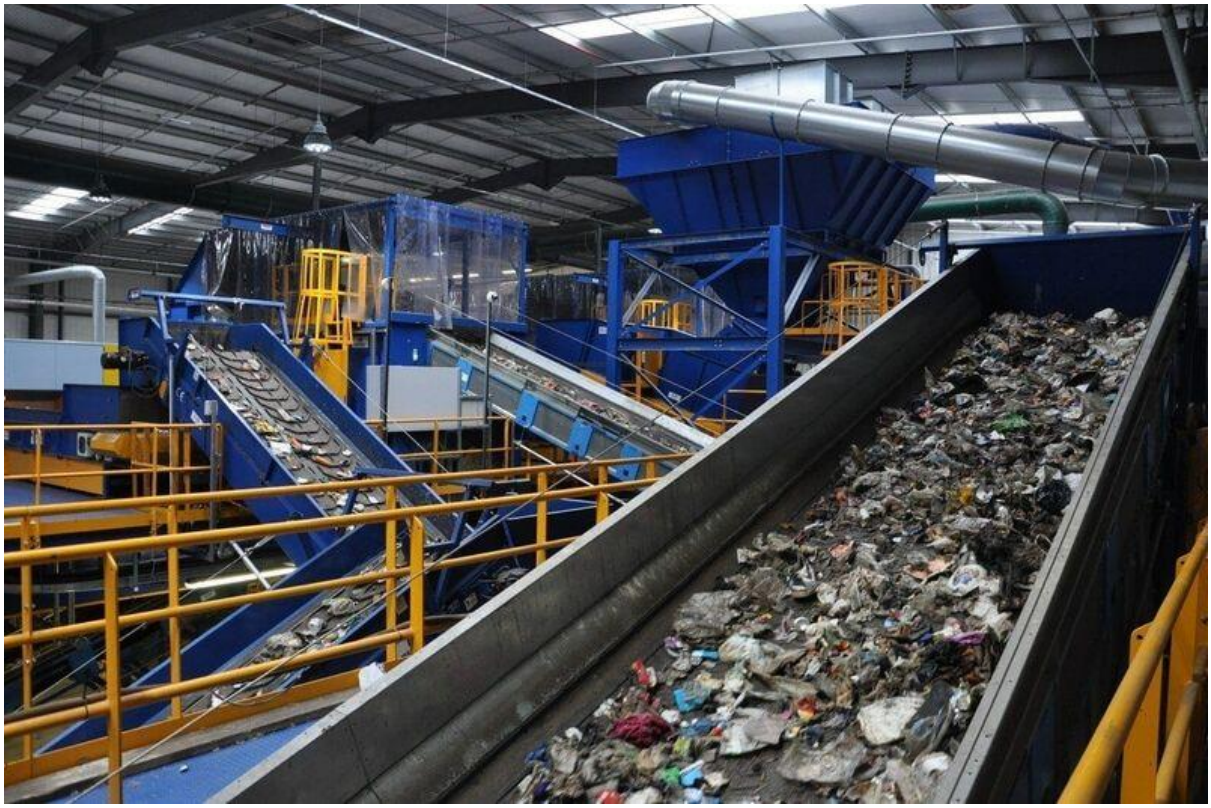
Material Recovery Facilities (Qualifying Materials):

Market Overview



February 2024

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Disclaimer

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1. Introduction

This is the second such report published by Monksleigh, having published a report earlier in 2023 for 2021 data and having created and populated data for www.wikiwaste.org.uk over the last four years. This report takes a similar format for data from 2022.

The introduction of the Environmental Permitting (England and Wales) Regulations 2016[1] required MRFs receiving over 1,000 tonnes of identified mixed material ('Qualifying MRFs') to sample both the input and output streams for sites in England, Wales and Scotland, but excludes sites in Northern Ireland. All terms referred to in this report can be referenced via the wikiwaste website as a bibliography/glossary and sources for this report are listed in Appendix 1: Sources of Data.

With the complexity of MRFs and their permit tonnage thresholds varying within the overall scope of this report, Monksleigh puts forward a structure that groups them on a scale/approach basis – notwithstanding that even within such groupings there are subtle differences between many MRF operations supplying solutions in the market.

In considering the data and sites reported, the following should be noted:

- Sites exempt from an Environmental Permit are excluded, which broadly relate to smaller tonnages handled and separately collected tonnages in the market.
- Many of the sites reported have an Environmental Permit that encompasses multiple activities. This can be seen in Appendix 2: Qualifying MRFs where overall tonnage managed by the Environmental Permit significantly exceeds that reported under the regulations shown as 'Qualifying Tonnes'.
- The main EWC code used for DMR material in the scope of this report is 20 03 01, however, this code is also used for other mixed waste streams and cannot be relied upon as definitive tonnage for Qualifying Material or DMR tonnage. i.e. this same appendix shows some line entries (MRFs) with 20 03 01 tonnage higher than the Qualifying tonnage reported.
- The data is focused on the published data for Qualifying MRFs only, the most recent of which is for the calendar year 2022.
- Northern Ireland has not adopted the regulations and so do not have 'Qualifying MRF' data. In this report a separate appendix captures the permitted tonnage arising from the MRFs located within Northern Ireland. It is known that some tonnage was moved from 'the mainland' to Northern Ireland in the period of reporting.

[1] Colloquially referred to by many as the 'MRF Code of Practice', referred to here as 'the regulations'

The broad scope of the report is summarised in Figure 1 below:

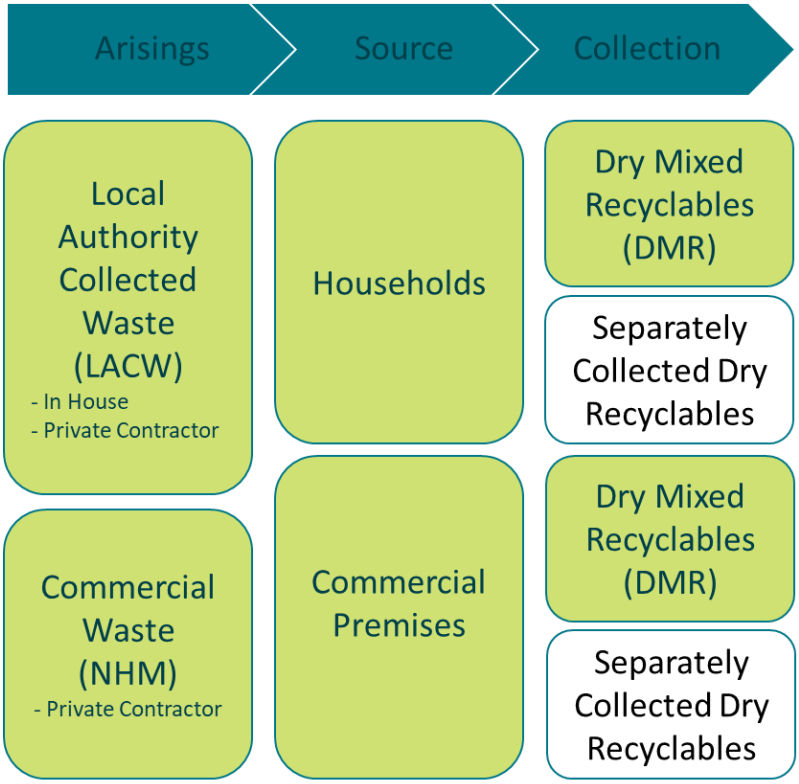

Figure 1: Schematic of the Scope of the MRF Market Receiving Qualifying Material (Monksleigh)

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2. REPORT SUMMARY

Input Tonnage

- **4.1m** tonnes received into all MRFs in Britain
- Total dry recyclable arisings **down 7%**
- Total tonnage to MRFs **down 3%**

Growth

- **Tonnage** in 2022 at levels **similar to 2016 and 2018**
- **Growth expected of c.500kt next c.7 years**:
  - Loss to DRS materials
  - Gain with wider range under Simpler Recycling

MRF Size

- **107** MRFs in Britain
- **50%** of MRFs handled between **50kt and 125kt**
- **4** MRFs handled >125kt equiv. to **22%** of market
- **Biffa** largest player with **17%** of market (by tonnage)

Sampling

- **44,961** samples on **inbound** material (av.**11.7% contam.**)
- **108,100** samples on out-bound
- At an assumed **cost of c.£3.2 to £7.9m**
- **Likely to double** with new MRF Regs from 2024

Output Mix

- **1,287kt** Paper
- **756kt** Glass
- **487kt** Plastic
- **214kt** Metal
- **2.3%** av. contam.

Paper and glass dropped significantly more than overall inputs - reflecting greater segregated collection of this material

Financial Challenges

- **Gate Fees** increasing, offset by **Commodity Value increases** - with more MRFs moving to risk share mechanisms with their customers
- **Delays in policy** change /detail still cause for concern

3. Market Overview

Scale

The MRFs falling into the scope of this report are listed in Appendix 2: Qualifying MRFs. As of December 2022, there were 107 Qualifying MRFs in Britain that received Qualifying Tonnage in 2022, split by country and input tonnage in Table 1 below. This represents a drop in tonnage from 2021 to 2022 of c.200kt or 5%.

Table 1: Number of Qualifying MRFs and Tonnage Input

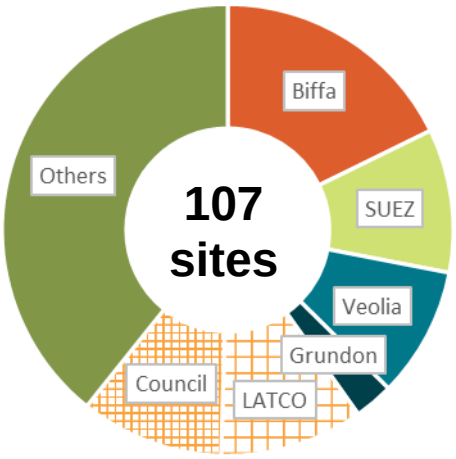
Country	Number of MRFs	Split	Input Tonnage	Split
England	81	76%	3,467,279	85%
Scotland	13	12%	327,050	8%
Wales	13	12%	282,288	7%
Total	**107**		**4,076,618**	

Operator Market Share Overview

Biffa at 18% had the largest market share by **number of sites** (including the Syracuse business which assimilated the MRFs acquired from Viridor in September 2021), Suez at 10% and Veolia at 9%. Single-site operators made up the other category of 39%.

