

Warwickshire Waste Partnership

15 June 2022

HWRC Waste Composition – Residual Waste

Recommendations

- (1) The Waste Partnership is asked to note the overview of the recent Household Waste Recycling Centre (HWRC) waste composition analysis and to consider how this information can be used to improve waste management across Warwickshire.

1.0 Background

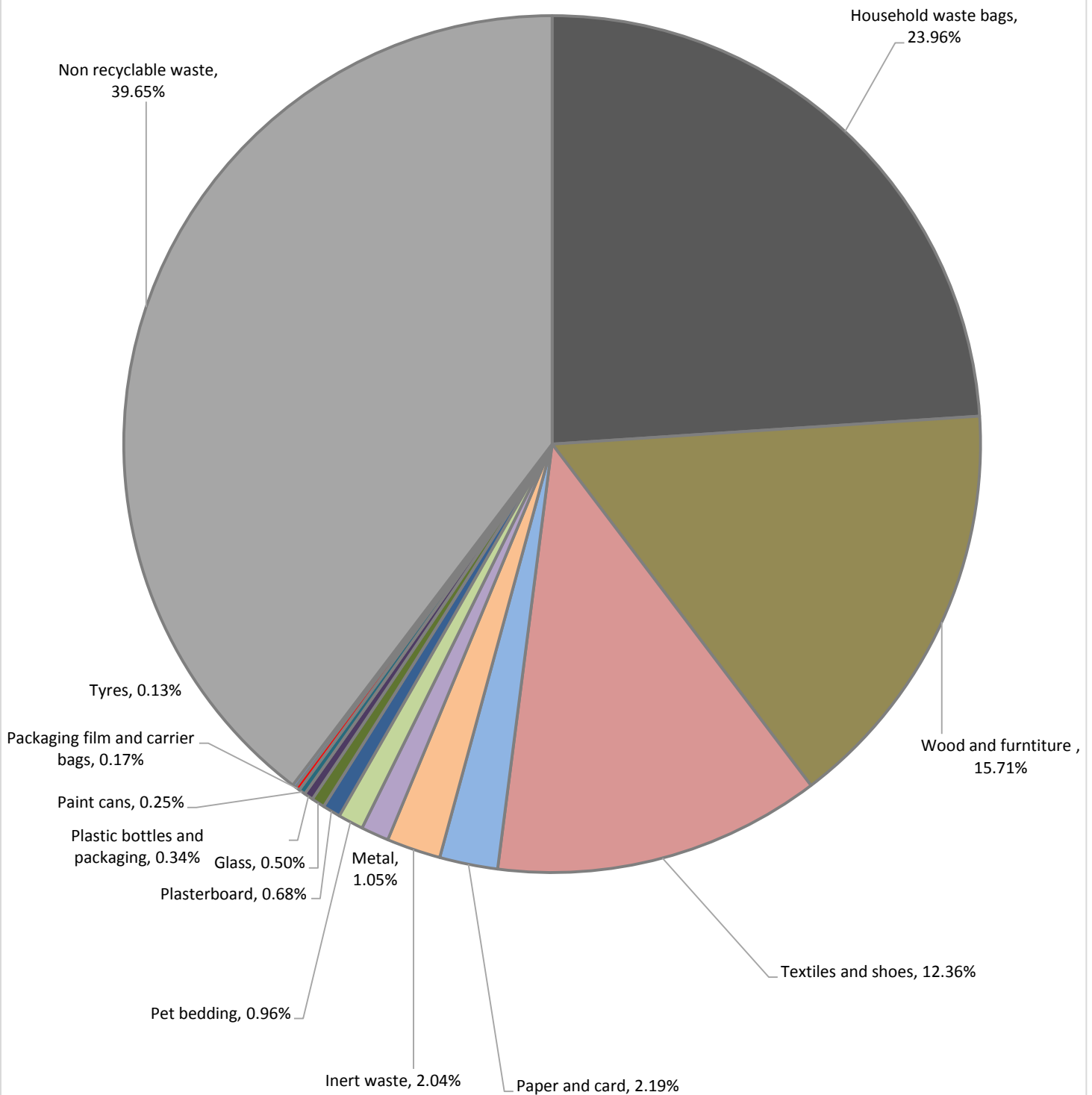
- 1.1 Warwickshire County Council commissioned a HWRC waste composition analysis to take place in March 2022 on behalf of the Partnership, using the same method as previous waste composition surveys.
- 1.2 This report focuses on the composition of HWRC residual waste.
- 1.3 Residual waste from the HWRCs was sampled at Lower House Farm, Hunters Lane, Princes Drive and Burton Farm.
- 1.4 The key aim of the waste composition analysis is to understand the waste composition in Warwickshire and to provide information which could be used by the Partnership when planning future services and campaigns etc.

