

CANTERBURY CHRIST CHURCH UNIVERSITY



Facilities department, Estates and Facilities

Waste and Recycling Management Strategy

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Waste and Recycling Management Strategy

Foreword

The university continues to recognise the impact that its activities have on the environment and is committed to maintaining a sustainable approach to our business operations.

We previously reported that at the end of 2015 we were recycling nearly 50% of our waste. Through best practice waste and resource management this increased to 52.46% (up 6.17%) as at July 2016. Although waste has increased slightly overall (2.9%) in the 2015/16 academic year, due to more buildings being brought on-line. None of our general waste was sent to landfill but instead is taken for incineration to produce energy from waste (EfW). We have introduced a food waste collection from a number of key sites and this waste is sent for anaerobic digestion.

We continue to work within our Strategy and Policy documents to ensure that we are legally compliant; observe the Waste Hierarchy and continue to look at ways we can improve our performance.

In the light of the experience we have gained in working closely with the previous waste contractor since January 2013 and new incumbent from July 2016, we have continually reviewed our targets to show realistic and achievable results in the years to come whilst managing to achieve 0% to landfill.

Due to the changes to the global waste market changes in the last three years and the previous supplier's contract ending in December 2015, the decision was made to extend for six months whilst a full re-tender exercise is carried out in the early part of 2016. This process enabled the university to check the market place, see where further improvements could be made whilst still maintaining best value for the services. The contract was subsequently awarded to Countrystyle and the first few months of the contract have been very successful.

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1 Introduction

1.1 Canterbury Christ Church University is a large Higher Education institution with some 1,800 staff and 16,000 students across 3 campuses (Canterbury, Broadstairs and Medway) and the Salomon's Centre near Tunbridge Wells. The University recognises that as an institution of this size it has an impact upon the environment both locally, regionally and nationally and is committed to minimising, within the constraints imposed by financial sustainability, any negative environmental effects from the delivery of its core activities of teaching, research and knowledge exchange.

1.2 The University is committed to sustainable development based on clear key performance indicators to ensure management is focused on key objectives and that waste targets are met. This Waste Strategy, together with the section on sustainable development in the supporting documents of the University Strategic Plan, details the nature of this commitment.

1.3 The University recognises the impact its estates and operations have on the environment and has committed to minimising its environmental impacts in a manner which is sustainable; the university has continued to work through the EcoCampus Environmental Management System (EMS). The EMS has been implemented across the University estate and aims to ensure the University embeds best practice in carbon and environmental management. The University achieved EcoCampus Platinum and ISO14001 in 2013 and held these through the first two annual health check audits in 2014 and 2015. The University has added the retention of the ISO14001 to its strategic objectives and completed a full re-accreditation in early 2016. Responsible and sustainable waste management is considered within the scope of the EMS, in addition to other environmental impacts such as energy and water consumption, carbon emissions, sustainable procurement and biodiversity management. Within the University's commitment to sustainable development, CCCU has clear aspirations to improve waste management performance. Through the University's main waste contract, a recycling rate of just under 50 % has been achieved and the University has set clear aspirations to increase its recycling performance and has achieved zero per cent to landfill.

2 What is Waste?

Waste can be defined as:

"Any substance or object the holder discards intends to discard or is required to discard".

That people (students, staff and visitors) produce waste is a fact of life we cannot change although every effort will be made to reduce, reuse, recycle and recover materials. However, we can change how much we produce, how we manage it and what we do with it. Indeed, managing waste in a sustainable way, optimising recycling and re-use, as well as limiting production, forms a core part of University Environmental Policy to protect the environment.

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- 2.1 This Waste Management Strategy outlines plans to put in place to help us reach our savings targets and the support in place to manage our waste more effectively and explains how everyone (students, staff and visitors) can play a part in ensuring we work together towards a future much less reliant on sending vast amounts of waste to landfill.

3 Waste Streams Assessment

The University Waste streams are categorised as follows:

- DMR – Dry Mixed Recycling.
- General Waste – not suitable for recycling
- Clinical Waste
- Hazardous Waste inc. WEEE
- Food Waste.

4 Vision

In line with the University's Waste and Resource Management Policy (Appendix 4), the University commits to "Managing all waste in a sustainable and responsible manner and to ensuring the continuous improvement of its waste and resource management performance".

These aims will be achieved by:

- Establishing clear recycling and waste prevention targets:
 - Recycle 55% of all waste by August 2017, and 60% by 2018
 - Reduce an additional 5% of our waste generation by 2018
- Continuation of the Waste Management and Recycling Working Group, reporting to Sustainability Strategic Management Group (SSMG) to implement the Strategy from Departments creating the relevant waste streams and to meet termly and to review the Strategy and Policy annually. This is supported by monthly meetings with key stakeholders and the waste management company and termly meetings of the waste and recycling management group.
- Continuing to develop the working relationships between all departments including the Student Building Wardens for H,S&E that will help to implement the Strategy across the campus network.
- Continue the successful provision of student interns to support waste and

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energy management in student halls of residence.