Table 2: MRF Market Share by Number of Sites

Operator	No.	Split
Biffa	19	18%
SUEZ	11	10%
Veolia	10	9%
Grundon	3	3%
LATCO/PPP	11	10%
Council	11	10%
Others	42	39%
TOTAL	**107**	

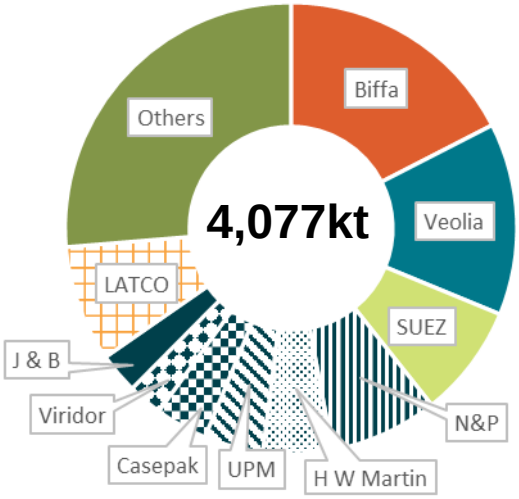


The market share by **tonnage** (outlined below), shows that Biffa still had the largest market share, Veolia at 14% and Suez at 8%. A number of the operators that appear in this analysis

have one or two larger sites (falling into the 'other' category in the previous figure) and the 'council' sites (shown in the previous figure) do not feature, as they are primarily small-scale sites.

Table 3: MRF Market Share by Tonnage Received

Operator	'000 tonnes	Split
Biffa	712	17%
Veolia	561	14%
LATCO/PPP	339	8%
Suez	330	8%
N&P	316	8%
HW Martin	201	5%
UPM	172	4%
Casepak	152	4%
Viridor	101	2%
J&B	119	3%
Others	1,073	26%
TOTAL	**4,077**	



Note: of the 339kt shown managed by LATCO/PPP operators, 93kt (28%) was Norse Environmental, 80kt (24%) was Severn Waste Services, and 55kt (16%) was Lancashire Renewables (67% in total). Sherborne Recycling was not commissioned in 2022 and so is not represented in this data.

MRF Groupings

Appendix 2: Qualifying MRFs (and the associated tables in the appendix) show the tonnage and split of waste received. Monksleigh categorises MRFs into the following groupings depending on their capacity, these are described in the table below.

Table 4: MRF Groupings/Size

Category/Grouping	Size Range (tonnes per annum)	Comment
Small	<20,000	Primarily transfer stations and local authority transport depots with only limited sorting - often focused on specific streamed collections (i.e. cans and plastic bottles)
Medium	>20,000 <50,000	Often a single processing line for multi-streamed DMR MRF - focused on one PPP/PFI contract or up to three separate local authority contracts. Smaller end of range MRFs may be large transfer depots, with or

Category/Grouping	Size Range (tonnes per annum)	Comment
		without some simple sorting prior to onward transport for further processing
Large	>50,000 <125,000	Complex multi-stream DMR MRFs, with one or more process lines, focusing on up to five local authority contracts
Extra Large	>125,000	Multi-stream and multi-line MRFs, focusing on at least five or more local authority contracts – of which there only four in Britain at present.

Source: Monksleigh

The split in Table 5 below shows that the majority of tonnage was received via large MRFs in Britain, with four extra-large MRFs accounting for 22% of input tonnage. Whilst there were 54 small sites (50%), an increase of 1 site on the previous year, they accounted for only 9% (373k tonnes) of the total tonnage received. In Table 6 below it can be seen that the split for England alone is broadly similar to Britain as a whole.

Table 5: Split of MRF Groupings and Tonnage Input (Britain)

Category/Grouping	Number	Split	Tonnes	Split
Small	54	50%	372,644	9%
Medium	25	23%	781,602	19%
Large	24	22%	2,018,472	50%
Extra Large	4	4%	903,901	22%
Total	**107**	**100%**	**4,076,619**	**100%**

Table 6: Split of MRF Groupings and Tonnage Input (England only)

Category/Grouping	Number	Split	Tonnes	Split
Small	39	48%	275,276	8%
Medium	16	20%	515,880	15%
Large	23	28%	1,944,206	56%
Extra Large	3	4%	731,917	21%
Total	**81**	**100%**	**3,467,279**	**100%**

Market Share - England

The market share split across the size groupings reveals that whilst Biffa and Suez are in the top three, the larger sites mask the high number of smaller sites, which are generally focused on delivering part of a solution for local authority collection contracts.

In addition, it shows that whilst Veolia is the single largest operator of large MRFs in England, many of the large MRFs are operated by independents, as are two of three extra-large MRFs (the third MRF being Biffa at Edmonton – the three in total comprise 21% of the market by tonnage).

The single largest site in England is the N&P site at Crayford (acquired from Viridor in January 2022 as part of the wider divestment of its MRF assets to Biffa four months earlier).

Table 7: Main Operators by Number of MRFs, Split by MRF Groupings (England)

Operator	Total	Small	Medium	Large	Extra Large
Biffa	15	9	2	3	1
Veolia	11	2	2	6	
SUEZ	11	6	2	2	
Grundon	2		2		
Renewi	2	1	1		
FCC	2	1	1		
H W Martin	2			2	
Others	37	20	7	10	2
Total	**81**	**39**	**16**	**23**	**3**

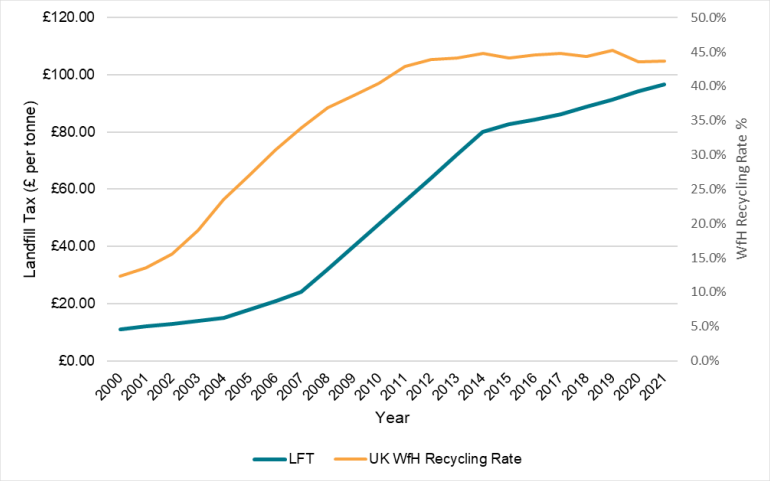
Table 8: Main Operators by Percentage Tonnage Received, Split by MRF Groupings (England)

Operator	Tonnes	Small	Medium	Large	Extra Large
Biffa	623,112	22%	12%	12%	36%
Veolia	470,923	7%	14%	24%	
N&P Crayford	316,311				43%
SUEZ	304,976	17%	13%	10%	
H W Martin	201,464			10%	
Casepak	152,045				21%
J & B	118,462			6%	
Norse	93,380			5%	
Pearce	94,576			5%	
Bywaters	86,517			4%	
Others	1,005,513	54%	61%	22%	
Total	**3,467,279**	**100%**	**100%**	**100%**	**100%**

4. Input Material

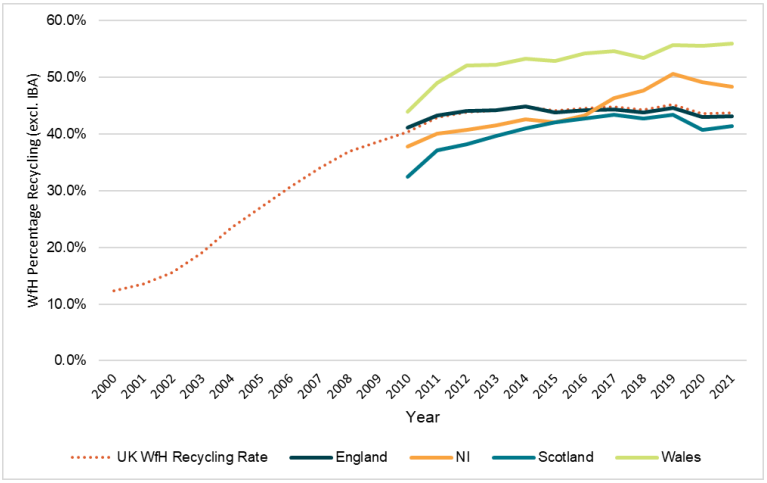
Macro Picture

Recycling rates of dry recyclables generally have not changed dramatically since 2014[2], when landfill tax increases ceased acting as a driver for change, notwithstanding the impacts on household waste that occurred during the COVID pandemic.



Source: DEFRA Statistics, HMRC, Monksleigh (WfH excl. IBA metals)

Figure 2: Waste from Households Recycling Performance Relative to Landfill Tax



Source: DEFRA Statistics, Monksleigh (WfH excl. IBA metals)

Figure 3: Waste from Households Recycling Performance by Country

[2] Figures 1 and 2 are for Waste from Households (WfH) Recycling Rates (excluding IBA metals). England reported a drop from 43.1% in 2021 to 42.4% in 2022. Like for like figures were not available from DEFRA for the whole of the UK for 2022 at the time of writing this report.

This report represents Qualifying Material data for 2022 only; a broad trend is possible for English data since the introduction of the regulations in 2016, but not at a granular level currently. It shows that tonnage recycled through MRFs in England dropped by 3% from 2021 to 2022, equivalent of that received in 2018 and close to that received in 2016.

