

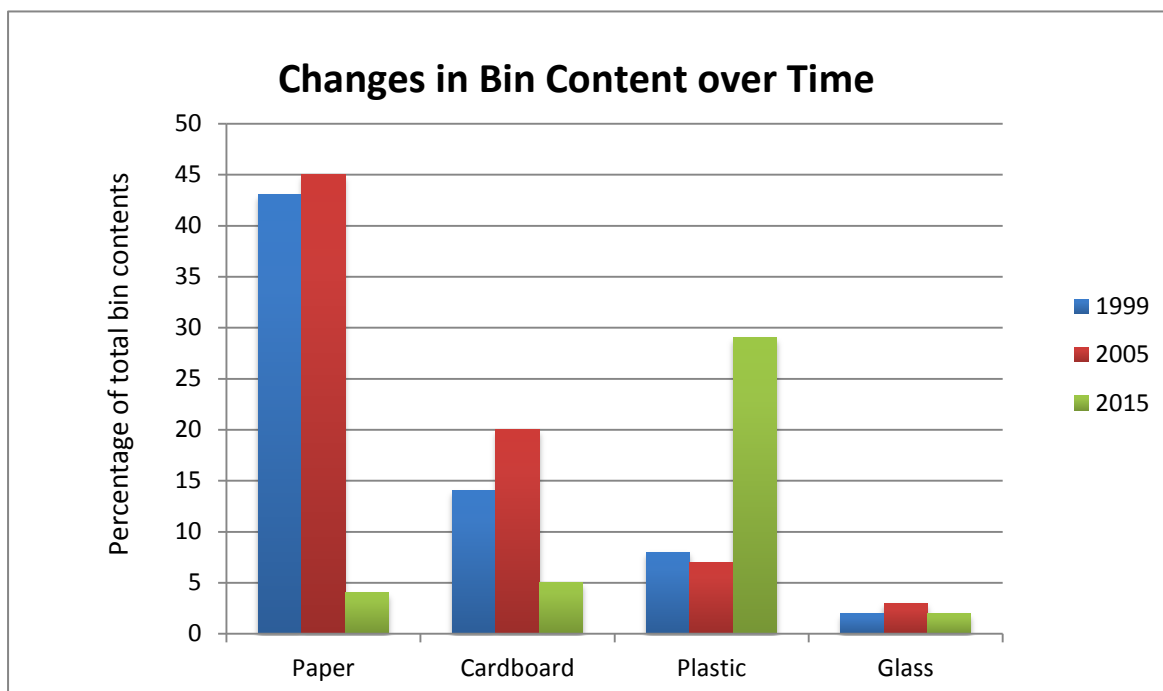
## Waste Audit Report – Key Findings

In December 2015, a waste audit was organised by the [Living Laboratory for Sustainability](#) to gain an understanding of what is going into our waste. The project followed up a longitudinal study and involved surveying a sample of the types and quantities of waste being disposed of via the University’s landfill bins. It was conducted by a group of ten students, Dr Edmund Tanner from the Department of Plant Sciences and members of the Environment and Energy Section. The main findings are below.

