Barnsley, Doncaster and Rotherham Waste Partnership Joint Waste Board Meeting – 1 July 2016

Barnsley, Doncaster and Rotherham Waste Partnership Joint Waste Board Meeting Council Report

Waste Compositional Analysis Report

Is this a Key Decision and has it been included on the Forward Plan?

No it is not a key decision.

Strategic Director Approving Submission of the Report

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Report Author(s)

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WASTE COMPOSITIONAL ANALYSIS REPORT

A Waste Compositional Analysis (WCA) looks at the type of waste that is left in the residual black bin. It is used to analyse what residents are throwing away and helps the waste management teams plan how to manage this material. The 3 Councils receive an income from some of the recyclates and this helps to offset the costs of the service.

In 2009/10 a waste compositional analysis was conducted across Barnsley Doncaster and Rotherham Council's, the data from which was used to feed into technical models used in the planning and development of the BDR Waste Treatment Facility. The waste composition can affect the performance of the facility; for example the more recycling that is available in the waste the more material there is available for the Mechanical Biological Treatment process to remove and present to the market for recycling.

Changes the authorities make to their collection service can affect the composition therefore the performance of the facility. The WCA can also be used in planning waste education programs, for example if there was a large amount of glass in the residual waste stream a campaign could be implemented targeting glass waste

WCA have been completed in 2009/10, 2014/15 and 2015/16, WCA are normally conducted twice in per year to take into account changes in seasonality. The 2015/16 data below is anecdotal data only as we are still awaiting the results for part two of the analysis.

Figure 1

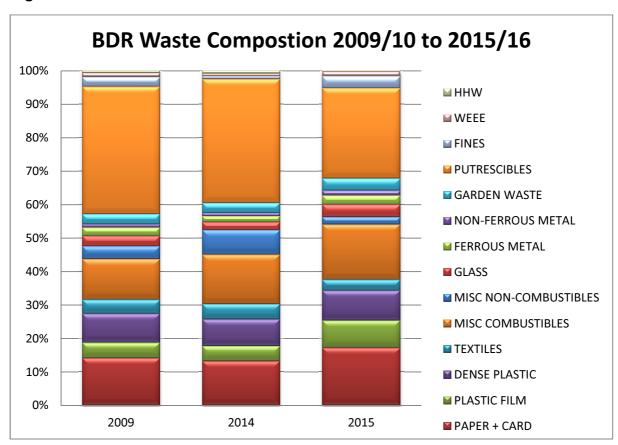


Table 1

% PRIMARY WASTE CATEGORIES	2009/10	2014/15	2015/16
PAPER + CARD	14.12%	13.25%	17.20%
PLASTIC FILM	4.59%	4.47%	8.16%
DENSE PLASTIC	8.66%	7.99%	8.95%
TEXTILES	4.20%	4.59%	3.24%
MISC COMBUSTIBLES	12.13%	14.75%	16.52%
MISC NON-COMBUSTIBLES	3.87%	7.37%	2.20%
GLASS	3.07%	2.35%	3.73%
FERROUS METAL	2.50%	1.76%	2.74%
NON-FERROUS METAL	0.97%	1.01%	1.47%
GARDEN WASTE	3.04%	2.96%	3.62%
PUTRESCIBLES	38.05%	36.96%	26.94%
FINES	2.88%	0.86%	3.54%
WEEE	1.24%	0.76%	1.39%
HHW	0.68%	0.92%	0.30%
TOTAL	100.00%	100.00%	100.00%

Figure 1 and Table 1 show the average waste composition for the three authorities in 2009/10, 2014/15 and anecdotally 2015/16 (after phase one of the survey).

It can been seen that there is still a high percentage of paper and card being put into the black bins that could potentially be collected and generate an income.

It is also evident that food waste is reducing, the remainder is treated by the MBT and the dried material (fines) is processed in the Anaerobic Digestion plant producing gas and compost like output.

Figures 2,3 and 4 below the changes in composition between 2009/10 and 2014/15 by authority.