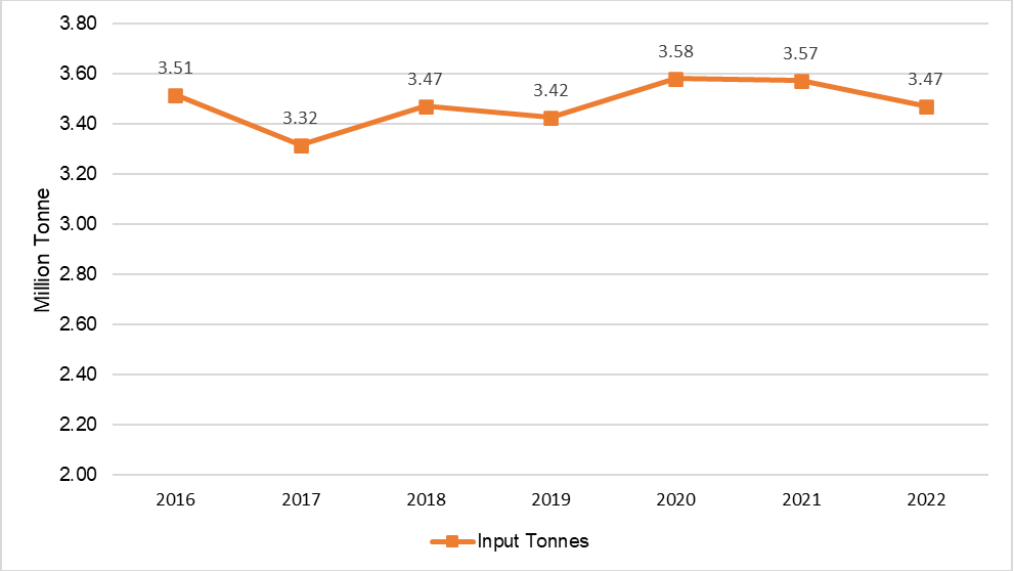


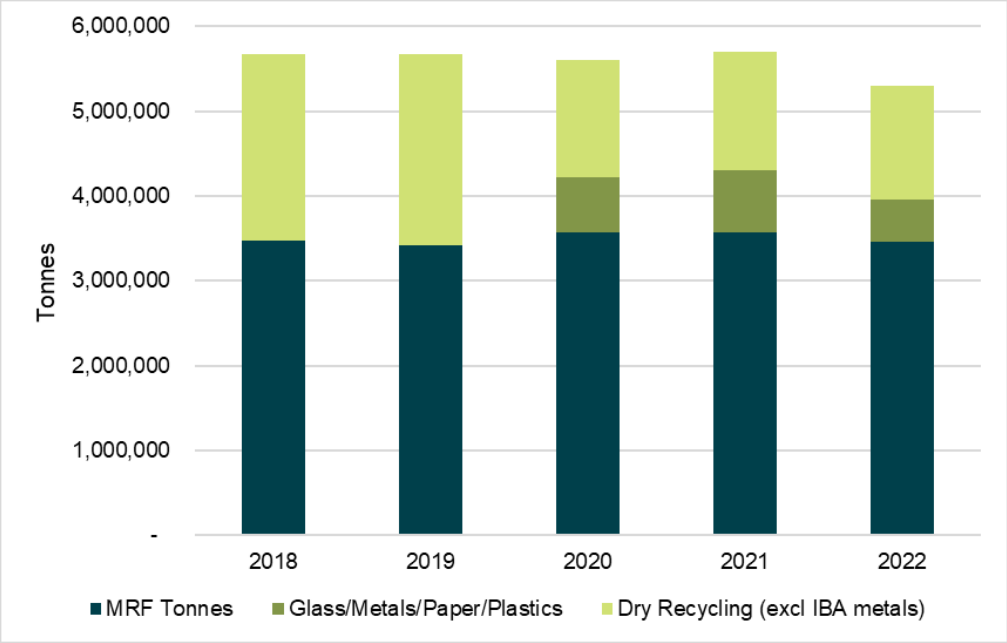
Figure 4: Total Tonnage Received by MRFs (England only)

Comparing MRF input tonnage for England (from this data) to recycled Waste from Households in England (reported by DEFRA) shows a slightly different picture. In Figure 5 below it can be seen that whilst MRF tonnage dropped by 3% in the context of broader dry recyclables for England the tonnage dropped by 7%.

When considering the MRF tonnage[3] as a proportion of dry recyclable in the figure then the MRF tonnage represented 65% of dry recyclable Waste from Households (up from 63% in 2021).

Additionally, the data from 2020 onwards breaks out categories of dry recyclables in more detail, and in this context the proportion of MRF tonnage that were dry recyclable 'qualifying materials' from households was 88% in 2022 (up from 83% in 2021).

[3] Notwithstanding that MRF tonnage input includes outputs from other MRFs, i.e. a degree of 'double counting', and MRF tonnage also included NHM tonnage and not just Waste from Households.



Source: Data from EA and DEFRA, Monksleigh Analysis

Figure 5: Qualifying Tonnage to MRFs for England and Total Tonnage Dry Recycled Household Waste for England[4] only

Presentation of Material

The type and complexity of a MRF for managing DMR is a function of the way that the material has been collected and presented by the collection system. The current preference by Local Authorities to collect DMR is in one of three primary collection systems:

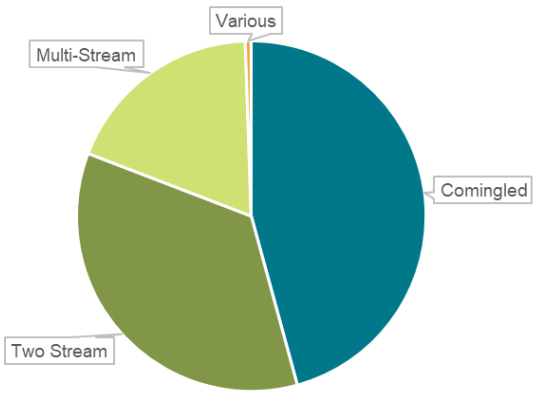
- Fully comingled (can be with or without glass included in the mix).
- Two Streamed (also known as twin streamed)
    - Separate collection of glass, with remainder fully comingled
    - Separate collection of fibre, with remainder fully comingled
- Multi-streamed (also known as Kerbside sort – i.e. separated at the kerbside, often with only limited sorting of plastic and metal cans at a very simple MRF).

Monksleigh's analysis of WRAP LA Portal data in Table 9 shows a higher proportion of multi-streamed and two streamed collections than that listed within the MRF section of the WRAP Gate Fees Report 2022/23 in Table 9 below.

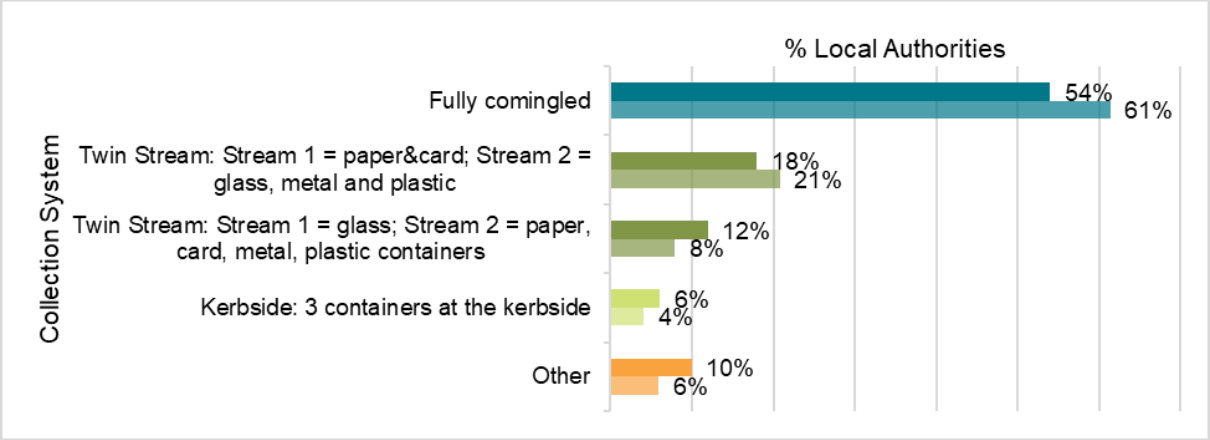
[4] The Dry Recycling is Waste from Households that excludes IBA metals, food and organics. From 2020 the dry recyclables are broken down and the dark green represents the dry recyclables captured by the regulations i.e. Glass/Metals/Paper/Plastics with the remaining dry recyclables in light green including textiles, WEEE, scrap and other materials.

Table 9: Local Authority Collection Systems (Britain)

Collection System	No. Authorities	% Split
Comingled	167	46%
Two Stream	128	35%
Multi-Stream	68	19%
Various*	2	1%
TOTAL	**365**	



Source: WRAP Local Authority Portal, Monksleigh
* Relates to those Local Authorities still using more than one primary DMR kerbside collection system within their jurisdiction.



Source: Figure 3 and Table 10 of WRAP Gate Fee Report 2021/22 (light colours) and 2022/23 (dark colours)

Figure 6: Methods of Collection of Materials

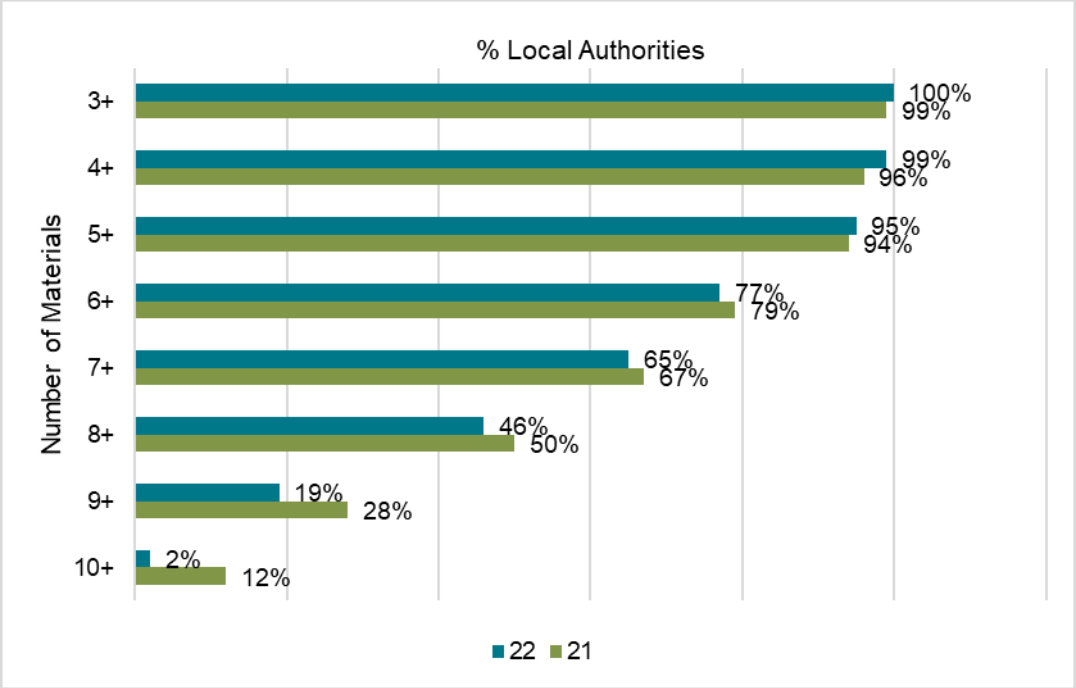
The results from Figure 6 above indicates that the MRF section within the WRAP Gate Fees Report (which only captures a proportion of the total market) concentrates primarily towards reporting comingled MRFs in its overall findings.

The Gate Fees Report suggested that 75% of respondents were considering some form of change to their DMR collection model, of these 32% said they were considering a shift to a ‘Twin-Stream’ with separate paper and card, and 8% considering a ’Twin-Stream’ with separate glass (12% were considering kerbside options). The difference from 21/22 to 22/23 shows the movement away from fully comingled – the primary move being toward twin

stream with separate glass. The majority of the ‘other’ category was a result of uncertainty of future approach.

The report also sets out the considerable variation and type of materials collected by local authorities. Figure 7 below highlights the number of materials collected, with the large majority collecting at least five or more materials. That said, between 21/22 and 22/23 there has been a marked decrease in those collecting 6 or more materials.