2.0 HWRC Residual Analysis Overview

- 2.1 The HWRC residual waste was sorted in a number of ways.
 - Firstly, any black bags potentially containing general household waste were removed from the skip and then the contents of the residual skip were sorted.
 - Secondly the total amount of bagged household waste was weighed, and the contents of the household bags were sorted to provide data on the composition of the household bags.
 - Finally, the data was combined to give an overall composition of residual waste being disposed of at the HWRCs.

3.0 Materials in residual skip & quantity of household waste bags

Chart 1 Average contents of the materials loose in the residual waste skip and the household waste bags %



- 3.1 Results from the survey showed that in 2022 the level of bagged household waste ranged between 18.09% at Burton Farm and 32.46% at Lower House Farm. The average bagged household waste over all four sites for the last four waste composition surveys is provided in the table 1. The number of black bags in the residual waste skip at the HWRCs has increased over the years.

Table 1 Percentage of household bags and loose material in the residual skip

	2016	2017	2018	2022
Household bags	8%	11%	18%	24%
Loose materials	92%	89%	82%	75%

Loose materials in the residual waste skip

- 3.2 Taking the average data from across all four sites the recyclable materials with the highest percentage in the residual skip after the bagged household waste was removed for the last four waste composition surveys are provided in table 2.

Table 2 Top recyclable materials in the residual skip

Materials	2016	2017	2018	2022
Paper and card	7%	2%	1%	2%
Textiles and shoes	14%	7%	5%	12%
Wood and furniture	12%	27%	14%	16%
Rubble and bricks	6%	11%	3%	2%
Metal	2%	4%	3%	1%
Organics	4%	5%	2%	1%

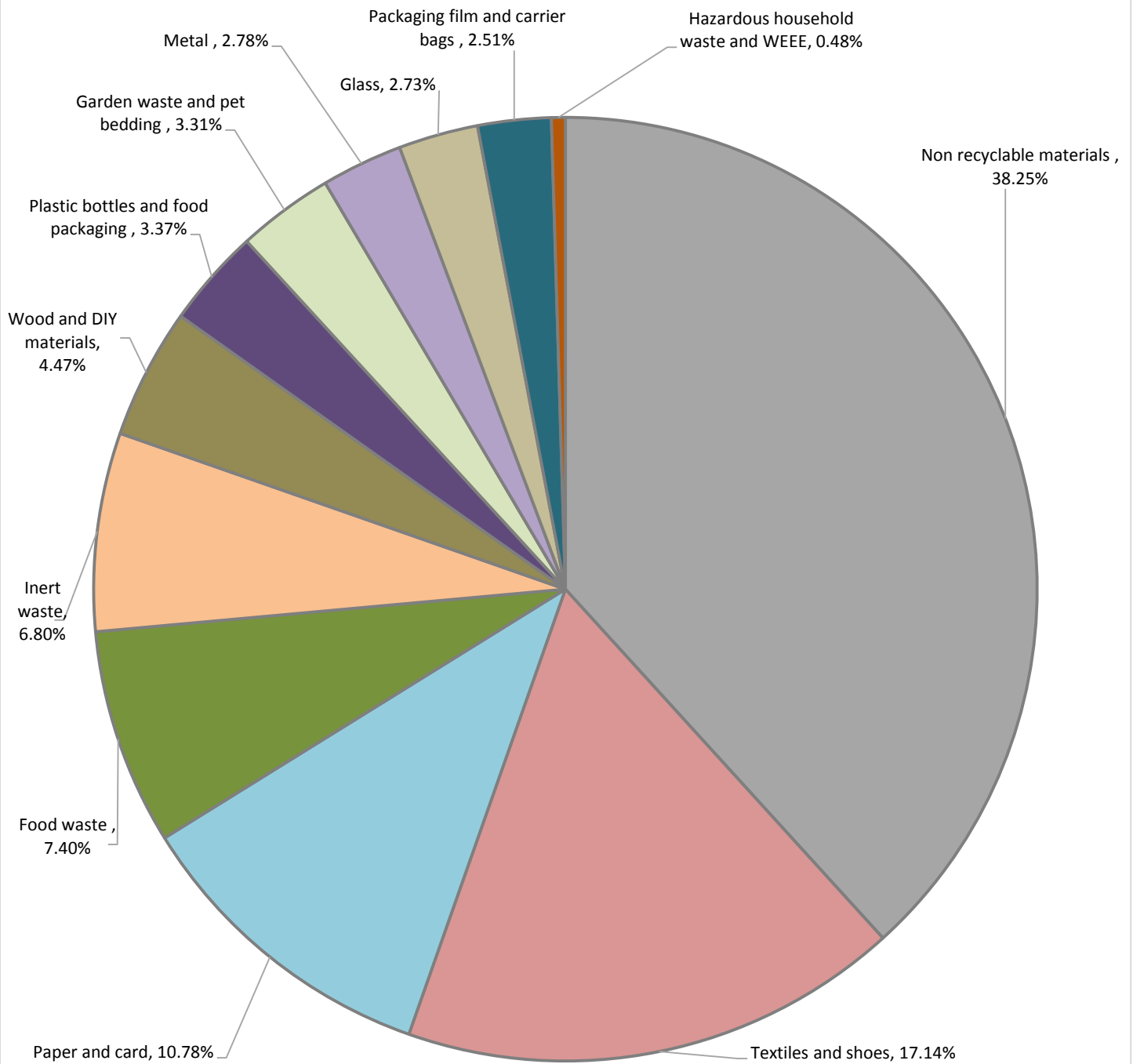
- 3.3 Using the average data across all four sites the amount of all recyclable material in the residual waste skip (not including the household bag contents) is provided in table 3. The amount of recyclable materials in the residual skip is down on previous years.

