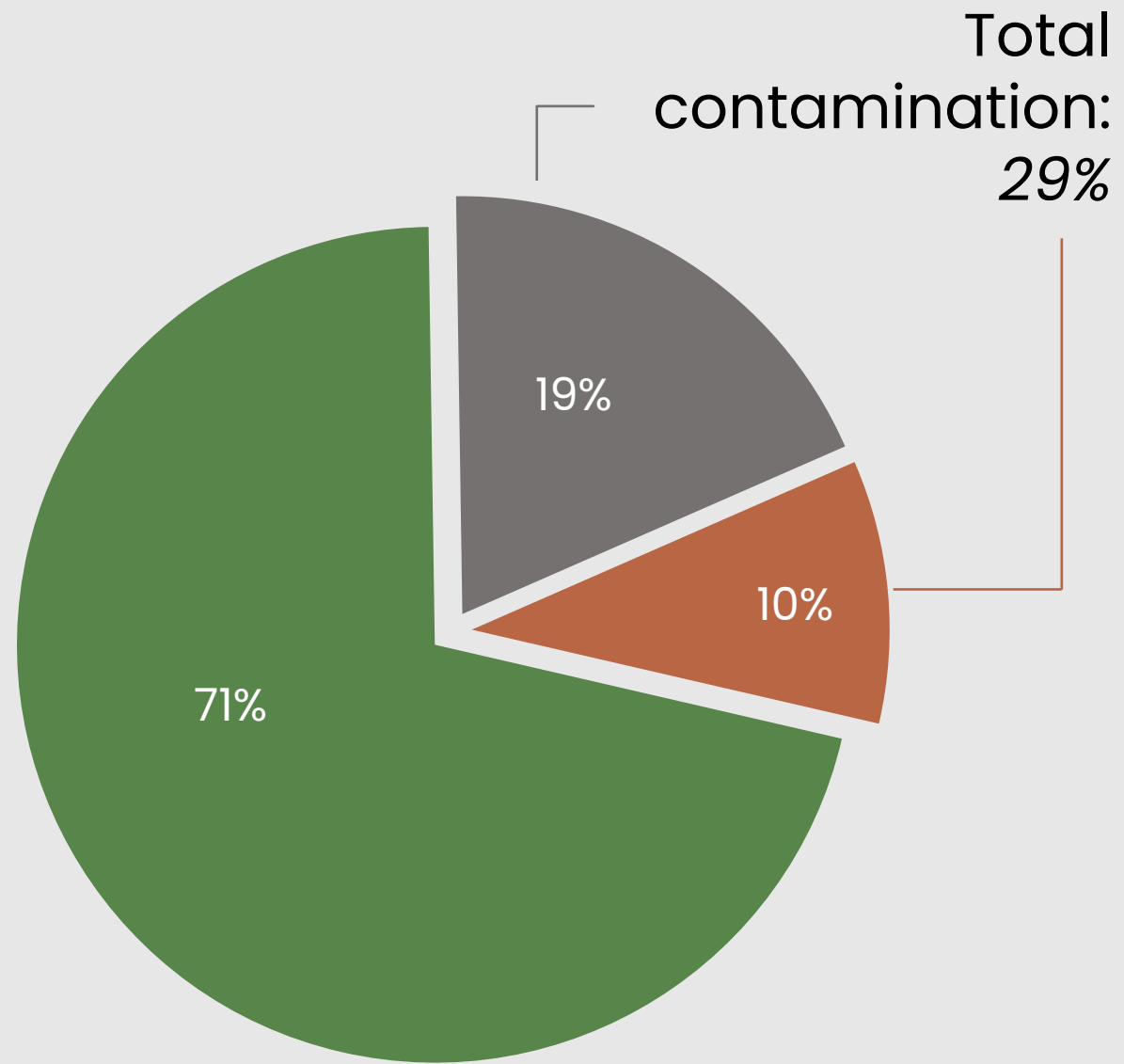
**Total weight:** 230 kg

- Recycling
- Organic Waste
- Trash