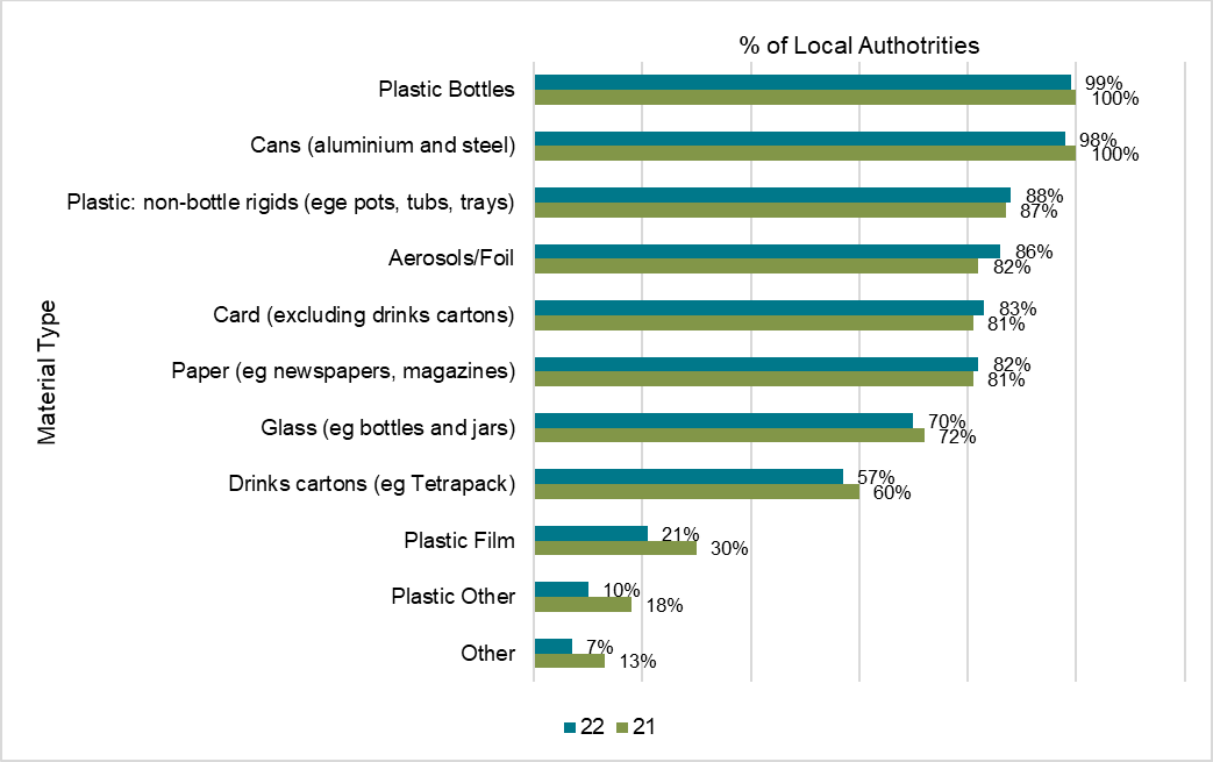
The variety in the collection systems leads to different sorting systems at MRFs, and the most successful MRFs have the most flexible systems, or multiple sorting lines, allowing them to receive a greater range of materials.



Source: Figure 10 and Table 10 of WRAP Gate Fees Report 2021/22 (dark green); Figure 2 and Table 9 of 2022/23 Report (dark blue)

Figure 7: Number of Materials Collected

Of the materials collected, the findings of the WRAP report suggested that the majority of Local Authorities collected cans, plastic bottles and PTT. The greatest variability in the four target materials (Paper, Plastics, Glass, and Metal) are in Paper and Glass, as shown in the figure below. The main reductions between the two years are for drinks cartons, plastic film, ‘other plastics’ and ‘other materials’.



Source: Figure 1 and Table 8 of WRAP Gate Fee Report 2021/22 (dark green) and 2022/23 (dark blue)

Figure 8: Percentage of Local Authorities Collecting Material Types

Input Material Mix

The number of samples taken in 2022 in accordance with the regulations totalled over 44,961, equivalent to an average rate of one sample every 85.7 tonnes across all suppliers. At £20 to £50 per sample this is an equivalent cost of £0.9m to £2.3m for inbound analysis.

Table 10: Actual Sampling Rates vs Requirement

Qualifying Material Input	Requirement [sample every x tonnes]	Actual [sample every x tonnes]	Rate Above Required (%)
All Inputs	125	85.7	46%

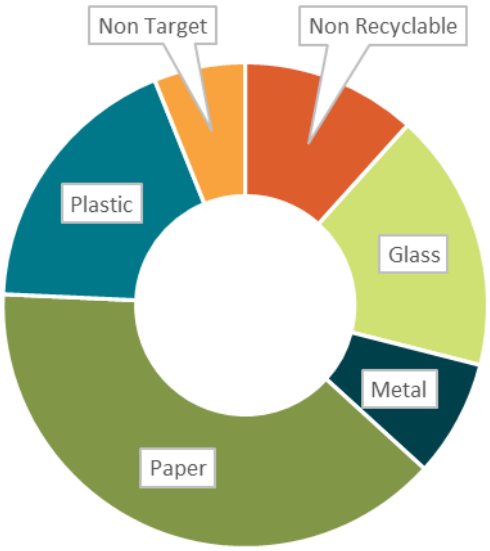
The sampling frequency above the requirement of 125 tonnes may be due to the size of each supplier's input (i.e. not in evenly spaced 125 tonne units) but also some operators choosing to sample more frequently for some or all customers (i.e. for wider management purposes).

The overall sampling of input tonnage gives the following mix of materials:

Table 11: Input Tonnage to Qualifying MRFs by Qualifying Material % Sampled

All MRFs Input Mix (107 Sites)

Material	Split	No. of Sites Receiving Material	Split/ Receiving
Glass	17.3%	72	67%
Metal	7.8%	107	100%
Paper	39.0%	82	77%
Plastic	18.2%	103	96%
Non-Target	6.1%		
Non-Recyclable	11.7%		

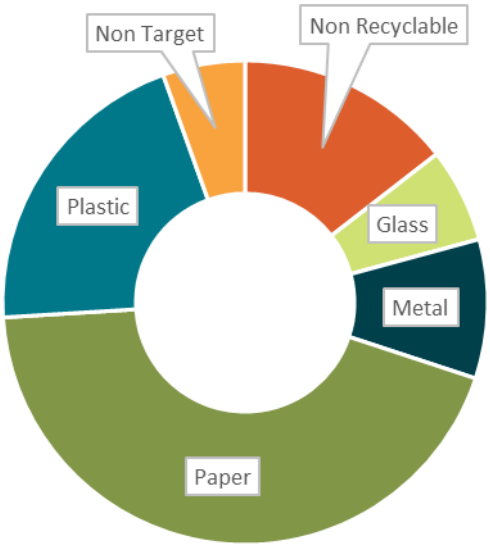


The mix of materials shown above changes, however, when the MRF size alters. The following table shows the changes to the material input mix when the size of the MRF increases.

Table 12: Input Tonnage to Qualifying MRFs by Qualifying Material % Sampled (by site size)

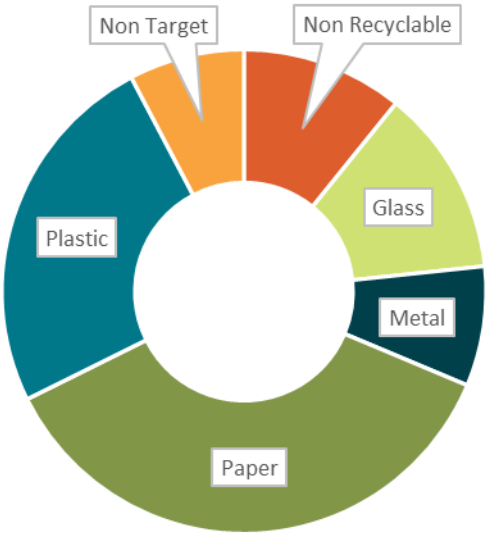
Small MRF Input Mix (53 Sites)

Material	Split	No. of MRF's Receiving Material	% of MRF's Receiving Material
Glass	6.3%	29	55%
Metal	9.3%	53	100%
Paper	44.0%	37	70%
Plastic	20.5%	52	98%
Non-Target	5.5%		
Non-Recyclable	14.5%		



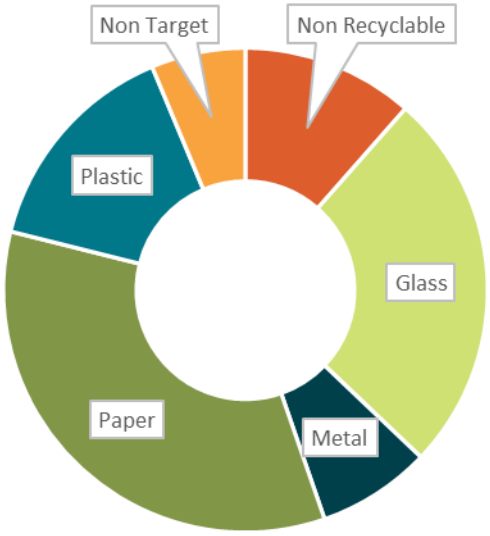
Medium MRF Input (25 Sites)

Material	Split	No. of MRF's Receiving Material	% of MRF's Receiving Material
Glass	12.5%	18	72%
Metal	8.0%	25	100%
Paper	36.6%	21	84%
Plastic	24.6%	24	96%
Non-Target	7.7%		
Non-Recyclable	10.8%		



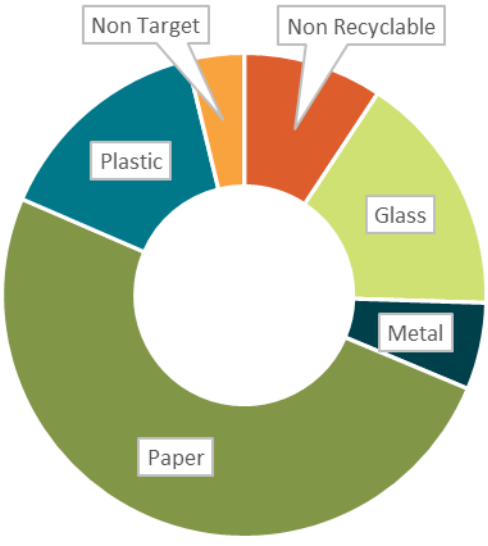
Large MRF Input (24 Sites)

Material	Split	No. of MRF's Receiving Material	% of MRFs Receiving Material
Glass	25.6%	21	88%
Metal	7.6%	24	100%
Paper	34.2%	20	83%
Plastic	14.8%	23	96%
Non-Target	6.3%		
Non-Recyclable	11.5%		



X Large MRF Input (4 Sites)

Material	Split	No. of MRF's Receiving Material	% of MRF's Receiving Material
Glass	16.2%	4	100%
Metal	5.8%	4	100%
Paper	50.2%	4	100%
Plastic	14.7%	4	100%
Non-Target	3.8%		
Non-Recyclable	9.3%		



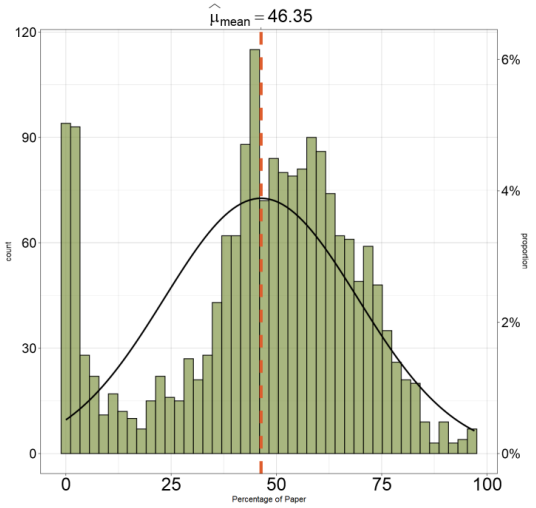
The split between the four main Qualifying Materials for each MRF is summarised in Appendix 2: Qualifying MRFs in Table 21.

