Ollscoil na Gaillimhe
University of Galway

Waste Management Plan

2023

Table of Contents

CONTENTS

INTRODUCTION

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 achieved 1st place in Ireland and no. 5 globally in the Times Impact Rankings for SDG 12 in 2022.

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 across the entire campus. AS such a large increase in the volume of waste from 2022 onwards will be recorded.

Covid19 distorted our figures for 2020 & 2021 with an almost 70% drop in waste produced during the time, but as of 2022 we are now back to normal levels.

This Plan outlines the university's performance, 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.

Main Campus

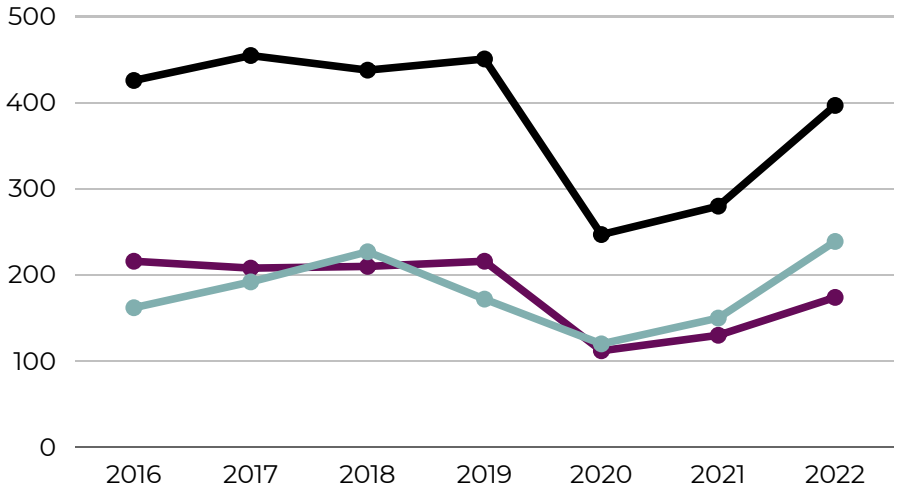
On average, pre-Covid the Main Campus (excluding catering and residences) generated about 450 tonnes of waste a year, of which approx. 50% was recycled and the remaining 50% sent to Waste Recovery. We have been operating Zero-Waste-to-Landfill on campus since 2018. In 2022, despite the campus being back to full capacity, the volume of waste collected is down approx. 13% and we hope that our ongoing initiatives to reduce waste will bring this number down further.

We were delighted to see our Recycling rate on the main campus increase to an average of 60% in 2022, a significant increase on the 52% average over the past few years.

						General Campus - 2022 Data								
General Campus	January	February	March	April	May	June	July	August	September	October	November	December	Year To Date	Avg. Monthly Weight
Waste Recovered	13,247	14,657	16,491	12,684	13,525	13,458	12,871	13,201	17,485	19,069	15,012	12,446	174,146	14,270
Mixed Recyclables	21,926	6,918	8,895	10,684	9,201	7,348	11,218	9,221	13,613	10,324	11,618	6,006	126,972	12,106
Glass	6,376	1,859	2,464	4,682	3,335	2,443	2,987	1,761	1,818	2,464	3,144	2,511	35,844	3,845
Organic / Green Waste	0	0	7,300	0	0	19,300	0	0	0	0	9,650	0	36,250	1,825
Confidential Shredding	2,509	2,048	1,800	2,100	2,035	1,800	1,600	1,745	2,257	2,300	1,970	1,695	23,859	2,114
WEEE	320	135	890	246	1,700	1,155	4,020	2,120	2,310	2,420	440	0	15,756	1,313
Total	44,378	25,617	37,840	30,396	29,796	45,504	32,696	28,048	37,483	36,577	41,834	22,658	397,071	34,160
Recycling Rate	70.15%	42.78%	56.42%	58.27%	54.61%	70.42%	60.63%	52.93%	53.35%	47.87%	64.12%	45.07%	60.11%	

General Campus Waste

Annual weight in tonnes (note - does not include catering venues & residences for which we only have complete data for 2019. Note also significant drop in 2020 due to Covid19)



Total Waste
Total amount of waste producted 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. Awareness campaigns have been organised within venues to encourage students to utilise these bins. The hard work has paid off and the recycling rate across all the restaurants and bars is now a very impressive 66%

	Restaurants - 2022 Data													
Canteens	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Year To Date	Avg. Monthly Weight
Gen Waste	2077	4393	5202	5511	4867	4231	3509	4238	5680	5912	5706	4382	55,708	4,296
Mixed Recycling	3082	4584.5	4824	3441	2816	2398	2611	3194	4209	4408	4100	3845	43,513	3,983
Organic Waste	2105	4293	4872	9586	6980	5980	4579	4103	4002	4200	4318	3603	58,621	5,214
Glass	420	210	210	510	960	417	335	275	332	381	364	297	4,711	338
Total	**7684**	**13480.5**	**15108**	**19048**	**15623**	**13026**	**11034**	**11810**	**14223**	**14901**	**14488**	**12127**	**162,553**	**13,830**
Recycling Rate	72.97%	67.41%	65.57%	71.07%	68.85%	67.52%	68.20%	64.12%	60.06%	60.32%	60.62%	63.87%	**65.73%**	

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 they are a bit behind the rest of the campus when it comes to recycling. There are a number of reasons for this and challenges when it comes to living spaces, but we are committed to improving this figure and many initiatives are in the works to improve this figure greatly in the coming years. We have just launched a new 640 bed student accommodation complex and this will provide a great opportunity to assess and improve the recycling facilities across all residences.

