



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY

Waste Management Report

2024

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ZERO WASTE COURAGE TO CHANGE

University of Galway are on a journey to lead the transition to a sustainable future and have identified sustainability as one of four core values in our University Strategy 2020-2025. The Buildings & Estates team play a key role in achieving our goals and sustainable waste reduction and management is a core feature of these efforts.

Waste management is a key priority for students and staff and perhaps the most visible day-to-day environmental issue on campus. Over the years we have worked hard to put in place benchmarks, collect accurate data and start monitoring how we use, recycle and dispose of waste on campus. In line with Sustainable Development Goal 12 (SDG12) we are committed to **responsible consumption & production**.

We are proud to have retained 1st place in Ireland and no. 5 globally in the Times Impact Rankings for SDG 12 in 2023, the second year in a row.

Prior to 2021, our waste data was not presenting a full picture of waste on campus, as it did not include our Canteens and Student Residences, as these are managed by separate companies. However from the start of 2022 we have incorporated these figures to develop a whole of campus picture of the waste usage. As such a large increase in the volume of waste from 2022 onwards will be recorded.

2022 was very much a benchmarking year when the campus returned to full activity after the Covid years.

This report outlines the University's performance in the calendar year 2023, **current policies**, future **initiatives** and **commitments** with regards to sustainable waste management. By improving waste practices and behaviours we aim to conserve natural resources, make cost savings and improve waste awareness amongst our students and staff.

Performance & Progress

A big change in the way we collect data was implemented at the start of 2022. For the first time we included the Student Residences alongside the Caterers and the General Campus. The Student Residences accommodate 1800 students during term and a wide variety of guests during the Summer season. They generate a significant volume of waste and the inclusion of this data has had a big impact on our figures. As of September 2023, we onboarded another 620 bed state of the art accommodation centre in Dun Linn and this will have an impact the waste produced from this day on.

Main Campus (Teaching, Research, Labs & Staff Offices)

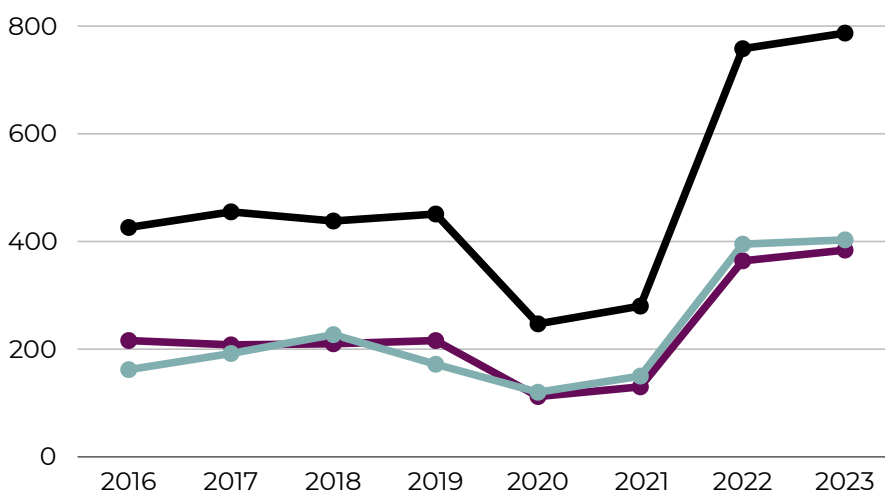
On the main campus, we continue to make progress on our overall recycling rate, having risen to almost 60% in 2023. This exceeded our original targets set in 2019, and illustrates significant progress in the past 5 years. The overall waste volume is back towards pre-covid levels, and we will be working to try to reduce this in the coming years.