The following table splits the four main target/Qualifying Materials into separate entries and further extrapolates the percentage split of each individual material received at differing sizes of MRFs using a distribution plot.

Table 13: Distribution of Sampling of Input Materials

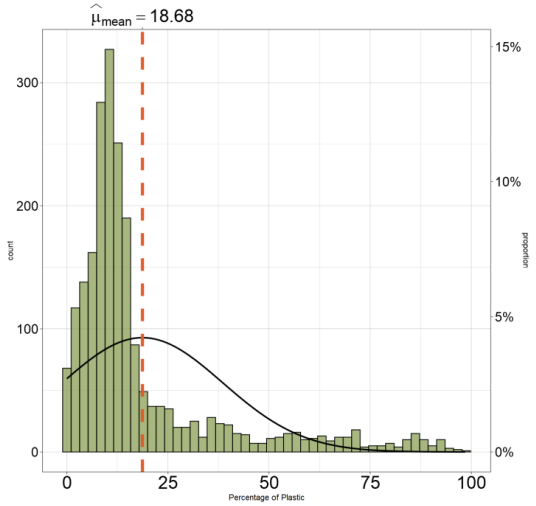
Paper

Size	Median	Lower Range	Upper Range
S	53.7%	0	23.3%
M	37.7%	5.6%	41.7%
L	42.0%	3.5%	43.9%
XL	50.1%	45.5%	52.5%
All	**44.6%**	**2.8%**	**44.7%**



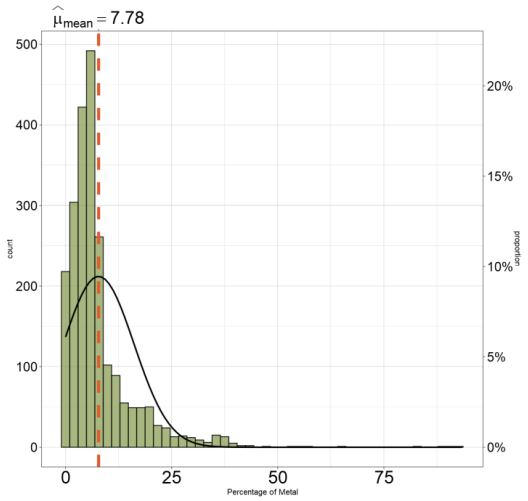
Plastic

Size	Median	Lower Range	Upper Range
S	8.2%	0.9%	5.4%
M	11.5%	8.8%	12.9%
L	11.2%	8.6%	11.8%
XL	11.8%	10.7%	12.4%
All	**11.3%**	**7.7%**	**11.4%**



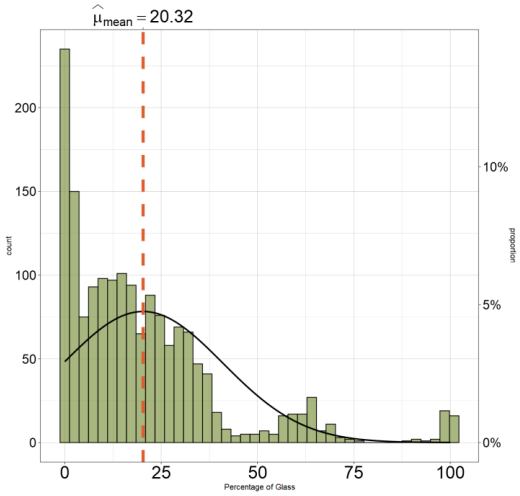
Metal

Size	Median	Lower Range	Upper Range
S	3.5%	0.2	2.2%
M	5.8%	4.5%	6.2%
L	5.8%	4.5%	6.1%
XL	5.1%	4.6%	5.5%
All	**5.5%**	**3.2%**	**5.5%**



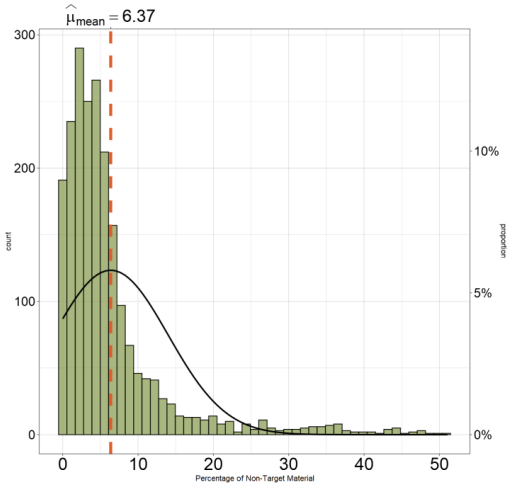
Glass

Size	Median	Lower Range	Upper Range
S	0.5%	0	0
M	0%	0	1.5%
L	18.5%	7.2%	19.2%
XL	15.0%	10.0%	20.1%
All	**9.0%**	**0**	**9.1%**



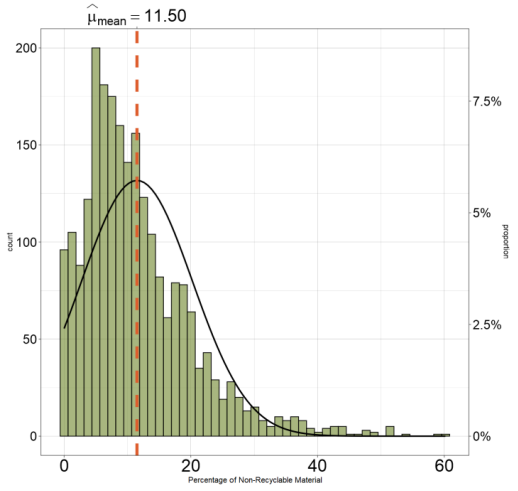
Non-Target

Size	Median	Lower Range	Upper Range
S	3.6%	0	2.4%
M	5.6%	4.2%	6.37%
L	2.9%	1.0%	3.4%
XL	3.8%	3.1%	4.1%
All	**4.0%**	**1.8%**	**4.0%**



Non-Recyclable

Size	Median	Lower Range	Upper Range
S	11.2%	0.5	7.1%
M	9.0%	6.2%	10.1%
L	9.8%	6.4%	10.8%
XL	9.2%	7.6%	9.9%
All	**9.6%**	**5.6%**	**9.9%**



*Note: Lower range and upper range are expressed as the 40th and 60th percentile respectively.

The median residual/non-recyclable tonnage across all MRF sizes is 9.6% and the mean/average 11.5% but the distribution is skewed by several readings with contamination levels at 30% or more. The non-target material, whilst recyclable, may or may not be recycled, and therefore may be included by some commentators as additional contamination.

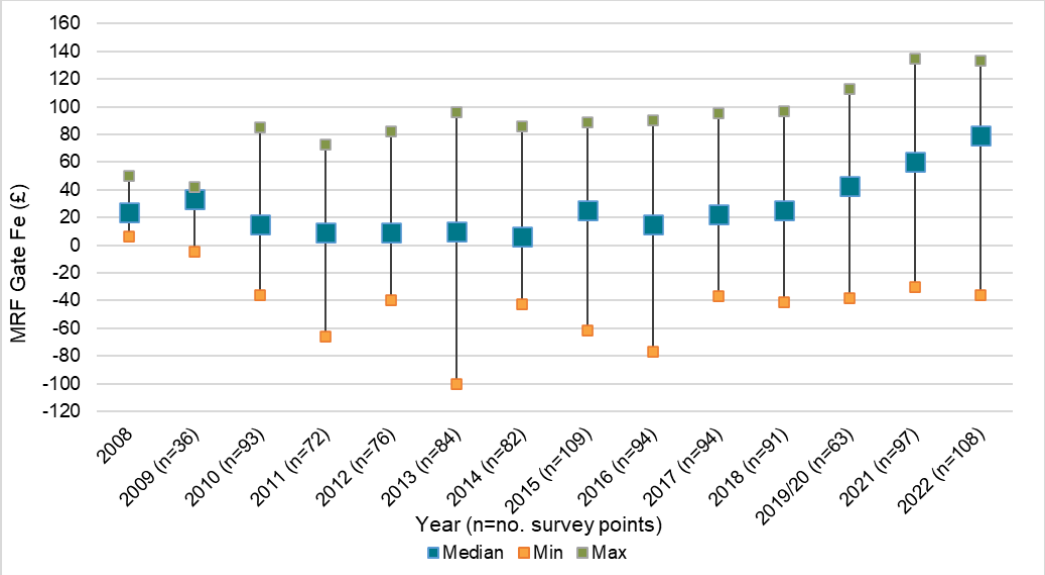
The data suggests that there is no direct correlation between high ‘contamination’ and either commercial or local authority delivered materials.

Monksleigh’s previous work in 2015 focused on large and extra-large MRFs and suggested contamination rates of between 8% and 26%. This is not unreasonable in the overall ranges above but the sampling, which is more intense at the larger sites, suggests that most current contamination levels are at the lower end of this earlier work.

5. Input Gate Fees

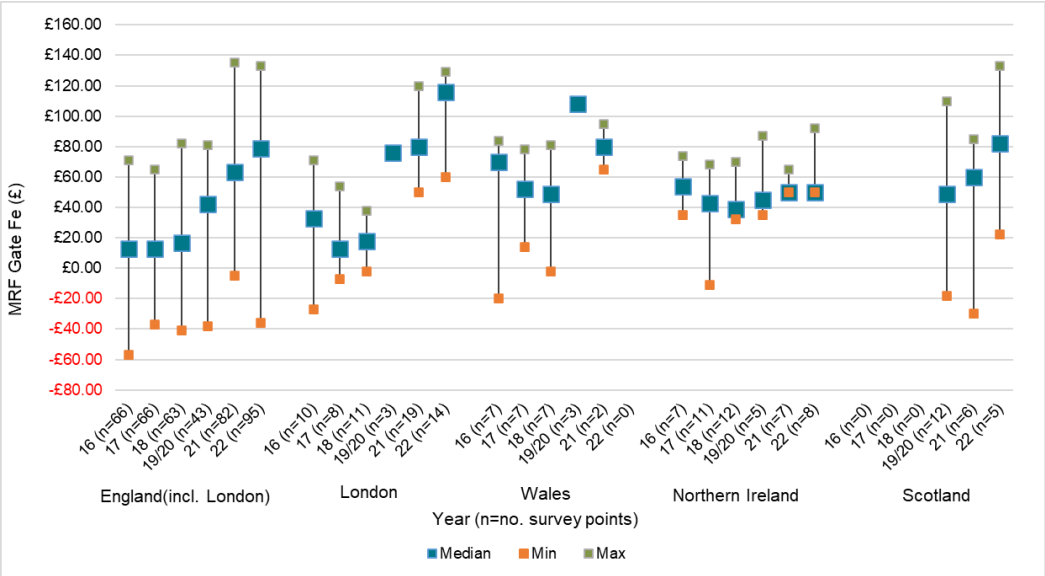
Overview

The most recent WRAP report on gate fees shows an **increasing trend in median gate fees** for MRFs although this varies by geographical region and minimum and maximum gate fee ranges have dropped on 2021.