Table 3 Recyclable materials in residual skip

	2016	2017	2018	2022
Kerbside Recyclable	28%	18%	3%	4%
Site Recyclable	24%	43%	27%	32%
Total Recyclable	52%	61%	30%	35%

4.0 Household waste bags

Chart 2 Average contents of household waste bags in the residual waste skip



4.1 Compositionally, bagged household waste is different to the rest of the material in the residual skip, with a wider range of recyclable materials present. Taking the average data from across all four sites the recyclable materials with the highest percentage in the bagged household waste for the last four waste composition surveys years are provided in table 4.

Table 4 Top recyclable materials in the household bags

Materials	2016	2017	2018	2022
Paper/card	16%	15%	9%	8%
Textiles	6%	3%	7%	17%
Plastic	4%	6%	4%	6%
Metal	3%	6%	3%	6%
Garden & organics	0%	2%	18%	3%
Food	27%	28%	16%	7%
Rubble and Plasterboard	0%	1%	1%	7%
Wood waste	3%	1%	0%	4%

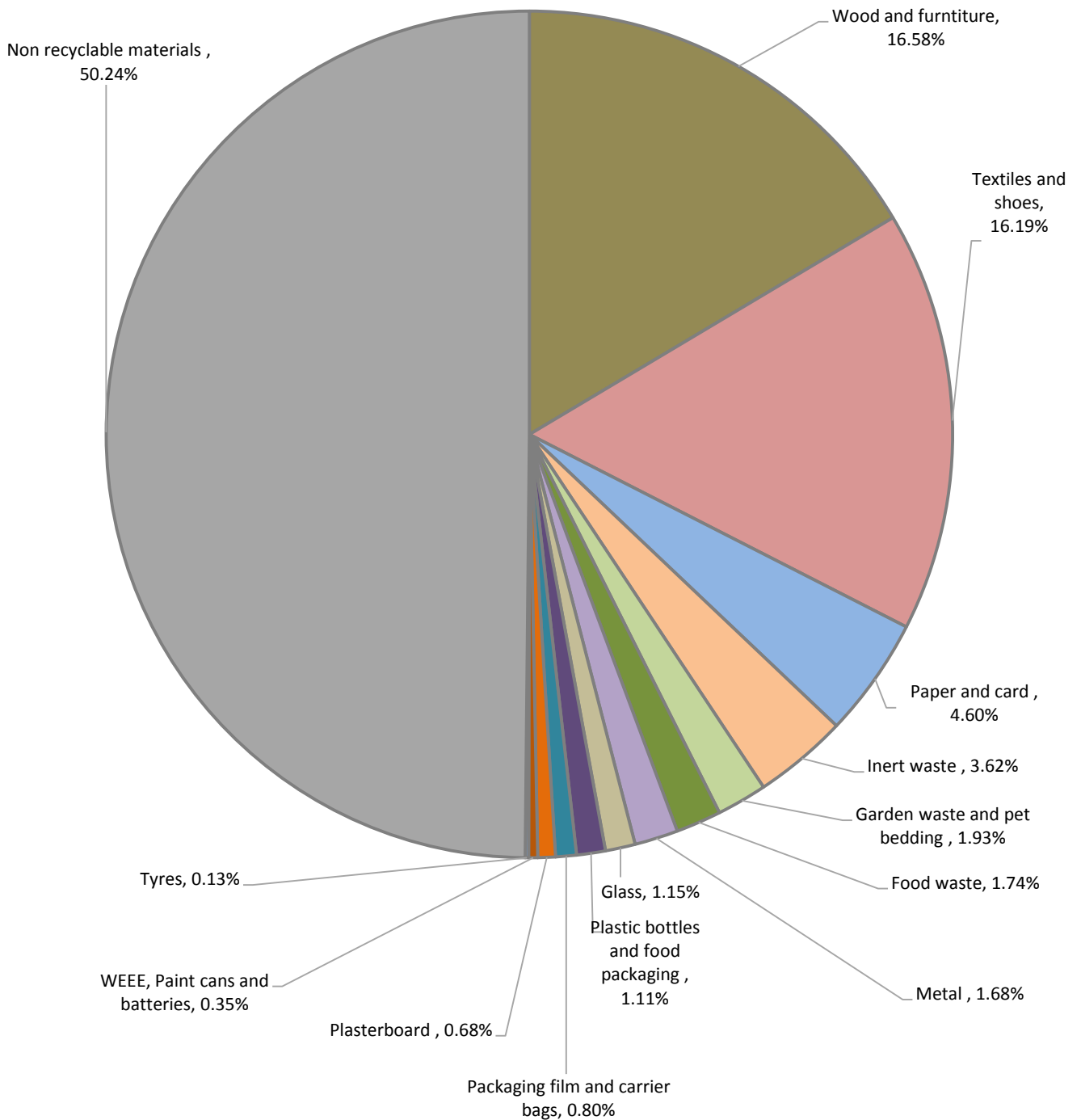
4.2 Using the average data across all four sites the amount of all recyclable material in the bagged household waste is provided in table 5.

Table 5 Recyclable materials in the household bags

	2016	2017	2018	2022
Kerbside Recyclable	57%	62%	50%	30%
Site Recyclable	4%	8%	13%	29%
Total Recyclable	61%	70%	63%	59%

5.0 All materials combined

Chart 3 Average contents of the residual skip at the HWRC (include household waste bags)



5.1 Taking the average data from across all four sites the recyclable materials with the highest percentage in the combined waste for the last four waste composition surveys provided in table 6.

Table 6 Top recyclable material in the residual skip