General Campus	January	February	March	April	May	June
Waste Recovered	14,311	19,899	19,436	16,368	16,036	13,700
Mixed Recyclables	13,246	10,270	12,282	13,712	11,455	12,535
Glass	2,069	3,308	2,358	1,370	3,509	3,110
Organic / Green Waste	0	0	0	0	0	0
Confidential Shredding	2,360	4,492	2,440	5,600	2,455	4,320
WEEE	540	0	0	600	160	1,460
Total	32,526	37,969	36,516	37,650	33,615	35,125
Recycling Rate	56.00%	47.59%	46.77%	56.53%	52.30%	61.00%

July	August	September	October	November	December	Year To Date	Avg. Monthly Weight
12,459	12,866	19,881	19,724	20,080	13,107	197,867	17,504
12,171	9,072	14,547	13,910	14,752	14,780	152,732	12,378
2,545	2,783	1,204	2,778	2,253	2,771	30,058	2,276
0	0	0	0	8,760	4,820	13,580	0
3,930	2,455	2,730	2,205	1,615	2,085	36,687	3,723
1,800	975	4,526	7,840	1,345	0	19,246	1,604
32,905	28,151	42,888	46,457	48,805	37,563	430,924	35,880
62.14%	54.30%	53.64%	57.54%	58.86%	65.11%	58.55%	

General Campus Waste

Annual weight in tonnes (note - from 2022, residences and restaurants added for the first time)



Total Waste

Total amount of waste produced on campus

Waste to Recovery

General Waste sent to energy recovery facility

Mixed Recycling

Mixed recycling, glass, organic waste & WEEE

Restaurants, Bars & Cafes

Catering partners are required to abide by our Waste Management Policies and track the amount of waste they produce as well as the recycling rate. Each venue must provide for food & mixed recycling bins as well as general waste at a minimum and provide adequate signage. A lot of hard work has gone in to increasing the recycling rate across the bars, cafes and restaurants and this rate has rose 3% again this year, rising to 69% in 2023.

Canteens	JAN	FEB	MAR	APRIL	MAY	JUNE
Waste Recovered	4465	4789	5669	4431	3127	3206
Mixed Recycling	2035	2221	2863	2018	1493	2043
Organic / Food Waste	4361	4739	4588	4251	3678	2958
Glass	154	777	784	587	861	861
Cardboard	840	960	990	740	340	280
Total	11855	13486	14894	12027	9499	9348
Recycling Rate	62.34%	64.49%	61.94%	63.16%	67.08%	65.70%

JULY	AUG	SEP	OCT	NOV	DEC	Year To Date	Avg. Monthly Weight
3630	3504	4936	6283	6172	3441	53,653	4,839
1944	1790	3366	4645	4451	2844	31,513	2,284
5191	4206	4065	5129	5746	3250	52,162	4,485
434	560	580	770	910	420	7,678	576
600	640	860	1350	1030	570	9,200	
11799	10700	13787	18177	18309	10325	145,006	12,183
69.23%	67.25%	64.20%	65.43%	66.29%	66.67%	69.34%	

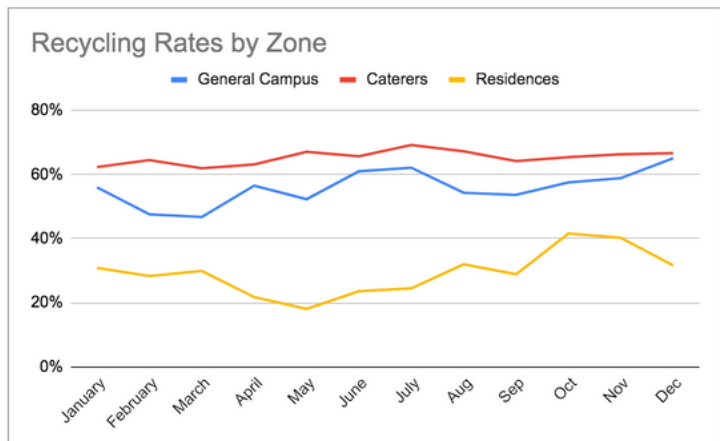
Residences	JAN	FEB	MAR	APRIL	MAY	JUNE
Waste Recovered	7790	10370	10980	11220	15420	6050
Mixed Recycling	2040	2160	1900	1600	1140	1360
Glass	880	1820	2570	1400	2150	390
Organic / Food Waste	560	120	220	120	120	120
Total	11270	14470	15670	14340	18830	7920
Recycling Rate	30.88%	28.33%	29.93%	21.76%	18.11%	23.61%

