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Waste Management Strategy 2022 - 2027

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REVISIONS

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It is intended that this document covers the period 2022 to 2027, with annual reviews during that period in order to ensure it maintains relevance and suitability to the goals of the University and its developing estate.

Summary of changes since last review

Initial issue

EXECUTIVE SUMMARY

Resource consumption is a major issue affecting us all. It's a major factor in climate change and loss of habitat and bio-diversity. Waste is a by-product of that resource consumption and the quantity produced can be seen as an indicator of the organisation's attitude and procedures.

Recognising that global and national improvement will only be made with local and individual commitment and action the University is actively seeking to employ operating practices that integrate environmental integrity with a concern for the physical and social fabric of the campus

Demonstrating its resolve to generate real change the University of Hull has made a commitment move towards a sustainable position and a net zero environmental impact, reaffirming the university's desire to take tangible action to contribute towards the urgent need to reverse the climate crisis.

This Strategy outlines how the University of Hull will manage and control the solid waste streams created by its activities across the estate it owns and occupies.

By setting realistic targets and monitoring its progress towards their attainment, the University strives for a continual improvement in its environmental performance and in the knowledge and awareness this engenders amongst students and staff.

This Waste Management Strategy intends to bring structure, a systematic approach and manageability to the whole process of controlling and reducing waste volumes from the University.

University of Hull recognises that it can only undertake effective control of its waste streams if it knows what impacts are being created by its activities and operational practices and those that will be made by future projects. Accordingly creating accurate and accessible data sources will be central to the success if this strategy and in facilitating research and innovation from the wider University community.

Sustainable reductions in waste volumes and more environmentally friendly disposal routes cannot be achieved from a one-off process and the University recognises it will not be instantaneous.

The goals of the University will be met by numerous actions and involve a great number of people. Waste is generated by each individual associated with the University accordingly the process of reducing waste volumes and increasing recycling rates will require action by all of us. Progress will be incremental and require awareness of resource consumption and waste generation being integrated within the day to day activities of all aspects of the University operations.

The management of waste will develop and evolve as the University grows and evolves but through performance monitoring and proactive and collective action continuous and sustainable reductions in waste volumes can be achieved and a low waste culture embedded as the normal operating practice of the University.

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1.0 INTRODUCTION

The University of Hull is committed to operating as a sustainable organisation. We're building on our teaching, research and professional services to achieve this and ensure that the University operates as sustainably as possible.

This is one of the key elements of the University's Strategic Plan with the University proactively working towards ensuring a sustainable future in all areas if the University activities.

The effective management of waste streams is seen as a critical element in achieving the sustainability goals that have been targeted. This document explains how University of Hull intends to manage waste volumes and their disposal and in doing so contribute meeting the University's wider aim to achieve a net zero status.

Fundamental to creating the necessary effective management control are:

- The identification of the sources of waste, the current volumes of waste disposed of and the disposal routes adopted.
- To use this data to establish baselines and implement effective and regular monitoring of waste volumes from all University activities
- To use this knowledge to identify short, medium and long-term waste reduction opportunities that are realistic, achievable, measurable and sustainable.
- Make the data available to the wider University community so as to facilitate research and innovation in waste management and associated technologies.
- To raise awareness of amongst all staff and students of the factors that result in waste being generated and engender changes in attitude and behaviour that support not only reductions in waste volumes but support the wider sustainability objectives.

The aim of this strategy is to provide the framework by which the University of Hull can realise the benefits associated with reducing waste volumes and as a result deliver more people-friendly, efficient and sustainable operating practices facilitating the continued enhancement of the University of Hull brand.

The commitment to achieve a carbon neutral campus by 2027 and operate in an environmentally conscious manner has been made and this strategy aims to set out the methodology to allow the University achieve that goal and establish and embed working methods that continue to promote sustainable and ethically responsible use of natural resources.

2.0 KEY OBJECTIVES AND DRIVERS

The overarching aim of this strategy is to facilitate the effective control and management of solid waste volumes and by doing so enhance the reputation of the University of Hull and contribute to an improved student experience.

The University has recognised the impact of overzealous resource consumption and climate change and the need to adopt more sustainable operating practices.

It would be naive to ignore the fact that the generation of waste and its disposal represents a significant cost to the University. By managing the resources it consumes in the most sustainable manner it can reduce waste volumes and control that expenditure and limit operational costs.

The Environment and the sustainable use of resources now has a key influence on Government policy and legislation. Energy consumption and waste streams are increasingly central elements in legislation and regulatory compliance and therefore must be managed and controlled.

By making data from waste management activities available to the wider University community the intention is to support and facilitate research and innovation and enhance learning opportunities.