- Providing guidance and procedures on aspects of strategy implementation to all relevant students and staff.
- Working in partnership with the contracted Waste Management Company to ensure optimum performance.
- Undertaking audits of the main waste contractor and periodic internal audits of practices to ensure legal compliance and best practice is achieved and plan corrective actions as necessary.

5 Purpose of the Strategy

This Waste and Resource Management Strategy presents an implementation plan by the University for the Sustainable Management of its waste.

6 Links with Wider Strategies and Initiatives

This Strategy has links with other strategic plans and initiatives such as the University Strategic Plan, EcoCampus Environmental Management System, the Estates & Facilities Strategy, the Environmental Sustainability Policy and the University's Carbon Management Plan.

7 Costs for Sustainable Waste Management

External research and analysis points to the fact that the direct costs of waste management, i.e. the costs incurred through the use of waste contractors, are actually the tip of the iceberg in terms of the 'true' cost to an organisation. Although estimates vary due to specific sectorial and industrial issues, the true costs of waste management are quite staggering for an organisation of the University's scale. Some reports estimate that the actual waste costs can account for up to 4% of turnover which, in the University's case, equates to over £5 million. Other reports suggest that the 'true' costs could be between 5 to 20 times the direct waste costs. Based on the available recent figures, this could equate to between £900,000 and £3.6 million in annual 'wastage'. These values do not include the costs associated with all the University's construction waste, which are also likely to be significant.

Since 2012 Local Authorities have begun charging for municipal waste collections. Councils can legally charge customers for the disposal of household waste which includes waste collected from some areas of the University's estate such as the waste collections from Parham Road Student Village by Canterbury City Council.

Whereas the landfill taxes have steadily climbed since April 2012, the costs of recycling have remained at approximately half that of landfill. In the last year this has changed and is another reason why the re-tender exercise was carried out to ensure best value and to maximise all opportunities.

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8 Education and Reputation

The University recognises the importance of responsible waste management and that developing and implementing the Waste Management Strategy will provide an educational example to staff and students. It will also demonstrate good environmental performance to all University stakeholders.

9 Environmental Performance

The Waste Management Strategy aims to reduce the environmental impacts of resource consumption and maintain zero to landfill in favour of EfW schemes including pollution risks and the release of greenhouse gases and supports the University EcoCampus Environmental Management System.

10 National Waste Strategy

The University Waste Strategy takes account of the Defra Waste Strategy for England 2007 and other related documents and reports. The University Waste Strategy has been developed with its aims and objectives reflecting the growing importance of sustainable waste management and the Waste Hierarchy within England including the governmental pressures for organisations to consider the sustainability of their own waste management.

11 Baseline Data

- a. In order to track past trends and make future predictions it is important to record centrally, information and data on waste generation and management methods including the costs of waste management at the University.
- b. In terms of presenting data production and expenditure data at the time of the Waste Audit in August 2011 it was noted that the University was receiving limited data from many of its waste contractors.
- c. Once the original contract (January 2013) was implemented and the monitoring of data was improved, data section has been developed and updated allowing much more robust reporting at the annual review process.

12 Strategy Timeline and Targets

- a. This Strategy will be implemented over a period of 5 years, in line with the University's Waste Management Contract, from August 2012 – July 2017. Targets are set according to the Waste Hierarchy and take into account short, medium and long term objectives.

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b. CCCU is now in a position to continue to chart progress and have 3 full years to use as a comparison

It remains the responsibility of the Housekeeping team to collect the university waste and place into euro bins located in our waste compounds. These compounds contain euro bins for Dry Mixed Recycling (DMR), General Waste (GTW) and a number also having provision for food waste and glass. None of the University's General Waste is sent to landfill but is shipped to mainland Europe for incineration and energy generation (Energy from Waste - EfW).

For the 13 months ending July 2016 (due to the change of contractor) the overall university waste contract recycling rate stood at 52.46%, this is an increase of the university recycling figures of 6.17% from the previous years figure of 46.29% with a total of 915 tonnes being collected. This shows a 2.9% increase in the weight of waste produced and collected over the previous 12 months. These figures demonstrate that recycling continues to improve and although there is a small increase in tonnage of waste generally, this is mitigated by the creation of the White building on the North Holmes Road site and the launch of the Petros Court accommodation blocks, bringing a further 418 student bedrooms online.

| Waste stream | Tonnage | | |
|---|----------------|---------------|------------|
| | 13/14 | 14/15 | 15/16 |
| General non-hazardous waste & skips | 525.6 | 464.70 | 430.73 |
| Dry Mixed Recycling | 291.9 | 145.70 | 209.45 |
| Glass | 167.1 | 185.71 | 172.86 |
| Food waste | 26.5 | 49.29 | 69.68 |
| Confidential waste paper | 6.2 | 9.37 | 7.66 |
| General WEEE | 28.91 | 20.37 | 7.25 |
| IT Recycling (Since March 2016) | | | 4.32 |
| Personal items – British Heart Foundation | 3.30 | 2.11 | 4.66 |
| Other misc items | 4.6 | 11.17 | 8.39 |
| Total | 1054.11 | 888.42 | 915 |

c. The following is the associated timescale for implementation:

Short Term - The focus will be on increasing recycling and recovery rates and introducing re-use options. This will be done through:

- continuing the established key roles and responsibilities for the Housekeeping & Waste Manager and the Waste and Recycling Management Working Group.