	2016	2017	2018	2022
Paper/Card	9%	4%	2%	5%
Textiles	15%	8%	6%	16%
Wood and furniture	12%	27%	14%	17%
Rubble and plasterboard	6%	12%	4%	4%
Metal	3%	4%	4%	2%
Garden and organics	2%	2%	4%	2%
Food	5%	5%	3%	2%

5.2 Using the average data across all four sites the amount of all recyclable material in the combined household waste is provided in table 7.

Table 7 Recyclable materials in the combined household waste

	2016	2017	2018	2022
Kerbside Recyclable	31%	24%	12%	11%
Site Recyclable	26%	45%	29%	38%
Total Recyclable	57%	69%	41%	50%

6.0 Summary

6.1 The summary findings from the HWRC waste composition are as follows:

- The percentage of recyclables in household waste bags is 59%.
- The top recyclables in the household waste bags are textiles (17%), paper and card (8%), food (7%), Rubble and plasterboard (7%).
- The percentage of recyclables loose in the residual waste container is 35%.
- The top recyclables loose in the skip are wood and furniture (16%) and textiles and shoes (12%).
- The total percentage of recyclable in the residual waste skips is 50% - all of this material except 2% food waste is recyclable at the HWRC

- The top recyclables in the residual waste skip from all the materials combined are textiles and shoes (16%), furniture (11%), wood (6%) and rubble and plasterboard (4%).
- Carpet and mattresses make up 24% of the non-recyclable materials in the residual waste container.
- Residents are making use of their kerbside collection services as there is less kerbside recyclable material coming to the HWRC

Background Papers

1. None.

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