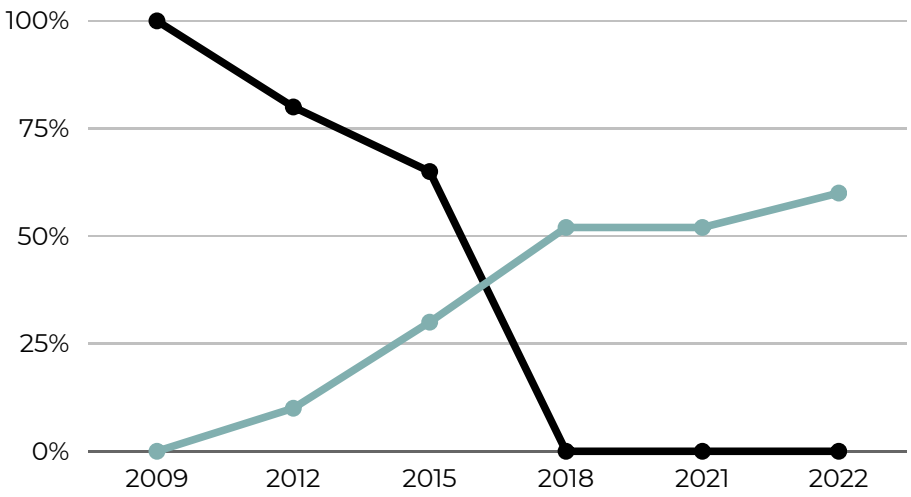
	Residences - 2022 Data													
Residences	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Year To Date	Avg. Monthly Weight
Gen Waste	8870	9170	9010	10260	28560	8820	10500	8530	10350	9250	10330	10240	133,890	9,328
Mixed Recycling	1330	1760	1840	1800	5040	1600	1280	1880	1560	3200	2520	1840	25,650	1,683
Organic Waste	320	710	800	730	180	2680	0	60	170	810	840	270	7,570	640
Glass	1580	1840	2210	1210	1950	540	370	640	750	2120	2120	1130	16,460	1,710
Total	**12100**	**13480**	**13860**	**14000**	**35730**	**13640**	**12150**	**11110**	**12830**	**15380**	**15810**	**13480**	**183,570**	**13,360**
Recycling Rate	26.69%	31.97%	34.99%	26.71%	20.07%	35.34%	13.58%	23.22%	19.33%	39.86%	34.66%	24.04%	**27.06%**	

Our primary goal is to encourage all staff and students to reduce the amount of waste we are generating on site. The graph above shows that the total amount is pretty stable (ignoring for exceptional 2020-21 Covid impact). Prior to Covid, we were approaching a point where mixed recycling was overtaking the general waste stream, and this is something we will be striving to continue in the coming years.

52% Our average recycling in 2022

Total Recycling Rate

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



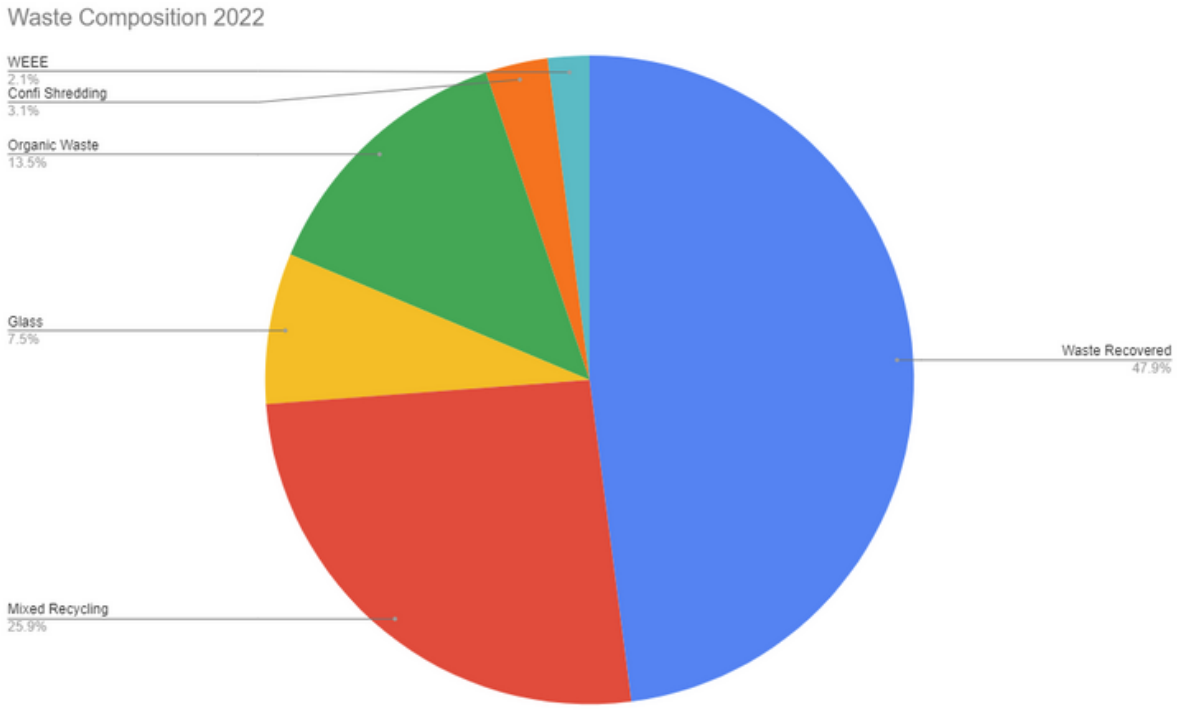
Waste to Landfill
Total amount of waste sent to landfill