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- Establishing and maintaining an effective training and support programme for the staff supporting the Strategy.
- continually analysing the facilities to maximise recycling across the campus network.
- utilising the internal and external auditing to effectively monitor and report into the Sustainability Strategic Management Group.
- Initiating and reviewing the waste and recycling awareness and engagement campaign with students and staff.
- continually measuring the waste contract and looking for any measures that can boost recycling and recovery rates through the use of technologies such as Materials Recovery Facilities and Energy from Waste.
- Producing procedures and guidance for key staff members
- Undertaking annual audits of internal and contractor performance

Medium Term – The focus will be on improving performance on the waste hierarchy. This will include:

- Promoting waste minimisation alongside recycling as part of a behaviour change campaign.
- Establishing effective waste prevention measures as part of the University Sustainable procurement process.
- Investigating novel solutions to increase recycling rates.
- Reviewing and introduction of appropriate waste management technology to maximise waste minimisation, recycling and recovery options
- Due to Estates Master Plan over the coming few years, there could be significant construction waste. Plans will need to be considered for this project.

Long Term – the focus will be on:

- To conduct contract review and waste audit across the campus network.

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13 University Legal Register

The University has complied and maintains an Environmental Legal Register as part of its commitment to EcoCampus. All relevant waste management legislation is outlined within the Register. The Register contains details for each listed piece of waste legislation, operational controls, any relevant licenses or consents required, identifies responsible persons and any staff training requirements. The Waste Management Register is maintained by the University's Facilities Department and is reviewed annually by the University's EcoCampus Implementation Team.

14 Monitoring, Reporting and Targeting

The University commits to ensure that where possible it will accurately measure and monitor its waste and performance. We will report upon the following:

- Total quantities of wastes being collected,
- Breakdown of materials (waste streams) being collected,
- Quantity of materials successfully being recovered and/or recycled,
- Quantity of materials sent to landfill,
- Quantity of materials being disposed of elsewhere via energy from waste facility or from composting,
- Waste management costs,
- Carbon emissions associated with disposing, recovering or recycling the generated wastes.

Based on the data collected the University will:

- Target any high production areas for waste prevention and re-use initiatives, seeking additional specialist advice where necessary.
- Verify charges and rebates against actual waste disposal tonnage information.
- Produce accurate Waste Management Data Reports to be presented to termly to the Sustainability Strategic Management Committee through Waste and Resource Management Group.
- Monitor and report monthly the performance of waste management contractors to the Waste and Recycling Management Working Group
- Optimise on-site and off-site waste management options

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15 Waste Management Options, Infrastructure and Technology

- a. The Waste and Recycling Management Working Group reporting through to the Sustainability Strategic Management Group will prioritise the use of a high performance contract that utilises technologies such as Material Recovery Facilities, Anaerobic Digestion and Energy from Waste Facilities to boost recycling and recovery rates.
- b. As the Strategy is implemented and reviewed a range of onsite strategic, infrastructure and technological options will be considered alongside the use of off-site technology. This will include the following:
 - The University Sustainable Procurement Policy to reduce potential for waste relating to the procurement of goods.
 - Application of 'End of Waste' solutions.
 - Re-use schemes for unwanted goods such as furniture, computers, books and clothing.
 - Take back schemes for WEEE and Batteries.
 - Adoption and promotion of business practices and policies such as the use of electronic resources, electronic administration and procurement, double side printing, supply of carrier bags and other disposable goods.
 - Waste prevention and re-use awareness campaigns.
 - The use of bailers, compactors onsite composting and other offsite technologies in order to promote self-sufficiency and increase the value of rebates.
 - Periodic review of best available technology and a partnership approach with the incumbent waste contractor in order to improve performance on the waste hierarchy.

16 Training and Guidance

The University will continue to undertake a waste training needs analysis and provide the ongoing required waste management training and development, staff inductions, guidance documents and procedures for relevant key stakeholder staff. The University also engages with its contractor in delivering regular "toolbox talks" across the campus network to ensure a consistent message is being delivered and to ensure that the message is not lost.

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17 Consultation and Communication

The Waste and Recycling Management Working Group will through the Sustainability Strategic Management Group:

- Develop and promote a communication policy to all University stakeholders in relation to Waste Management performance.
- Publicise this policy on the University Sustainability Development web pages.
- Work with others at local and national level to promote and develop waste management environmental good practice.

18 Operational Action Plan

The Action Plan is attached as Appendix 4 and identifies SMART key performance indicators (KPI's) that will be reported termly to the Sustainability Strategic Management Group through the Waste Management and Recycling Working Group.

Appendices:

1. Waste Streams Across the Campus Network with Key Staff with Waste Management Responsibilities
2. Waste Management and Recycling Policy