JULY	AUG	SEP	OCT	NOV	DEC	Year To Date	Avg. Monthly Weight
7880	8960	11064	13477	16532	13405	132,948	10,090
1190	2480	3015	5063	5080	4389	31,417	1,925
1000	340	1078	2002	4081	1386	19,097	1,668
300	1400	404	2535	1989	430	8,318	255
10170	13180	15561	23077	27682	19610	191,780	13,938
24.48%	32.02%	28.90%	41.60%	40.28%	31.64%	30.68%	

Student Residences

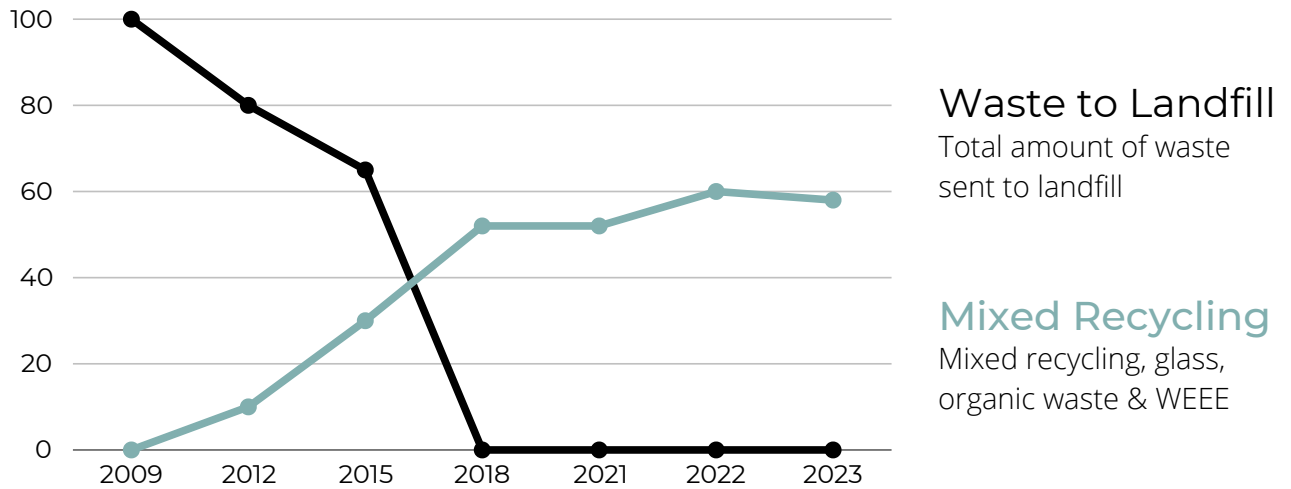
The student residences were included in our overall waste data for the first time in 2022. As can be seen from the figures below, they produce a large volume of waste and unfortunately while there was a slight improvement on last years recycling rate, it is still well below the rest of the campus and due to the significant volume of waste generated by residences, this is dragging the entire recycling rate for the University down. The team at Atalia who manage the residences are working hard on various initiatives to improve this rate and will be collaborating with members of the University CUSP team in the near future to raise awareness amongst student residences there.

Breakdown of Performance by Area/Zone:



Main Campus - Total Recycling Rate

Increase in recycling over the past 10 years (excl. catering & residences)