Source: Adapted from Figure 6 of WRAP Gate Fee Report 2022/23

Figure 9: Gross MRF Gate Fees (excl. Transport)



Source: Composite figure from last six WRAP Gate Fee Reports, Monksleigh

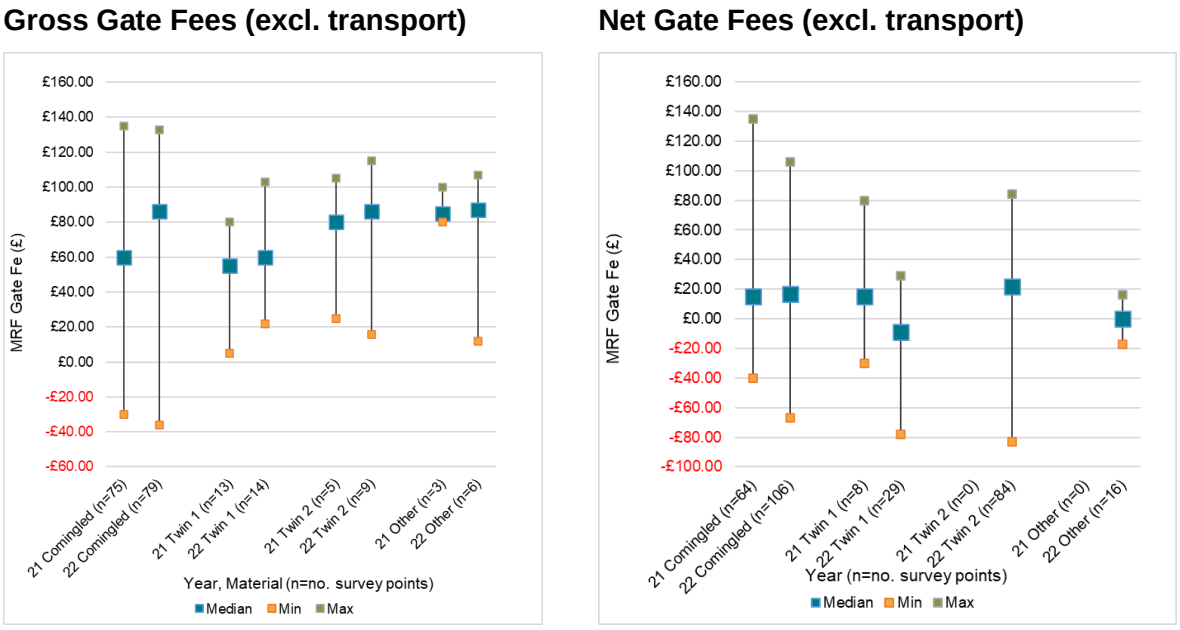
Figure 10: Gross MRF Gate Fees (excl. Transport) by Country/Region

The wide range of prices reflects significant variability in the types of contract arrangements in place, which is due to a blend of historical arrangements:

- Early-stage contracts in the market, often long term in nature, centered on the operator taking all the benefit of the recyclables (and associated risk) and paid a gate fee to the local authority. Some of these early contracts had risk/reward mechanisms but the MRF operator generally assumed the recyclate would cover their processing fee to generate a margin – but as prices dropped many operators struggled and indeed failed.
- The mid-stage contracts saw a more sophisticated development of gate fees where there was a development of some form of guaranteed gate fee paid by the local authority (in many cases set close to the anticipated basket value for recyclables) with a risk reward around a baseline. These contracts often were longer than 5 years and so the mechanisms were designed to flex, but the exact degree and parameters were based upon markets for recyclate that had not been particularly volatile.
- Most recently (and since the market drop in 2015 and subsequent volatility in the market for output materials) there has been more of a move to a fixed processing fee with a credit for a percentage of the basket value, with contracts of around three years plus potential extensions. This clearly underwrites the profitability of a MRF and shares the upside of the recyclate value depending on the frequency of review of the mix and price in the calculation of the market basket rate.

The natural evolution towards shorter-term contracts, with higher processing fees and a share in commodities, has led to a progressive increase in the MRF ‘gross’ gate fees, and this can be seen in the general trends in the previous graphs.

The share in commodity sales is the most significant variable between contracts, which is inevitably also influenced by the mix of materials collected and the actual commodity value used. This has led WRAP in their most recent Gate Fees report to continue to split out the gross gate fee by collection type (i.e. more mixed/complex, higher cost) and the net gate fee (the actual cost to the local authority after any rebate and allowing for the cost of contamination.

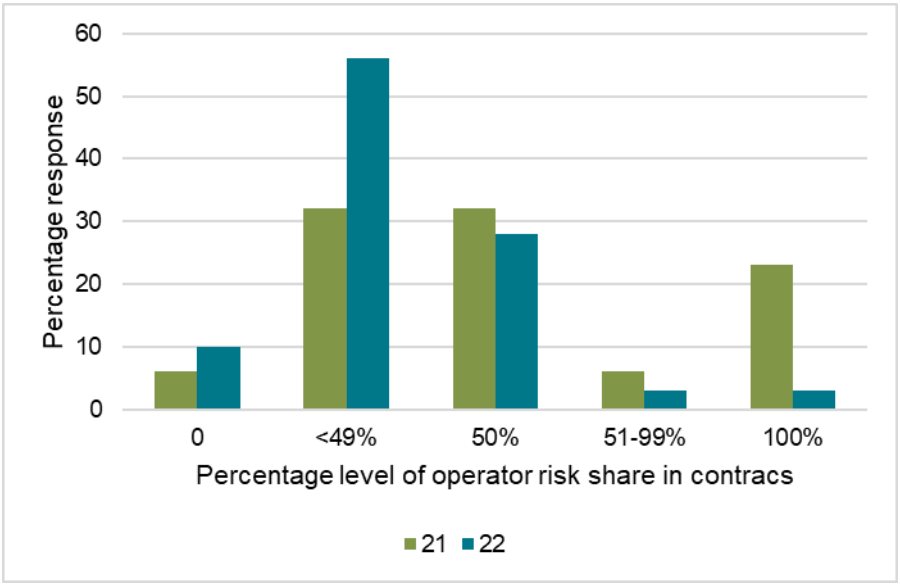


Source: Table 14 and Table 17 of WRAP Gate Fee Report 2022/23

Figure 11: WRAP MRF Gate Fees by Type of Collection

Risk Share

The WRAP Gate Fees Report 2022/23 indicates that a significant movement occurred between the reporting years towards a more risk sharing model for commodities, which is bourne out by the greater range in gate fees previously set out (the drop in overall gate fee charged and an increase in minimum gate fees is reflective of commodity income)



Source: Adapted from Table 17 of WRAP Gate Fee Report 202/21 and figure 11 of 2022/23 report

Figure 12: Percentage Level of Operator Risk Share in Contracts

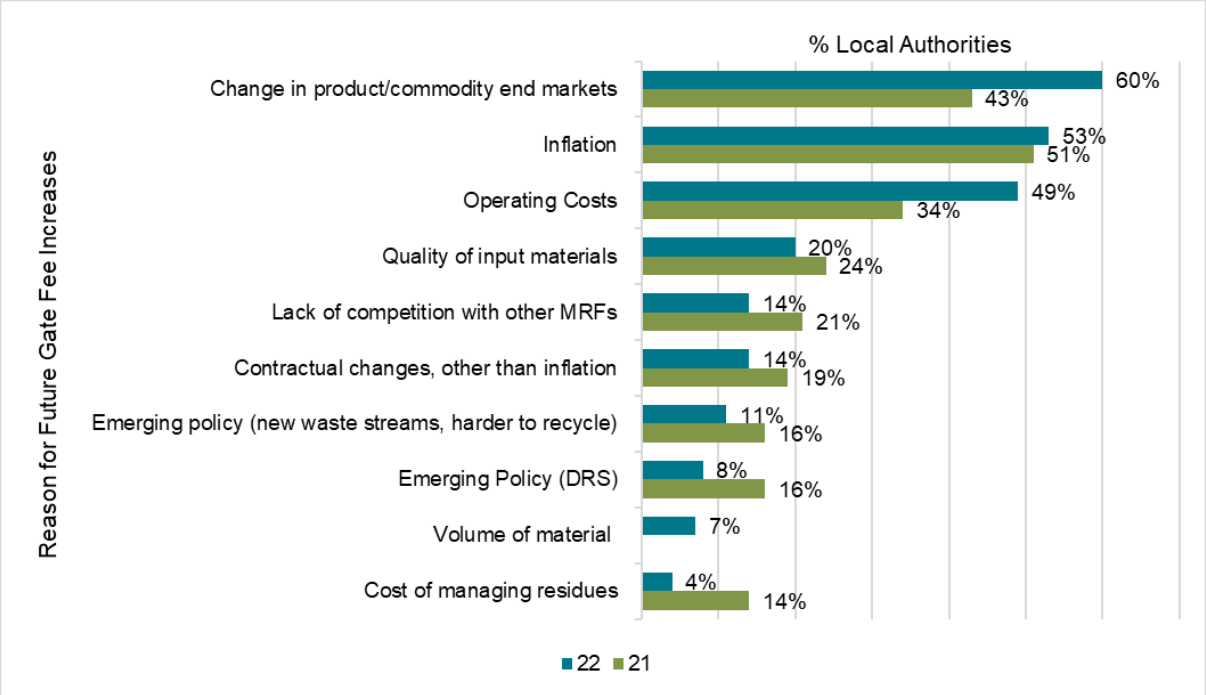
When considering the degree of risk share in contracts only 3% of respondents took 100% of the commodity risk (down from 23% in 2021/22) , a reflection that many older contracts, often linked to PPP/PFI, have been renegotiated to reflect higher operating costs but also higher income costs from commodities.

Contract Renewals

The WRAP Gate Fees Report suggested that 28% of Local Authority respondents had a contract end date in 2023, 18% in 2024 and 26% and in 2025. Out of all of the respondents, 78% had contracts ending by the end of 2026. The short-term nature of current contracts is a function of uncertainty in the market, which will hold back investment and create a deferred need to tender a large number of contracts simultaneously in the market.

Gate Fee Changes

The top 10 reasons for anticipated increases in gate fees by those surveyed in the WRAP report have been extracted into the figure below, noting that the emphasis from the previous year has moved to commodity prices, operating costs and inflation, and less towards policy change and MRF availability.



Source: Adapted from Table 23 of WRAP Gate Fee Report 2020/21 (light green); Table 19 of 2022/23 Report (dark green), Monksleigh

Figure 13: Top 10 Reasons for Future Gate Fee Increases

What the 22/23 survey still does not capture, in Monksleigh's opinion, is the potential impact of changing mix of materials as a result of policy change, leading to a lower rebate for suppliers – although arguably this may be offset by the Extended Producer Responsibility (EPR) payments to local authorities – notwithstanding the announcement in September 2023 around consistent collection/simpler recycling which may delay or indeed re-shape the future policy context.