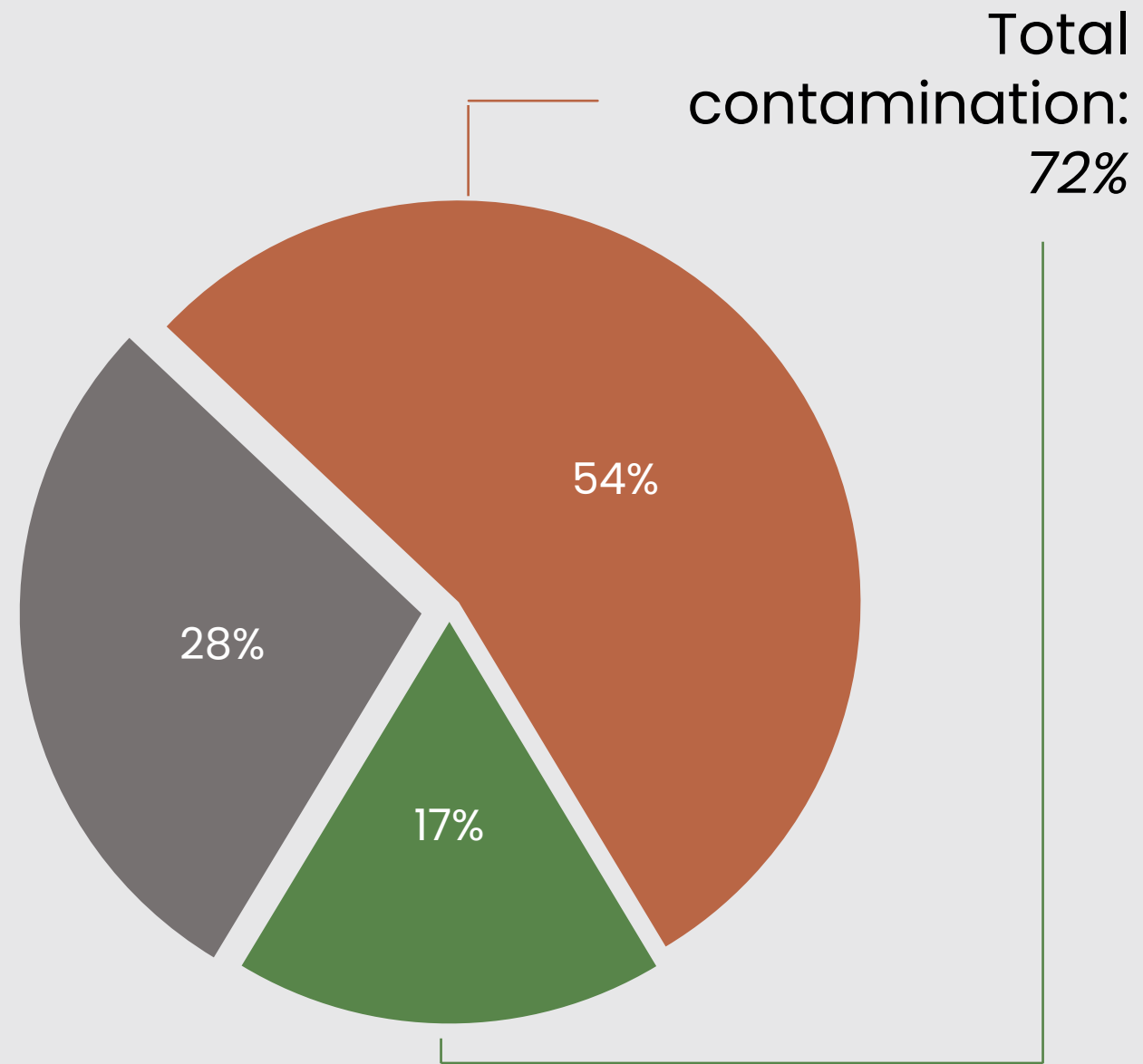
Takeaway: implementing composting effectively *doubles* the Woodnote's diversion rate