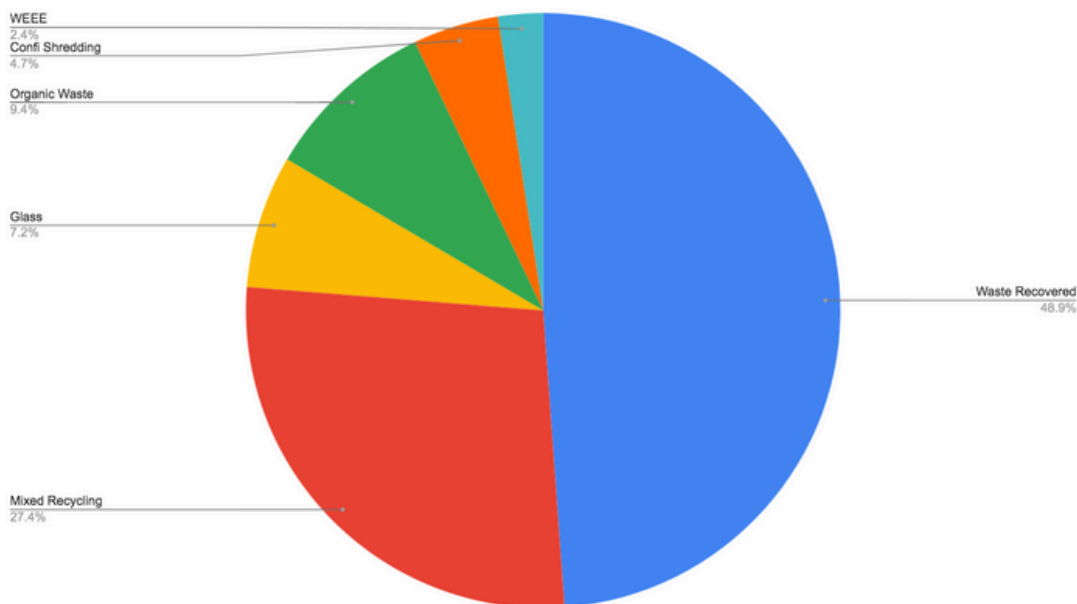


This chart helps illustrate the dramatic improvements that have been made on campus over the past 12 years, when all of our waste on campus was sent to landfill. In that time, we have raised our recycling rate to over 50% and achieved Zero Waste to Landfill status with thanks to our waste contractor Barna Waste.

Waste Composition 2023

Breakdown of Waste Streams

Waste Composition 2023



51%

Our average recycling in 2023

Recycling Initiatives

2goCup: Reusable Coffee Cups



It's estimated that over 15-20,000 disposable coffee cups were being disposed of across the campus restaurants and cafes every year. As most coffee cups are unrecyclable due to their plastic lining, this was having a significant impact on the environment.

Commercial Services introduced a reusable cup scheme in 2022 and it has now been rolled out to all cafes and restaurants on the campus. People will pay an additional fee (30 cents) to continue to use a disposable cup, or they can bring their own reusable cup to avoid the surcharge.

We partnered with the leaders of this movement, 2goCup to introduce this scheme. People can purchase a reusable 2goCup for just €1 and either replace it for a clean one each time they return to the café/restaurant, or exchange it to get their €1 back.

The scheme has proven a huge success and the community has embraced this new initiative

Eliminating all disposal cups from September 2024

Commercial Services have committed to ban the use of all disposable cups from September 2024. As part of this process, self wash stations will be installed in all cafes, bars and restaurants so that patrons can wash their reusable cups.

Say hello to 2GoCup

How Does it Work?

- 1** Deposit €1 for your 2GoCup
- 2** Enjoy your guilt-free caffeine hit!
- 3** Return your empty 2GoCup for your €1 deposit back, **OR** re-order in a fresh 2GoCup

Waste Characterization Study

In February 2024 University of Galway commissioned a Waste Characterization Survey through MKO Environmental Consultants and our waste contractors Barna Recycling. We carry out this survey every two years as an important research project to determine the breakdown of different waste streams that are going into the General Waste stream. This then enables us to take action to divert these streams into the correct recycling stream through on site initiatives and awareness campaigns.



As highlighted on the previous section, the University provides hundreds of dual bin recycling/general waste bins as well as glass recycling stations throughout the campus with the goal of minimising the amount of material going to the general waste scheme. The previous survey highlighted a big increase in coffee cups in the general waste stream. This is in part due to the safety restrictions in place for Covid which meant cafes/restaurants did not accept reusable cups. We also noticed a large amount of health textiles and lab plastics owing to Covid19 mask use and testing devices.