6. Output Material

Output Material Mix

The number of samples taken in accordance with the regulations was over 108,100; undertaken at a rate considerably higher than that required by the guidance. At £20 to £50 per sample this is an equivalent cost of £2.1m to £5.4m for outbound analysis.

Table 14: Actual Sampling Rates vs Requirement

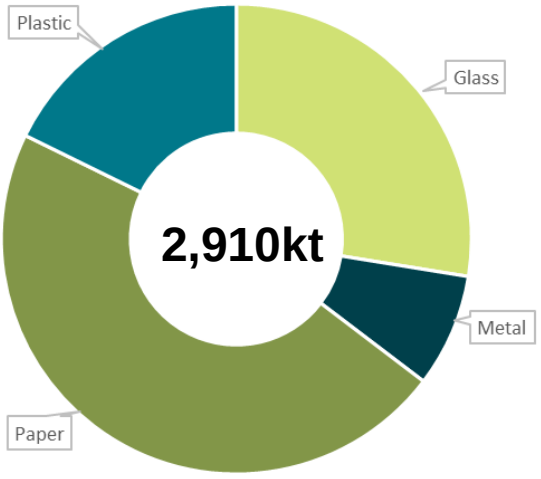
Qualifying Material	Requirement [sample every x tonnes]	Undertaken [sample every x tonnes]	Rate Above Required (%)
Glass	50	46.92	7%
Metal	20	16.02	25%
Paper	60	48.53	24%
Plastic	15	12.9	16%
Average Rate (All Materials)		**25.7**	

This may be due to the size of each delivery to an offtaker (i.e. the offtaker may require a more frequent sample per load) but also some operators choosing to sample more frequently (i.e. for wider management purposes).

The overall sampling of output tonnage of Qualifying Material gives the following mix[5]:

Table 15: Output Qualifying Material Tonnage (all MRFs)

Target Material	Tonnes	Split
Glass	815,006	28%
Metal	225,687	8%
Paper	1,329,573	46%
Plastic	540,102	19%
Total	**2,910,368**	**100%**



[5] The figures reported here and in Tables 15 and 16 include the contamination as set out in Table 17.

From this mix the following table shows the reconciliation between input and output tonnes, applying a calculation to the balancing figures and noting that 353,045 tonnes went back into MRFs for further processing (but not necessarily the MRFs listed in this report).

Table 16: Output Tonnage Reconciled to Input Tonnage

Material	Tonnes	Split
Target Material	2,910,368	69%
For Re-processing	372,763	9%
Non-Recyclable and Non-Target (calculated)	711,606	17%
Balance (not accounted for i.e. losses and stock)	186,223	5%
Total Output (reconciled to input tonnage)	**4,076,618**	**100%**

The outbound sampling showed the following element of non-recyclable and non-target material in the sorted and processed output material (i.e. indicating the contamination unable to be separated by the MRF).

Table 17: Percentage of Target Material by MRF Size (average for materials)

MRF Size	Target Material (%)	Non-Target (%)	Non-Recyclable (%)
Small	92.5%	4.1%	2.1%
Medium	89.6%	5.7%	2.4%
Large	91.6%	4.7%	2.4%
X Large	94.2%	3.7%	2.7%
Total	**91.6%**	**4.7%**	**2.3%**

This level of contamination may be less sensitive in, for example, metal output, but more sensitive in, for example, paper output. It is also apparent from the data that some non-target measurement is a factor of measuring the grade of the output material i.e. paper 'contamination' in a cardboard grade leading to the paper measured as non-target.

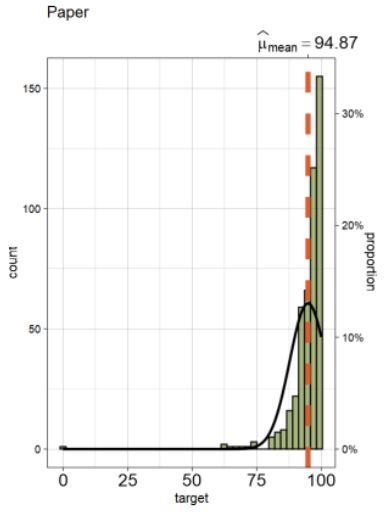
Overall, therefore, all MRFs appear to be able to clean up inputs to give an output with no worse than 2.3% contamination – although it seems that the larger MRFs are able to deliver better quality outputs – likely a function of the equipment available being able to achieve better outcomes.

The distribution of the sampling around the output tonnage per individual target/Qualifying Material is set out in the table below. They indicate that the sampling is weighted towards high levels of target material, re-enforcing the better performance by the larger MRFs, with plastics showing the lowest levels of target material and paper the highest.

Table 18: Distribution of Sampling of Outputs

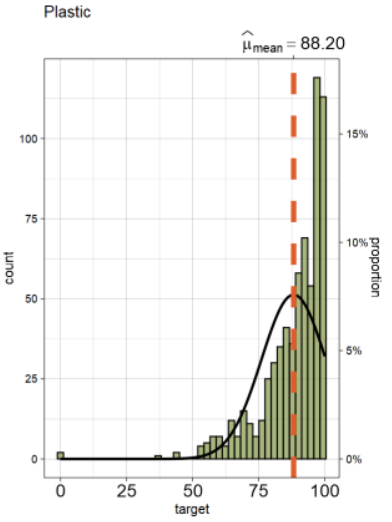
Paper

Size	Average	NonTgt.	NonRecyc.
S	91.8%	2.4%	1.7%
M	93.4%	3.5%	1.9%
L	96.8%	2.3%	1.0%
XL	98.4%	0.9%	0.9%
All	**94.2%**	**2.6%**	**1.5%**



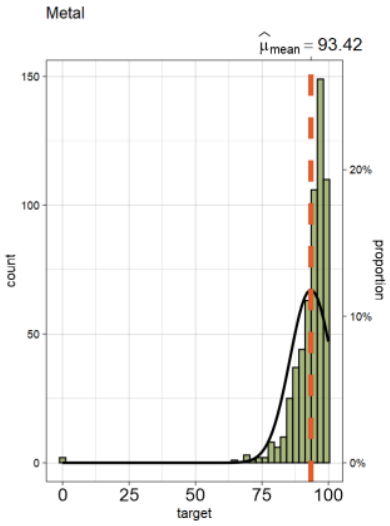
Plastic

Size	Average	NonTgt.	NonRecyc.
S	90.6%	5.7%	2.5%
M	86.8%	9.2%	2.7%
L	89.0%	7.6%	3.3%
XL	91.1%	5.8%	4.2%
All	**89.3%**	**7.1%**	**3.0%**



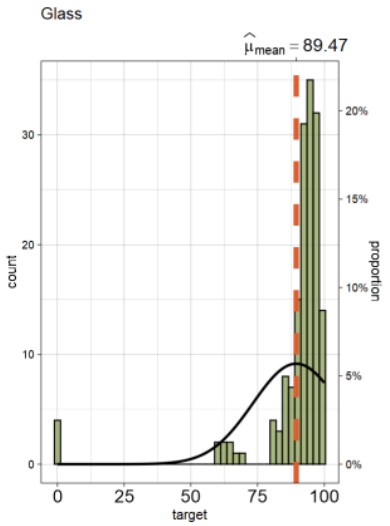
Metal

Size	Average	NonTgt.	NonRecyc.
S	94.8%	3.4%	1.8%
M	90.8%	4.4%	2.2%
L	90.9%	3.9%	2.1%
XL	97.8%	1.2%	1.0%
All	**92.9%**	**3.7%**	**1.89%**



Glass

Size	Average	NonTgt.	NonRecyc.
S	92.8%	4.3%	3.2%
M	81.2%	5.2%	4.4%
L	88.8%	3.4%	3.5%
XL	93.3%	4.1%	2.5%
All	**88.1%**	**4.2%**	**3.6%**



Note: The mean excludes all zero values and therefore is not the same as the average in the table which is across all values.

There appears to be little correlation between the input collection system and degree of non-target and non-recyclable outputs, other than the smaller MRFs appear to be able to tolerate less, i.e. higher levels of 'contamination' on the input lead to higher levels of 'contamination' in the output. This, however, ignores for example separately collected paper grades that are not captured in the scope of this report.

Whilst the overall mix is undoubtably a function of the collection system, the MRF processing is more a reflection of the MRFs ability to process it technically. Hence input contamination is more a function the source of the waste and the degree of attention to detail by those putting out the recyclables for collection.

Trends in Output Material

As per the input analysis, this report represents Qualifying Material data for 2022 only; a broad trend is possible for output data for England since the regulations were introduced in 2016, but not at a granular level at this time. Output from MRFs consistently report c.90% of input material, without considering losses and balancing tonnage.

Analysis of the data, set out in Figure 14 and Figure 15 below, shows that the tonnage recycled through MRFs has:

- A progressive downward trend for paper.
- A marked increase from 2018 in glass handled to a peak in 2020, with a subsequent dramatic drop.
- An increase in plastics from 2018 to 2019, flat to 2021 and a small increase by 2022.

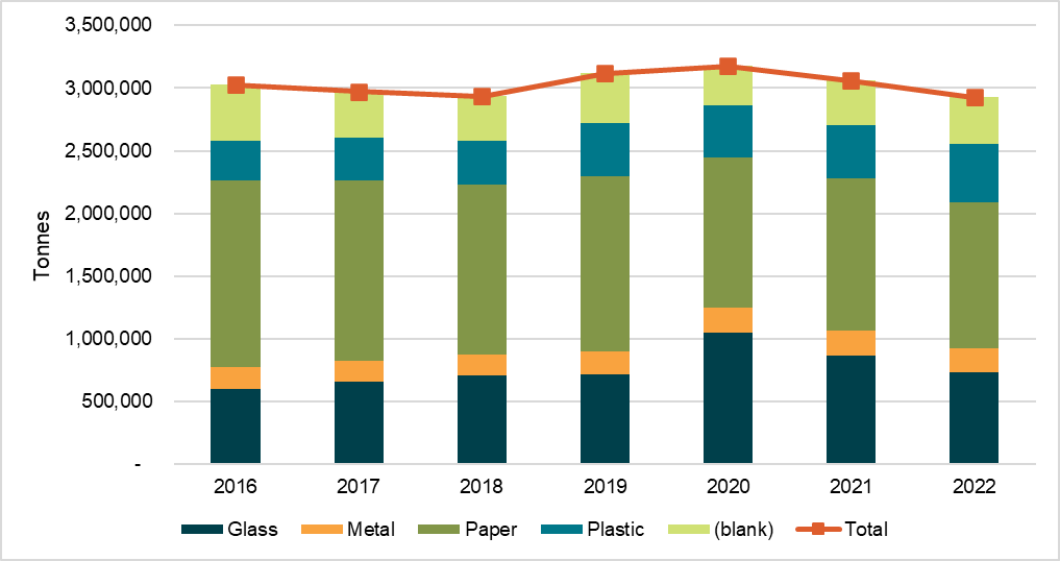


Figure 14: Outputs from MRFs for England only[6]