# Contamination

## Recycling Bin



## Trash Bin

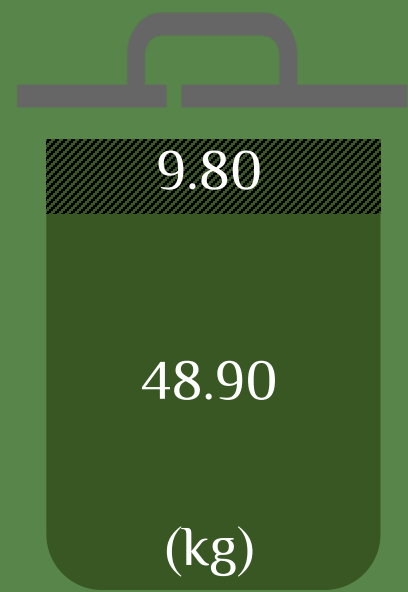


■ Recycling

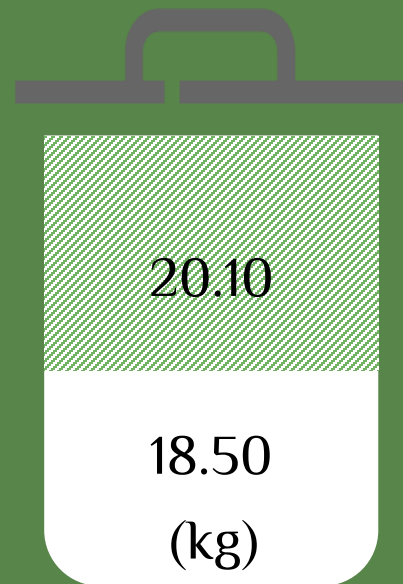
■ Organic Waste

■ Trash

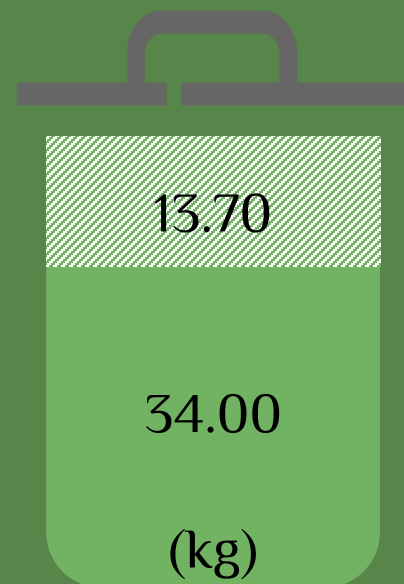
# Capture Rate



**Cardboard**  
Capture rate:  
83%



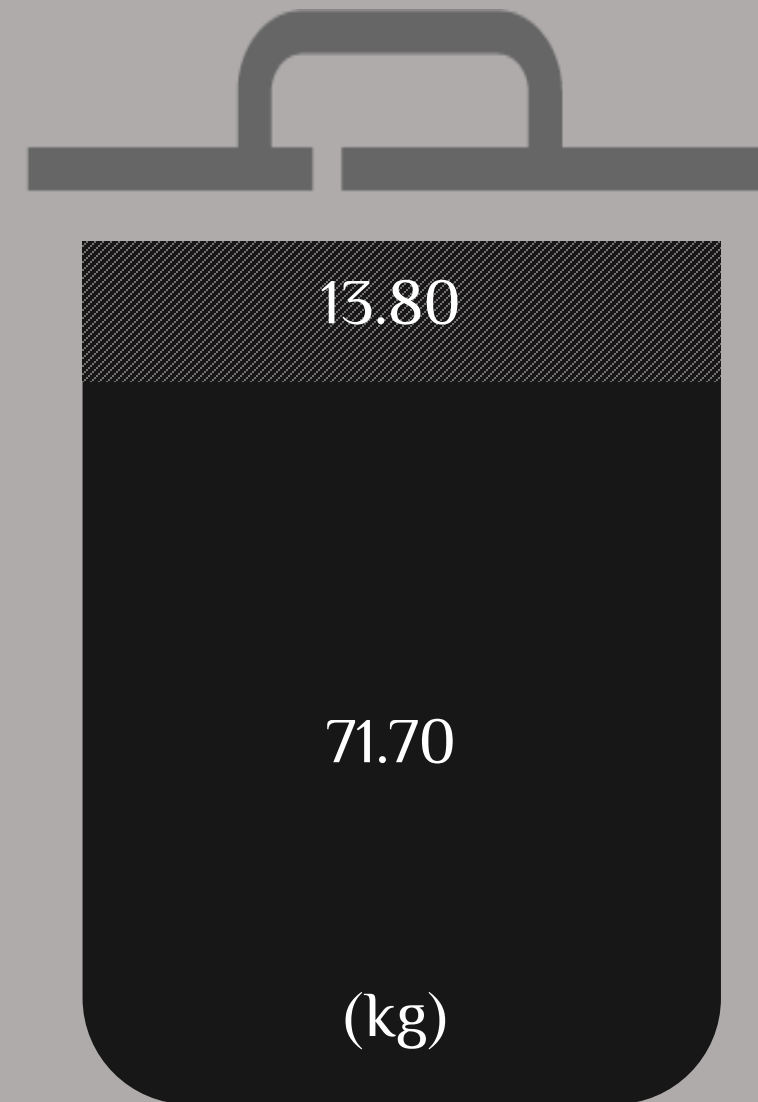
**Plastic & Metal**  
Capture rate:  
48%