2024 Results

Table 4-2 UG Waste characterisation Results

Waste Category	25/07/2014		17/10/2014		21/10/2016 (Adjusted)		10/02/2022		01/02/2024	
	(kg)	% of Total	(kg)	% of Total	(kg)	% of Total	(kg)	% of Total	(Kg)	% of Total
Organic Waste	21.1	15.5	23.9	14.1	16.3	12.4	17.9	10.8	31.29	17.36
Papers	18.5	13.6	25.2	14.9	16.4	12.5	35.9	21.6	14.59	8.09
Cardboards	5.2	3.8	15.8	9.4	15.65	11.9	8.1	4.9	15.6	8.65
Composites	26.0	19.1	19.2	11.4	13.85	10.5	16.8	10.1	14.78	8.20
Textiles	1.7	1.2	4.6	2.7	2.6	2.0*	3.1	1.9	5.56	3.08
Healthcare Textiles	9.0	6.6	0	0	0	0.0	8.2	4.9	0.14	0.07
Plastics	38.8	28.6	64.1	37.9	46.7	35.5	50.2	30.3	68.92	38.24
Glass	2.2	1.6	3.9	2.3	13.8	7.5	4.9	3	4.25	2.35
Metals	3.8	2.8	3.4	2.0	14.65	1.4	4.1	2.5	11.67	6.47
Special Municipal Waste	0	0.0	0	0	0	0.0	0	0	2.92	1.62
Unclassified Combustibles	3.6	2.6	0.9	0.5	0.2	0.0	1.7	1	0.86	0.47
Unclassified Incombustibles	1.9	1.4	3.8	2.3	0	0.0	0	0	0.28	0.15

The table above compares the results of this years survey with previous surveys.

Analysis

The results are broadly similar to previous surveys however there are a few things that stand out:

- Paper & Cardboard is still a very high proportion of the stream, although paper as a percentage has reduced significantly in 2024
- Organic waste is the single biggest contributor to the general waste stream, and while this was gradually decreasing in previous surveys, it is now increasing (although this may be due to a large amount of ash contained in the sample)
- Plastics are a persistent large proportion of the total, and increased 8% this year
- Coffee cup which make up the majority of the Composites category, remain stubbornly high despite the introduction of the 2GoCup scheme

Conclusion

It is clear further work is to be done to improve recycling efforts across the campus. Cardboard and paper especially should be looked at. The University will soon be banning disposable coffee cups from all outlets which will dramatically reduce this category. More efforts need to be made to reduce use of single used plastics such as bottles and food containers.

CURRENT PROCESSES

Across campus, a huge volume and variety of waste is produced and managed by our internal team and external partners.



General Waste

Our primary waste contractors Barna Waste collect the general waste streams across campus, extract valuable materials at their local processing facility, then ship the remainder to a 'waste-to-energy' facility in Europe. This energy is captured for electricity generation.

Recycling

There are hundreds of mixed recycling bins internally and externally across campus. These are collected and then sorted into cardboard, plastic and glass, before being broken down / baled and shipped to specialist facilities for reproduction into new goods.



At present we provide for organic food waste collection in our canteens, cafes and restaurants. Much of this ends up back at our waste contractor Barna Waste who operate the only large composting facility in the area. A substantial volume of food waste is collected both from the kitchens during preparation and leftovers from customers in the canteens.

Glass & Cans

Glass bottle recycling banks and an aluminium recycling facility are located on South Campus opposite the Orbsen Building and North Campus beside the entrance to Corrib Village. Our waste contractor collects and processes these locally.



WEEE Waste

WEEE (Waste Electrical and Electronic Equipment) is anything that has a plug or a battery and is at the end of its useful life. The B&E team collect WEEE waste across campus. This process allows valuable resources including plastics, metals and glass to be recovered for further use in manufacturing, and ensures hazardous waste is disposed of safely helping to protect our environment.

Hazardous Waste

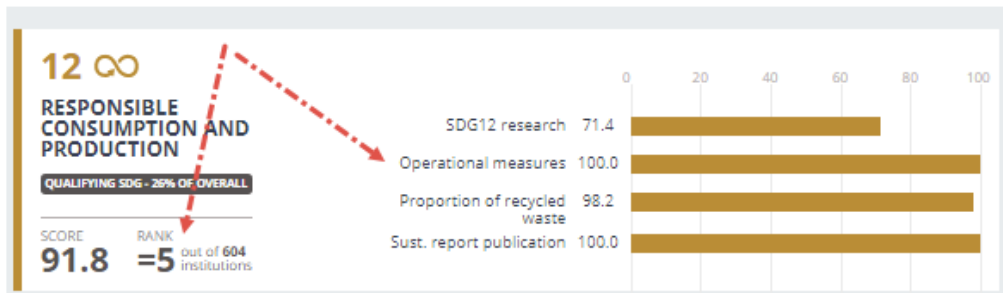
A wide variety of work is carried on across campus, especially in research buildings where different varieties of hazardous waste are produced. As such, each unit uses their expertise and takes responsibility for organising the safe disposal of the hazardous / chemical waste they produce.