### Changes in bin composition over time

#### Recyclable waste

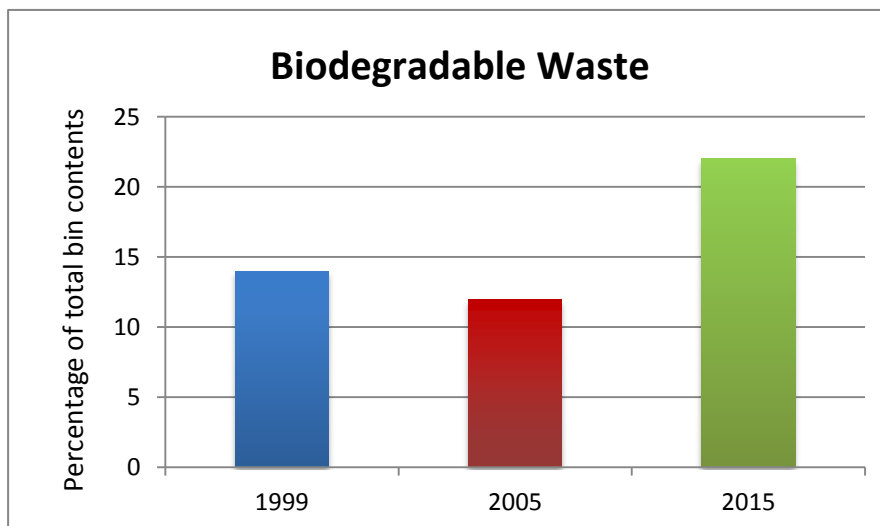
- The longitudinal study enabled a comparison of departmental waste composition between 1999, 2005 and 2015, as shown in the graph below (fig.1)
- Paper disposal showed a particularly positive result
  - The quantity of paper in the trade waste bins declined from 45% of the total waste output in 2005 to 4% of the total waste output in 2015
  - This suggests increased levels of paper recycling and, possibly, reductions in paper usage
- Cardboard disposal showed a marked improvement, comprising 20% of landfill waste in 2005 to just 5% in 2015
- Plastic disposal increased from 7% of waste in 2005 to 29% in 2015
- Glass has been a consistently minor component of general waste



**Fig.1:** Presence of different materials in bins of 1999, 2005 and 2015, as percentage of all waste

## Biodegradable waste

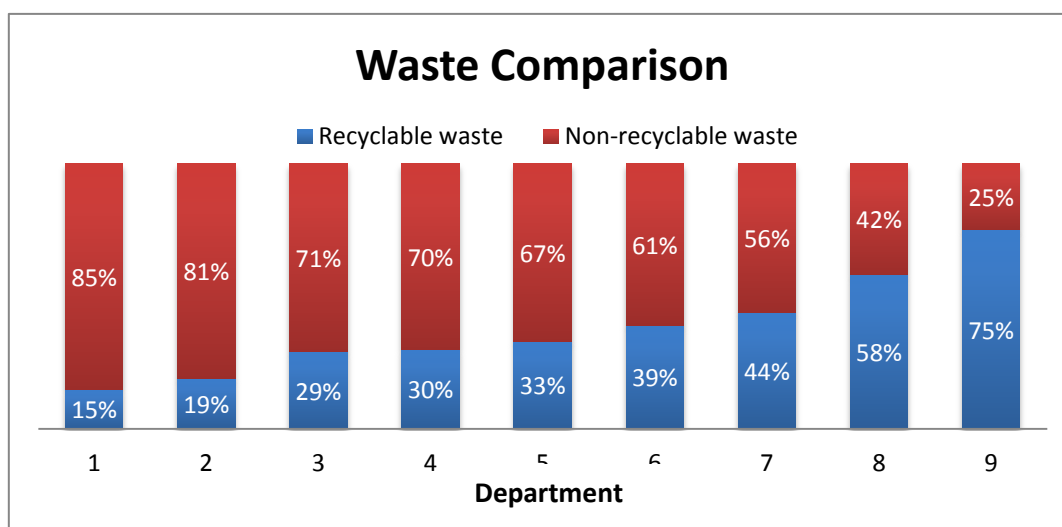
- The quantity of biodegradable waste has increased over time, from 12% of total waste in 2005 to 22% in 2015 (see graph below; fig.2)
- This is significant because biodegradable waste can now be disposed of in separate food waste bins, which are sent to an anaerobic digestion plant