**Glass**  
Capture rate:  
71%

**Recyclables**  
Capture Rate: 70%

■ Captured  
▨ Missed



**Trash**  
Capture Rate: 84%

Takeaway:  
*Education*  
must include  
a focus on  
sorting  
plastic and  
metal.





Collect surplus food &  
organic waste

**Proposal to the Woodnote:**

**\$150/pickup (we suggest a pickup once a week).**

**\$6/box of 45 compostable bags (10L bins)**



## Collect surplus food & organic waste

- Turn bathroom bins into composting bins.
- Ensure that pet litter does not contain silicate.
- Equip the common room kitchen with reusable dishware and cutlery to reduce event waste.

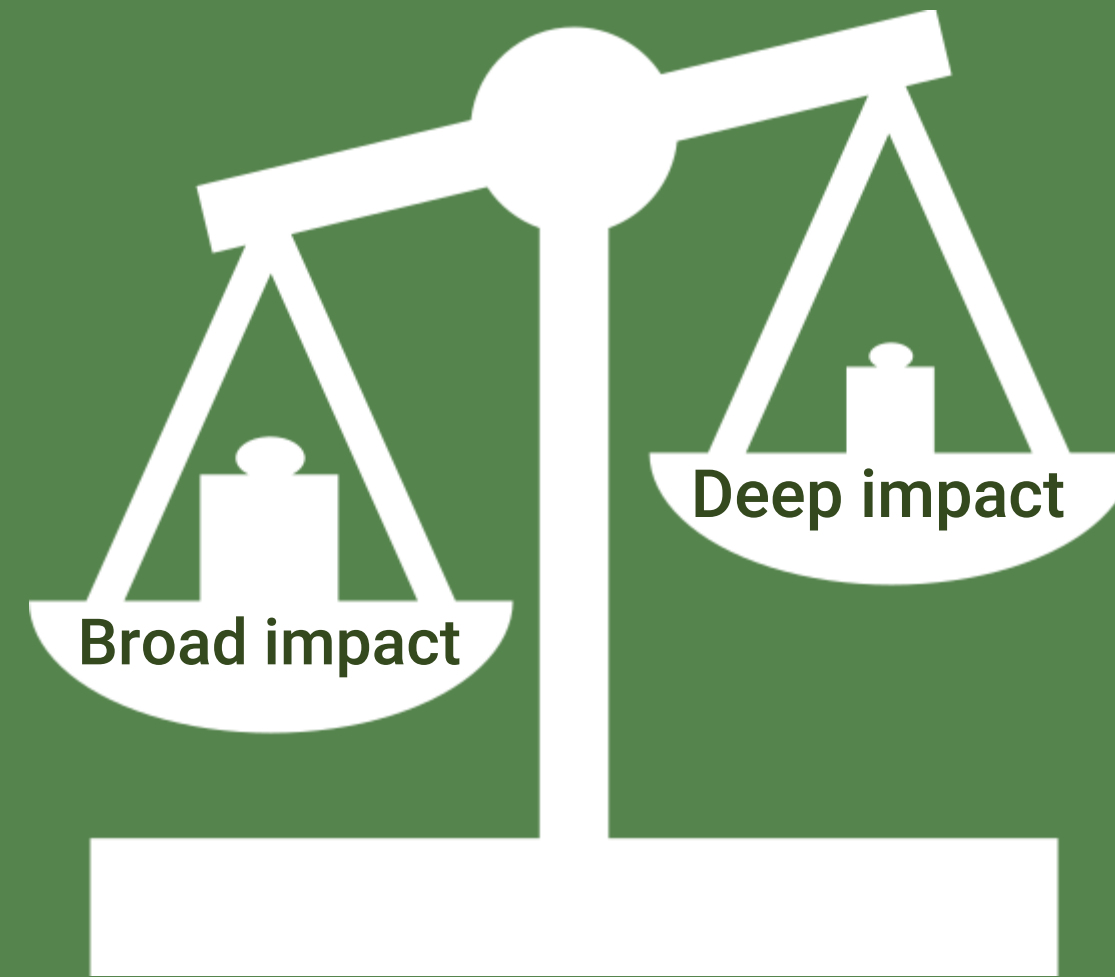
# EDUCATION

- Introductory workshops on waste sorting. (5 workshops for the 140 residents)
- A door knocking tour two weeks after implementation.
- Waste ambassadors standing next to waste stations in events.
- Signage in the common room
- Make use of the Woodnote social media.



# Education

Awareness efforts to culture change is like vaccines to herd immunity.



# #CUcompost Waste Ambassadors

9 paid ambassadors

9 languages



59 events in 2019-20