Making the University's performance available to all staff and students is a means by which waste management can be integrated into the collective consciousness and become a motivator for behavioural change.

In seeking to reduce waste volumes the widely accepted hierarchy of action will be employed in most cases.



For food, green waste and low-grade wood waste, evidence suggests that the standard waste hierarchy does not present the best environmental solution. In these cases, the following options would be the preferred routes.

- Food Anaerobic digestion has been shown to have a more favourable environmental impact than composting or other recovery options
- Green waste For garden waste dry anaerobic followed by composting is considered better than composting alone.
- Low grade wood Energy recovery options are considered more suitable that recycling.

3.0 CURRENT POSITION

As waste is generated by everybody using the University facilities there will need to be actions taken by all to reduce the volumes.

The basic approach to manage and reduce waste volumes will broadly be;

- Establish robust monitoring processes to clarify the source and magnitude of waste being generated.
- Utilise the data gathered to establish the current position and periodically update the position to stakeholders
- Identify anomalies in usage to be investigated and resolved
- Identify opportunities to reduce waste volumes and implement projects to realise those savings.

The effect on the working environment and operation of the University created by the Covid-19 pandemic means the waste generation and volume of recyclable material collected from the 2020/21 reporting year are thought to be an unrepresentative measure of the University's current position.

The University has therefore adopted the 2018/19 reporting year to be the basis of its waste management baseline and is to use this data set as the starting point for the strategy to reduce waste volumes and against which to measure progress.

Using this waste data, a baseline position has been established for the whole university estate and for the main campus site (the subject of the carbon neutral aim)

	Whole Estate	
Total Waste:	1,059.31 tonnes	
Recycled	203.43 tonnes	

Considering just the main campus the volumes become.

Total Waste:	792.71	tonnes
Recycled	177.54	tonnes (22.4%)

Under the current waste arrangements, no waste from the university goes directly to landfill, all waste is sent either to recycling facilities or to be incinerated for energy production. Our current recycling rate however presents an opportunity for improvement.

The breakdown of Campus waste streams in out baseline year shows the majority being incinerated for energy recovery.

This picture has improved dramatically since this point with figures from the current (2021/22) year showing a much improved recycling rate.



The waste streams not going for incineration all go to be recycled via the appropriate route which results in our total recycling rate now being around 40% of the total waste generated.

This improved picture is however just an intermediate point on the journey, the aim is to achieve a much higher overall rate of recycling.

4.0 ACTION PLAN

Promoting good waste management practices and having visible waste reduction initiatives is recognised as being highly likely to play a meaningful role in engendering sustainable behaviours in staff and students.

The overarching objectives are to reduce the quantity of waste being generated by the University to a minimum and of the waste that is generated work to ensure as much as possible is re-used or recycled.

Aim:

To improve available information.

Actions:

- Track waste volumes on monthly basis to facilitate the identification of trends.
- Report the information biannually
- Use waste data to highlight higher waste generating areas of site.
- Audit general waste content to gauge its make-up and proportion of recyclable material.

Aim:

To reduce food waste volumes.

Actions:

- Investigate where food waste is generated and whether this is prepared on site or is brought in goods
- Encourage reduced price sale of items nearing their best before dates rather than disposal.

Aim:

Increase the re-use of serviceable but unwanted items.

Actions:

- Investigate options to re-use furniture on site and identify obstacles to implementation.
- Investigate opportunities to donate unwanted but sound/ working equipment rather than dispose of it.

Aim:

Target that no waste goes to landfill.

Actions:

- All future waste disposal contracts to specify no waste to landfill but to recycling or incineration with energy recovery
- Investigate options for Green and Food waste to go to anaerobic digestion facilities rather than composting.

Aim:

To increase percentage of waste that is recycled.

Actions:

- Provide guidance notices at each waster station to highlight what can be recycled
- Standardise recycling waste bins across the site.
- In office areas install paper recycling bins.
- Create a Waste A Z guide available to all staff and students that details how different waste items should be disposed of.
- Publicise recycling volumes and encourage staff and students to use recycling bins

Aim:

To maximised re-use and recycling of equipment, components and materials during building alterations.

Actions:

- Specify in project documentation that waste streams created should be segregated for recycling and Waste transfer notes must be provided for all waste movements.
- Ensure re-modelling and refurbishment options are considered prior to demolition.
- Equipment and component sale/donation for re-use should be explored prior to building strip out or demolition
- Waste streams from the demolition or strip out of buildings should be segregated and recycled. Contracts should include financial penalties for waste going to landfill.
- Include Sustainability performance as a key element of contractor selection for and demolition or strip out works.