

Composition and re-use potential of household bulky waste in the UK

WRAP has undertaken research to understand the composition of bulky waste in order to identify the barriers and opportunities for the re-use of bulky items across the UK. The research recorded all bulky waste, including WRAP's priority materials of WEEE, textiles and furniture, disposed of via local authority kerbside bulky waste collections (BWC) and at Household Waste and Recycling Centres (HWRCs).

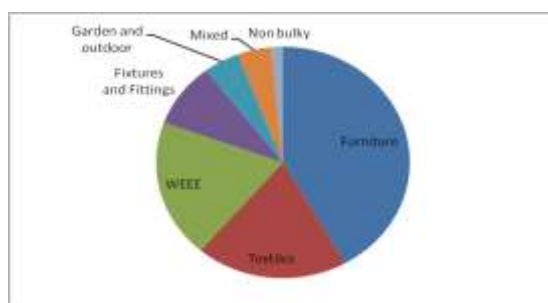
The research identified that products such as sofas, mattresses and beds are more commonly disposed of using local authority bulky waste collection services, and that televisions, wardrobes and carpet are more likely to be taken to a HWRC. The research also found that there is often the potential to re-use items thereby removing them from the waste stream.

The research recorded all bulky waste by analysing call centre logs for bulky waste kerbside collections, compositional analysis of kerbside collected bulky waste for re-use potential, and surveying individuals depositing bulky items at HWRC's. Bulky waste items included WRAP's priority materials of WEEE, textiles and furniture. The legal definition of bulky waste was used^[1].

How much bulky waste is there in the UK?

- UK estimates derived from WasteDataFlow (WDF) suggest that during 2010/11 (circa) 1,590,000 tonnes of bulky waste was collected at the kerbside or taken to HWRCs.
- Approximately twice as much bulky waste was taken to HWRCs (1,050,000 tonnes) than was collected at the kerbside (540,000 tonnes).
- Of all bulky waste in the UK around 42% consists of furniture, 19% textiles and 19% waste electrical and electronic equipment (WEEE).

Figure 1: Breakdown of all bulky waste in the UK



- These estimates equate to around 670,000 tonnes of furniture and 310,000 tonnes each of textiles and WEEE disposed by householders in the UK annually.
- Bulky waste collections account for 2.5% of all household materials collected at the kerbside, which is an equivalent of an average of 20 kg/hh/yr.
- Bulky items accounted for 17% of all throughputs at HWRCs, which is equivalent to around 39 kg/hh/yr.

It is worth noting that for the purposes of this study, textiles include mattresses and WEEE does not include retailer reverse logistics (retailer collections from the home).

Are there any differences between items taken to a HWRC and set out for a kerbside bulky waste collection?

The range of bulky items set out for collection at the kerbside is narrower than that which is taken to HWRCs. This is likely to reflect both the nature of local authority collection policies (many do not collect DIY-type waste) and the difficulty

of transporting large items, such as sofas and mattresses, to the HWRC. Bulky items such as dining chairs and microwaves however can more easily be transported to HWRCs.

The most common bulky items taken to the HWRC are televisions, wardrobes and carpets. The most common items set out for collection at the kerbside are sofas, mattresses and beds.

See Figure 2 (below) for a graph showing the estimated weight of bulky waste in the UK.

What is the re-use potential of bulky waste in the UK?

Of bulky items taken to a HWRC, 36% were judged to be re-usable by householders. The surveyors estimated that across all types of items 32% (by weight) of bulky items were re-usable in their current condition: Slightly lower than the estimate of the householders.

However, this increased to 51% if items requiring slight repair (but in otherwise good condition) were taken into account. This suggests that just over half of all bulky items taken to HWRCs are re-usable. Householders stated that nearly 80% of items were undamaged by their journey to the HWRC.

For items collected via bulky waste collections, surveyors estimated that across all types of items 24% of bulky items were re-usable, with a further 16% assessed as re-usable with slight repair.

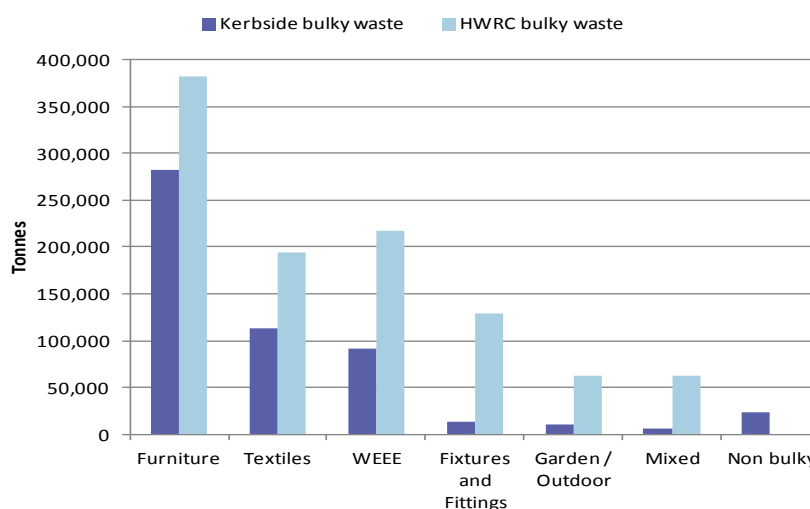
Are there any demographic differences in bulky waste arisings?

- More ACORN[2]. Category 2 households set out textiles (mainly carpets and mattresses).
- More ACORN Category 1 'Wealthy Achievers' households set out WEEE.
- More ACORN Category 2 'Urban Prosperity' and ACORN Category 5 'Hard Pressed' households set out non-bulky items for collection in the kerbside bulky waste service
- Similar proportions of furniture were set out by all ACORN households.
- Differences not evident based on geographic location.

[1]<http://www.legislation.gov.uk/ukxi/2012/811/contents/made>

[2] ACORN (acronym for A Classification Of Residential Neighbourhoods) is a geo-demographic information system categorising some United Kingdom postcodes into various types.

Figure 2: Estimated weight of bulky waste in the UK



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