35 000 participants in 2019-20.  
(equivalent of the entire Concordia undergraduate population)



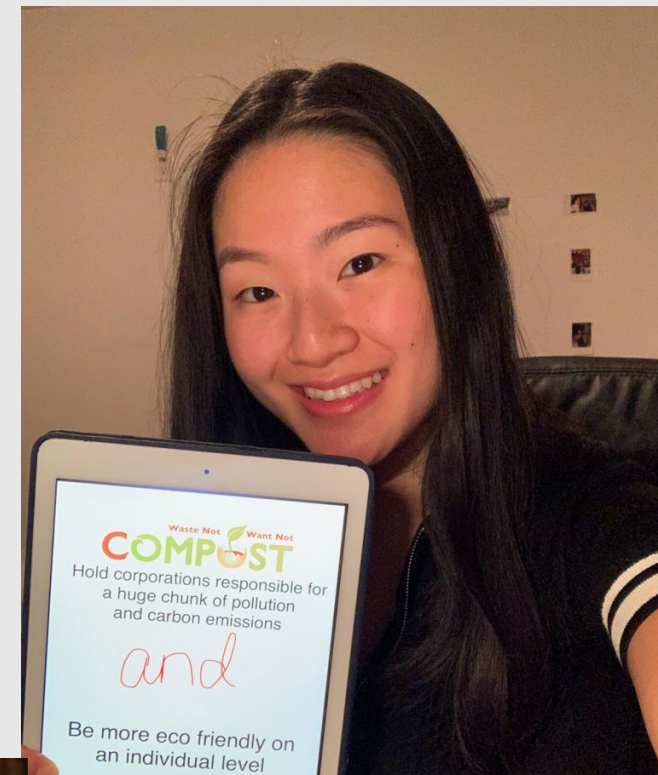
# Vision: hiring YOUR students



We will hire *two* residents of the Woodnote, part time

# Above and beyond

In our first CSU contract, we committed to hiring 5 Concordia students part-time.



# Education: Building credibility & inspiring confidence



Participate: [ConcordiaCompost.ca/photos](https://ConcordiaCompost.ca/photos)



# Leadership by example



Hortense Le Ferrand,  
NTU Singapore



راديو كندا الدولي RCI

الرئيسية في الواجهة تقارير طويلة في العمق البودكاست اكتشفوا كندا

شهر التواضع الاسيوي

بودكاست

التطبيقات المحمولة RCI

دعوة إلى "رمضان أخضر" في كندا

من إعداد سمير بن جعفر | barid@rcinet.ca  
تاريخ النشر: الأربعاء 6 مايو، 2020  
تاريخ التحديث: الخميس 7 مايو، 2020

وقبل إطلاقها لهذا النداء طلبت عواطف زبيرى من أصدقائها ومتابعيها على فيس بوك عدم نشر صور لموائد الإفطار الممتلئة بالأطعمة المختلفة احتراما لمشاعر المحتاجين خاصة أولئك الذين فقدوا وظائفهم بسبب جائحة كورونا "حتى وإن قدمت لهم الحكومة الكندية مساعده لتجاوز هذه المحنة"، كما قالت.