Mixed Recycling
Mixed recycling, glass, organic waste & WEEE

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 2022

Breakdown of Waste Streams



New Recycling Initiatives

New Green Waste - Composting Iniative

In 2022 the Buildings & Estates team collaborated with our waste contractor Barna Recycling to set up a new Green Waste recycling stream to collect green waste from our vast 105 hectare campus. This includes all leaves, grass cuttings and hedge trimmings which is valuable composting material. Barna operate the only large composting facility in the region and they also collect food waste from all the restaurants and cafes on campus. They then combine this food waste and our green waste and allow it to breakdown under specialised conditions in order to create a nutrient rich organic fertilizer. This fertilizer is then brought back to the campus for our grounds team to use on new flor and tree bedding instead of imported fertilizer. This creates a fantastic waste circular story.

The Buildings & Estates team were delighted to collaborate with Aurora Leyton, MSc Environmental Leadership and our waste contractor Barna Recycling to document and analyze the impact of this new process and the results were a fantastic video showcasing how this process works and a summary infographic and paper analyzing the process further

.You can watch the video here and the full infographic can be found on the next page.

Recycling Initiatives

Recycling Initiatives

2goCup: Reusable Coffee Cups

Its 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.

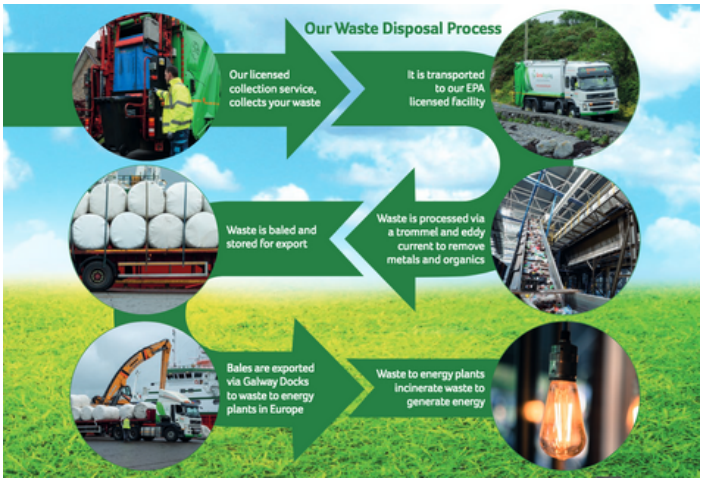
Commercial Services introduced a reusable cup scheme in 2022 and it has now been rolled out to all cafes and restaurants on the campus. People will pay an additional fee (30 cents) to continue to use a disposable cup, or they can bring their own reusable cup to avoid the surcharge.

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

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 restuarants. 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. Locakable consoles are available in each building where staff can dispose of confidential material. This is collected and processed by DGD at their Limerick facility.

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 plateued 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!

04

Develop Waste Policies for Each Stream

At present we lack specific policies around the disposal, reuse or recycling of specific types of waste such as Hazardous Waste. We will work to have these drawn up & implemented by end of year 2022.

IN PROGRESS

TARGETS

Targets for 2023-2024

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

Develop Waste Policies for Each Stream

At present we lack specific policies around the disposal, reuse or recycling of specific types of waste such as Hazardous Waste. We will work to have these drawn up & implemented by end of year 2024.

03

Reduce Total Volume of Waste by 10%

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

04

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.

CONCLUSION

Our second official Waste Management Plan highlights the great work that has been done over the past year, with some exciting initiatives introduced and 2 core Targets being achieved. However we have also realised with the integration of the Student Residences waste data, that we have a lot more work to do and we look forward to tackling these challenges head on over the coming years. We look forward to working with all stakeholders across campus to set and achieve ambitious goals.

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

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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.

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