**Fig.2:** Levels of biodegradable waste in general waste bins, in 1999, 2005 and 2015

## Differences between departments

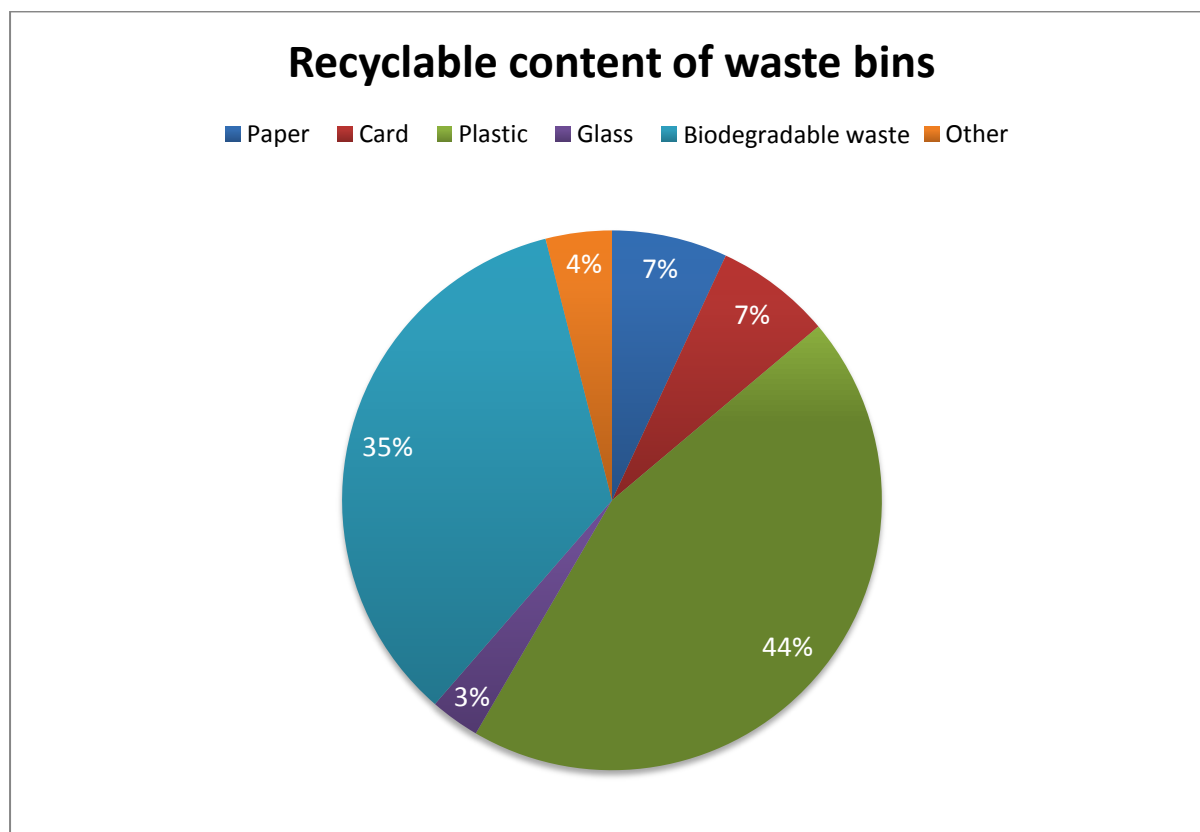
- The levels of recyclable waste in the general waste bins varied greatly between departments, ranging from 15% to 75% of their total waste
- The graph below shows the disparity between departments
- Overall 42% of the bin contents could have been recycled



**Fig.3:** Levels of recyclable and non-recyclable waste across a sample of 9 departments, 2015

## Breakdown of 2015 bin contents

- Of all recyclable material in the landfill bins, 44% was plastic (see chart below; fig.4)
- 35% of the waste was biodegradable, which could now be put in the food waste bin, if a department requests a food waste bin to be provided



**Fig.4:** Relative levels of different recyclable materials found within the trade waste bins

## Recommendations

- Having made dramatic improvements in the quantity of paper and card sent to landfill, departments should now focus on plastic recycling to reduce unnecessary waste further
- Food waste should be disposed of in a separate bin (for anaerobic digestion) rather than the general waste bin (departments will need to request this from [Facilities.Management@admin.cam.ac.uk](mailto:Facilities.Management@admin.cam.ac.uk))
- **Top ways of raising recycling rates include:**
  - Providing a high number of large, accessible recycling bins
  - Locating waste and recycling bins next to each other, so users have a choice
  - Ensuring different bins are distinctly and consistently coloured
  - Labelling bins and using posters to avoid confusion
- The Energy and Environment Section ([www.environment.admin.cam.ac.uk](http://www.environment.admin.cam.ac.uk)) can provide support and materials, including departmental waste audits, posters and further information, to help improve recycling within the departments