وتأسفت الناشطة الحقوقية إلى أن البعض يعتبر رمضان "شهر الولائم" وكان لهذا النداء نتائج إيجابية حيث أنها لاحظت أن بعض أصدقائها من المؤثرين على مواقع التواصل الاجتماعي تحدثوا نشر هذه الصور، رغم أنهم عادة يشرون كل ما يقومون به في حياتهم اليومية.

ولإشارة فإن عواطف زبيرى، استوحت نداء "رمضان أخضر" من حملة "Waste Not, Want Not" (لا تُصنع، لا تتردى) بنظمها طلاب جامعة كونكورديا منذ أربع سنوات.

وتهدف هذه الحملة إلى تثقيف الطلاب في الحرم الجامعي في موضوع السماد الطبيعي (Compost) ومواضيع أخرى متصلة لها علاقة بحماية البيئة.

(راديو كندا الدولي)  
روابط ذات صلة:



Betty Gold, Green Africa Youth  
Organization, Ghana

Canada Switzerland @CanSwitzerland

Reducing waste starts with each of us!

As an Embassy we set goals on how to be #green in everything we do.

#CUcompost #GreenFriday #BeatPlasticPollution

You and Susan Bincoletto

Susan Bincoletto, Canada's  
ambassador to Switzerland.

# Education

Help people learn how to sort, and they will reduce their waste on their own.