Shredding

DGD Shredding are our contractors who facilitate the disposal of confidential material across the campus. Lockable consoles are available in each building where staff can dispose of confidential material. This is collected and processed by DGD at their Limerick facility.

Time Impact Rankings 2023



University of Galway named #1 University in Ireland for sustainable development

The University of Galway retained its position as the number one University in Ireland for Sustainable Development in 2023, rising 13 places from 47th globally to 34th. An incredible achievement. In relation to Waste Management, this falls under SDG 12 - Responsible Production & Consumption. Each year we submit to the Times Impact Survey our waste data and Waste Report, and from this they determine our performance in comparison to over 1400 other universities across the world. We were delighted to be positioned 5th in the world in 2022 for our performance under SDG12, and we retained this position again in 2023.



Show me universities in any country / region offering any subject
 Or, find specific universities by name

Rank	Name	Responsible consumption and production	Overall
1	Western Sydney University Australia	93.4	99.4
2	University of Reading United Kingdom	93.0	90.7
=3	University of Manchester United Kingdom	92.9	97.5
=3	Manchester Metropolitan University United Kingdom	92.9	90.4
5	University of Galway Ireland	92.1	92.6

Read more about the Impact Rankings 2023: responsible consumption and production

STUDENT INSIGHTS

- Top universities in the world for global impact
- Top universities for climate action
- Top universities for tackling gender equality

ACADEMIC INSIGHTS

- Impact Rankings 2023: results announced
- Impact Rankings show stars shine everywhere
- Impact Rankings 2023: Australia and Canada set pace for sustainability

METHODOLOGY:

- Impact Rankings 2023: responsible consumption and production (SDG 12) methodology

We will be working hard to maintain and improve upon this ranking in the coming years, and becoming a global leader in the Responsible Production & Consumption category of the SDGs.

TARGETS

Review of 2022 targets

University of Galway is committed to setting and achieving ambitious targets in terms of waste management. Lets start off by reviewing the targets set out in our 2022 Waste Management Plan:

01

Increase recycling rate to 55% by 2025

While a lot of progress was made since 2010, our recycling rates have plateaued in recent years. Our introduction of new organic waste stream should help us achieve this target.

NEARLY THERE!

02

Incorporate Canteen Waste Data into Reporting

Until now, our waste data did not include the campus catering outlets which produce a significant amount of the overall waste on campus. From 2022 we intend to include this data in our reports to give a truer account.

DONE!

03

Introduce Organic Waste Stream

We plan to introduce a new organic waste stream which will be composted and turned back into fertiliser for our groundstaff to use across campus.

DONE!

TARGETS

Targets for 2024

The following targets we will be focusing on for the year ahead:

01

Recycling at Residences to 40% by 2025

At 27% the recycling rate at our student residences is far too low. We will be working with the management company to introduce new infrastructure and awareness schemes to improve this figure dramatically in the next couple of years.

02

Increase Recycling Rate to 25% by 2025

As the recycling rate on the main campus and restaurants is 60% and 65% respectively, we believe that by improving recycling at the Residences will help us achieve this target in the next two years.

03

Reduce Total Volume of Waste by 5%

We will be working with the catering partners and residences management to explore ways we can reduce the amount of waste across campus through various initiatives

CONCLUSION

The results of the waste data for the entire campus in 2023 show a mainly positive picture, with continued progress in the recycling rates across the Main Campus and Restaurants. A slight improvement was noticed in the Residences but this will be a big focus area over the next year and any improvements there will see a dramatic overall improvement for the total campus figures. The waste characterization survey illustrates that we have more to do in terms of diverting paper, cardboard and plastics to the correct recycling streams.

The University has launched a new Sustainability Office in April 2024, and with this will bring a renewed focus on the waste produced on campus, and hopefully new enthusiasm and resources to introduce new waste reduction and recycling initiatives across the campus. We look forward to working with all stakeholders across campus to continue our improvements

We thank you for your continued cooperation in helping University of Galway to become a world leading green & sustainable campus through responsible waste practices

BUILDINGS & ESTATES

For further information on the details within this report or to discuss how you or your department can help us in managing waste on campus please reach out below.

Michael Wallace
Building & Estates
michael.wallace@universityofgalway.ie