Figure 2

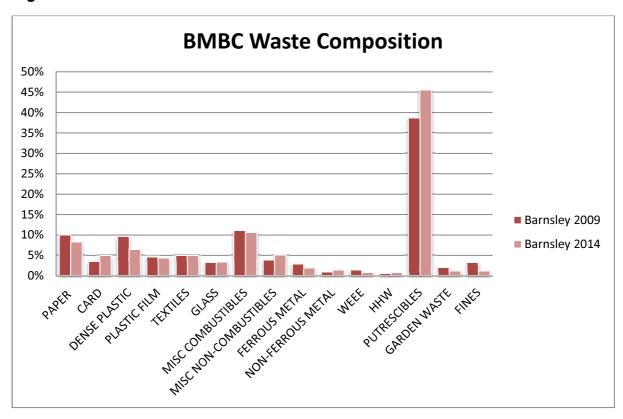


Figure 3

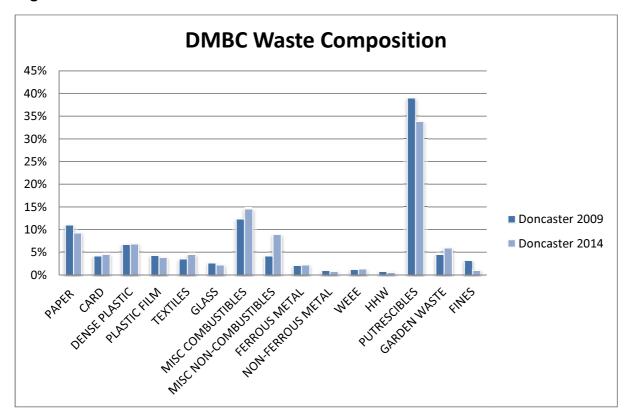


Figure 4

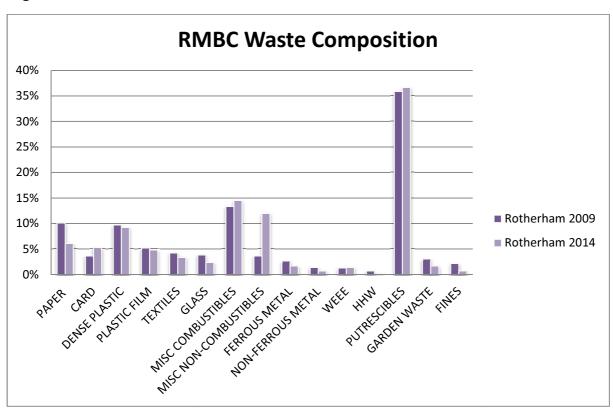


Figure 5 illustrates the change in KG per Household per year based on the compositional analysis.

Figure 5

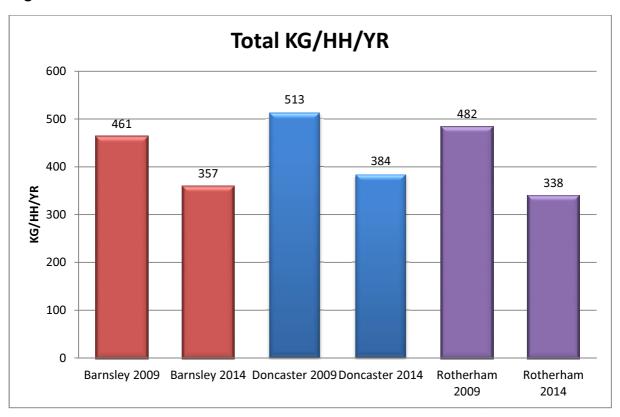


Table 2 Percentage waste reduction

Barnsley	23%
Doncaster	25%
Rotherham	30%

Figure 6

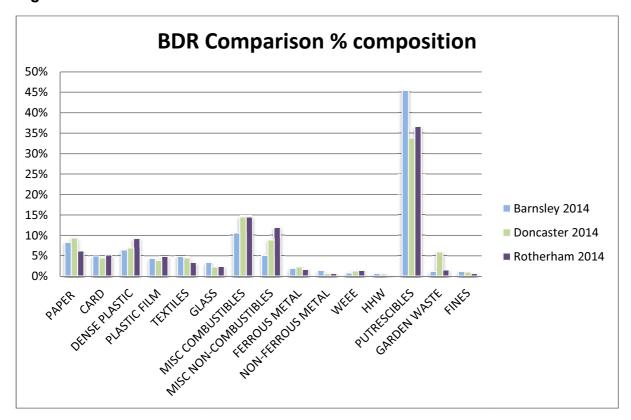


Figure 7

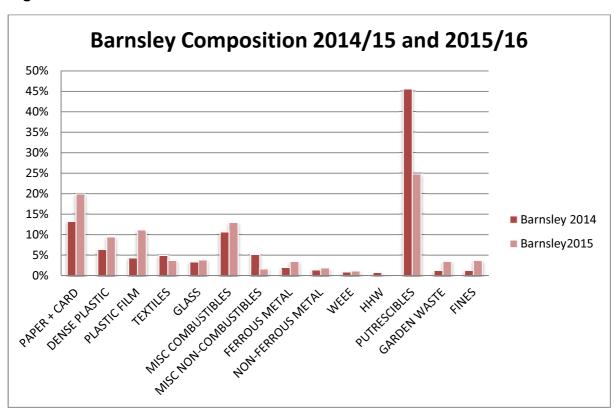


Figure 8

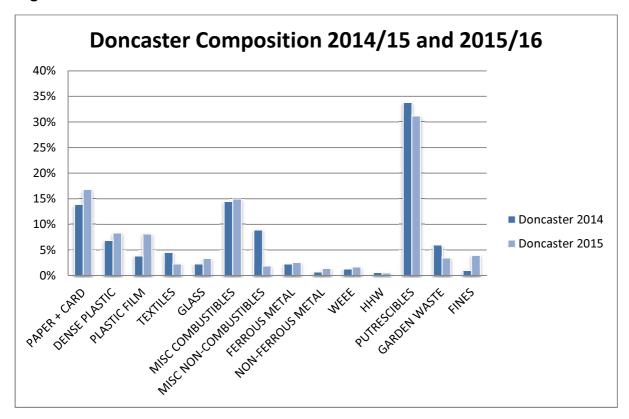


Figure 9