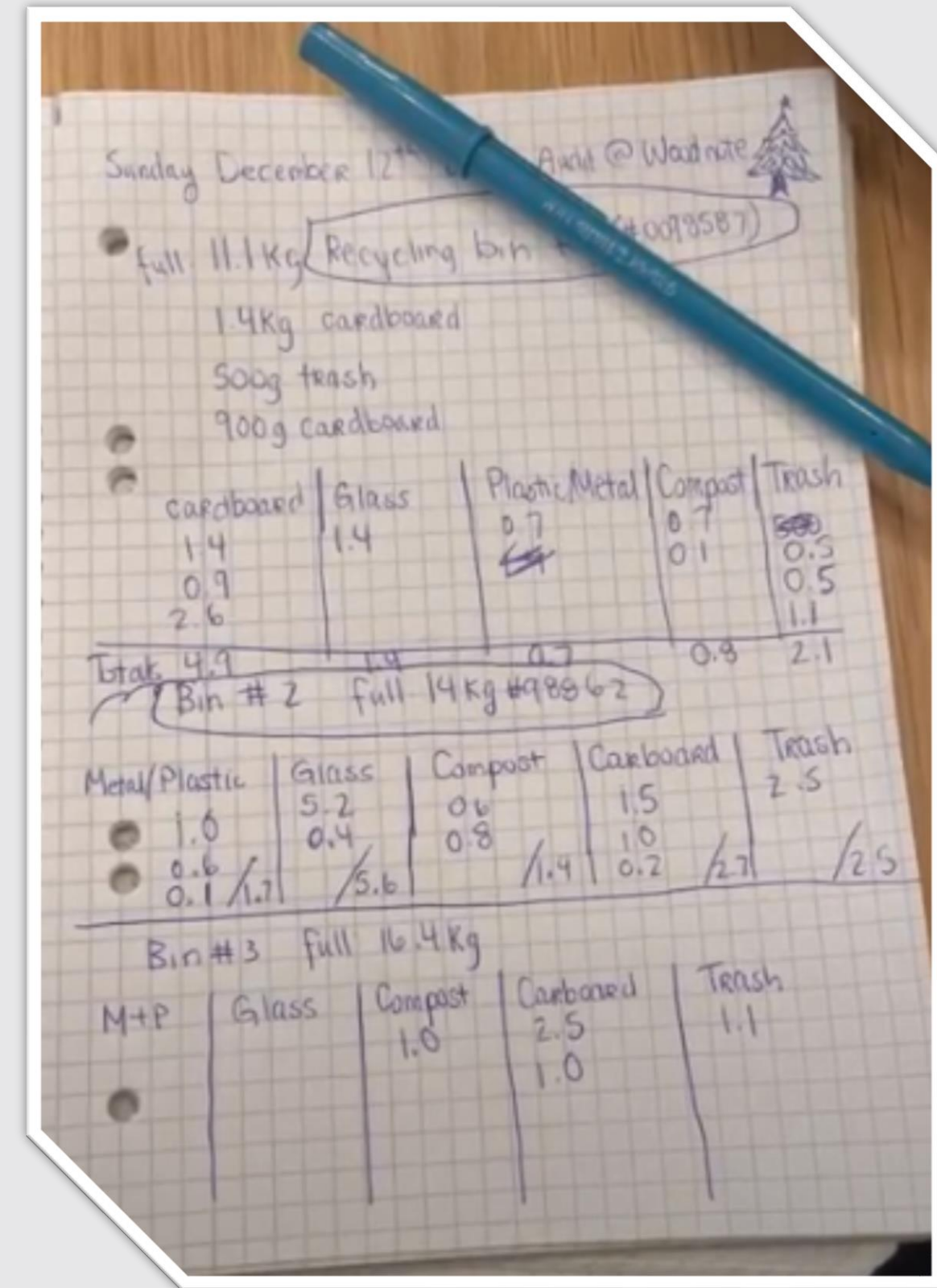


Cassandra, Concordia Student



# Data

- Put a paper in the waste bin room for the concierge to track the number of full bins they put outside for collection per stream.
- Conduct an annual waste audit

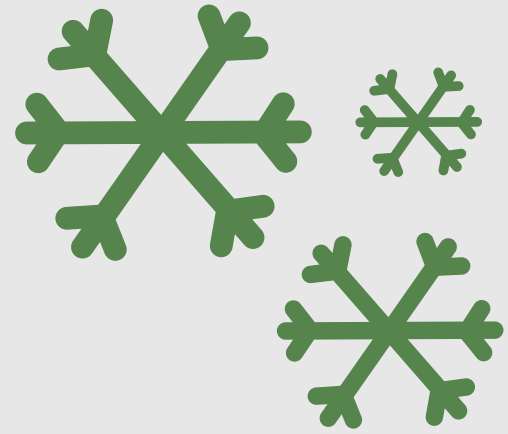


# Proposal's budget

- We commit to hiring 2 Woodnote residents part-time.
- If the Woodnote hires our waste ambassadors, we will provide signage for the common room (waste stations and bathrooms) for free

Collection items	\$	Details	
Organic waste weekly pick-ups	150/pick-up		
Compostable bags for 10L bins	6/box	45 bags per box	
Education & data items	\$/y	Details	
Introductory workshops	\$200	5 workshops, preferably on the same day or weekend	
Waste ambassadors* (Note 1 & 2)	\$1,900	# of ambassador hours	85
Waste audit	\$900		
Total services	\$3,000		
Social media and overhead contribution	\$600	20% of total services	
<b>Total for education and data (\$/y) (Not including sales tax)</b>	<b>\$3,600</b>		

# Climate crisis impact on Montreal



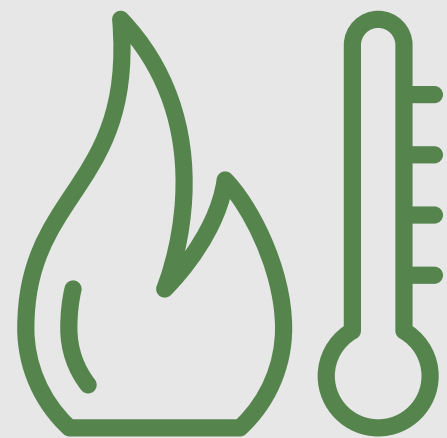
**2 record  
snow falls**

\$40 MILLION FOR ONE-DAY  
SNOW REMOVAL.



**2 record  
flooding**

THOUSANDS OF HOMES  
FLOODED.



**Record  
heat wave**

50 PEOPLE DIED.

# Climate action- a priority.

Montreal Climate March-September 2019



Photograph by  
Juliette Carman

WHY US?



**We have done it before.  
We are ready to do it again.**



Laurence Lavigne Lalonde, executive committee member, City of Montreal

Thank you.

enuf



EMAIL

[Keroles.Riad@enufCanada.ca](mailto:Keroles.Riad@enufCanada.ca)

@CUcompost   