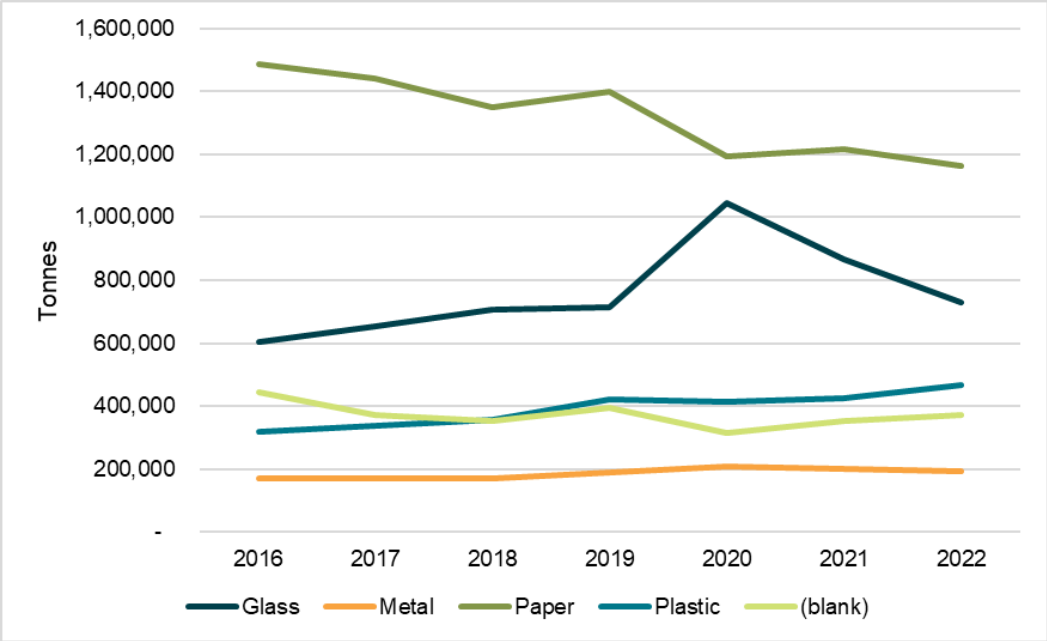
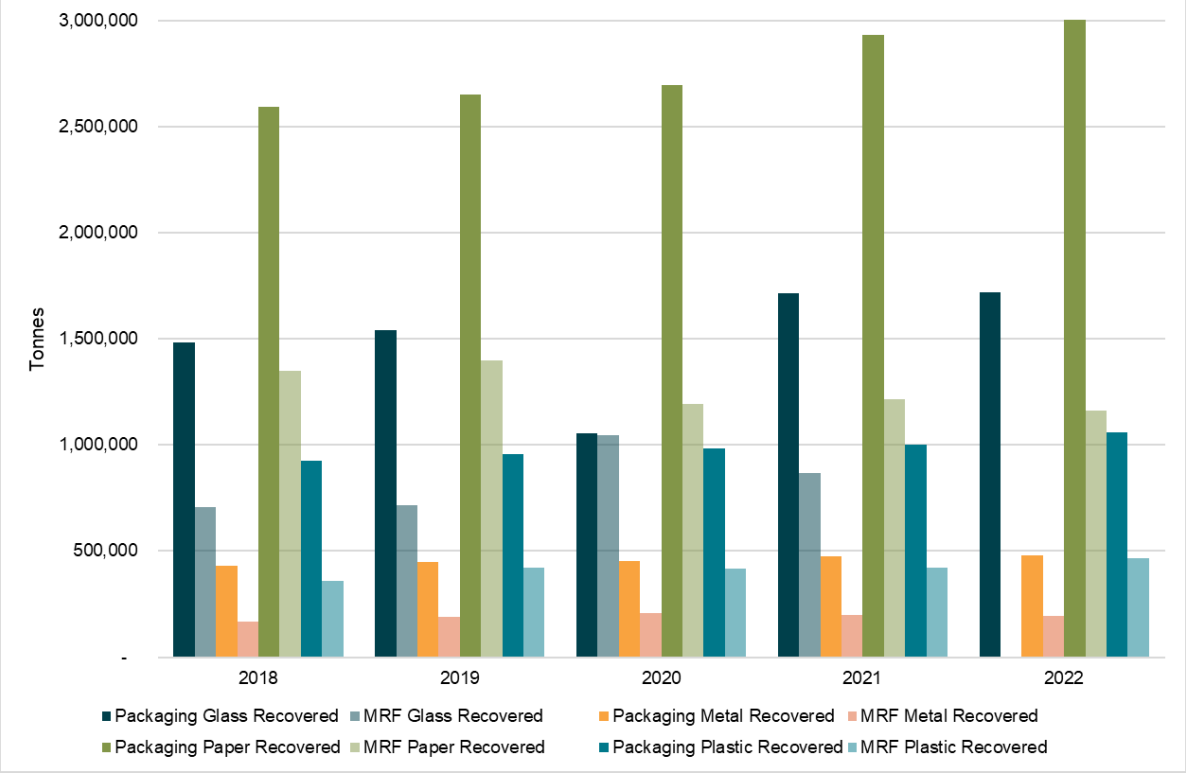


Figure 15: Outputs from MRFs for England only

Analysis of Qualifying Materials leaving sites vs the amount of those packaging waste materials that have been recovered/recycled are shown in Figure 16 below. The key features are:

[6] The outputs shown are the gross measurement by the MRFs and include the levels of contamination reported within the sampling at around 2%.

- An increase in paper packaging over the period, with a drop in paper from MRFs (i.e. more paper packaging is likely to be being recycled via a segregated system)
- A dramatic drop in glass packaging in 2020, corresponding with nearly all of that collected going through MRFs in that particular year (i.e. during COVID the data suggests a drop in glass packaging due to the closure of restaurants and pubs, with an increase of glass presented from households, that then increases in MRFs throughput rather than segregated collections)
- Increases in metals and plastics packaging, with largely corresponding increases in MRFs sending this material out



Source: Qualifying Material and National Packaging Waste Data, Analysis by Monksleigh

Figure 16: Recovery of Packaging Materials vs MRF Outputs (England only)

7. Potential Impacts of Policy and Regulatory Change

Plastics Tax[7]

The Plastics tax was implemented in April 2022, with the primary aim being to increase demand, and in turn price, for recycled plastic packaging. The limitation to price and demand will be the cost of virgin plastic but it will drive more plastics of higher grades over time. A secondary impact is likely to be a reduction in the use of plastic packaging over time.

Amendment to the Environmental Permitting (England and Wales) Regulations 2016

In October 2024 the revised Part 2 Schedule 9 of the Environmental Permitting (England and Wales) Regulations 2016, relating to the sampling requirements at Material Facilities (MFs)[8] will enter into force. This will mean that more MFs will fall under the regulations than they have done previously including those that receive and manage single waste streams or waste already separated at collection.

The biggest impact that these new regulations will have on MRFs currently operating under this regime will be the increase in sampling frequency with the regulations now requiring sampling for every 75 tonnes of material (rather than the 125 tonnes currently required).

At the same time MRFs will be required to measure and report on an increased total of 10 types of incoming material instead of four; packaging and Deposit Return Scheme (see below) material proportions will also have to be sampled and reported.

MFs will need to keep accurate records of the total number and weight of the samples in the reporting period and state whether the material is target, non-target or non-recyclable. More information is available on our website Changes to the MRF Regulations, which also provides a link to the formal guidance.

In our opinion, apart from the practical ramifications of delivering these changes, the likely impact is more than a doubling of cost associated with sampling and reporting.

[7] https://wikiwaste.org.uk/Plastic_Packaging_Tax

[8] MFs are defined in the regulations as a regulated facility or part of a regulated facility that receives mixed waste material in order to separate it into specified output material for the purpose of selling it or transferring it to other facilities or persons to enable that material to be recycled by those facilities or persons.

Extended Producer Responsibility (EPR)[9]

The EPR data gathering requirement commenced as of January 2023 for household packaging placed on the market, with the intention to implement the scheme from 2024 now deferred until late 2025. This will essentially involve payments from business to a central body, for onward distribution to Local Authorities for the collection of their packaging waste put on the market.

It appears that the payment made will be based on the type of collection system implemented. The exact arrangements, the amounts to be paid and the way the Local Authorities will ultimately spend/allocate the money on delivering the service remain unclear.

If the levels of payment are heavily skewed to a particular collection system, then it could influence the approach taken. On the other hand, the cost of changing systems, bins, and associated arrangements (MRFs, bulking, offtakes) are such that many authorities will possibly not change their systems dramatically, just adding the materials under the consistency of materials required.

Simpler Recycling[10]

On 21 October 2023 DEFRA released their response to the consultation regarding the proposed improvements to household and business recycling in England (previously referred to as Consistency in Collection but now termed 'Simpler Recycling').

Under the new requirements[11]:

- All local authorities in England must collect the same recyclable waste streams for recycling or composting from households and include paper and cardboard, plastic, metal, food waste and garden waste.
- All non-household municipal premises in England (such as businesses, schools and hospitals) must make arrangements to have the same set of recyclable waste streams (with the exception of garden waste) collected for recycling or composting and must present their waste in accordance with the arrangements.

DEFRA have confirmed within this response that '*the co-collection of specific dry recyclable waste streams can be collected together as long as it does not significantly reduce their*

[9] https://wikiwaste.org.uk/Extended_Producer_Responsibility
[10] https://wikiwaste.org.uk/Consistency_in_Recycling_Collections_in_England
[11] Consultation Outcome. Government response – consistency in household and business recycling in England, October 2023

potential to be recycled'. These new requirements must be implemented by the respective Local Authorities by 31 March 2026 (for households) and businesses by March 2025 (although micro firms have a two year 'grace-period' on top of this to March 2027). Plastic film collections from doorsteps will commence in March 2027. Further information on the Simpler Recycling proposals are available at: Simpler Recycling. Wales has already progressed legislation to require businesses to sperate wastes from April 2024.

- ## Collection Systems Context

In Monksleigh's opinion, and based on the survey results by WRAP in their annual gate fee report, the patterns for Dry Recyclables collection systems are likely to change as Local Authority contracts come up for renewal:

- A small number of multi-stream collections continue, with possibly a small increase over time if local circumstances and EPR encourage them to do so
- Fully comingled collection continues for metropolitan areas and those areas where it is impractical to change. In some cases it may be that a mixed solution is given, where fully comingled collections continue for multi-occupational housing/flats alongside a different system in the same local authority for houses. Local Authorities thought they may have to use TEEP to justify this approach, but recent clarifications suggest this may not be required.
- An increased movement from fully comingled to a form of twin-streamed collections – the option is primarily to collect either glass or card separately with the remainder a comingled stream.

Therefore MRFs with the ability to handle both fully comingled and twin-streamed solutions will remain competitive and relevant to the widest cross section of the market, but the throughput and storage aspects of the MRF design may be impacted over time with these changing flows.

- ## Potential Impact

In our opinion, the application of the impact assessment originally made for this approach is such that the best movement for Local Authorities is from a c.44.8% recycling rate to a c.58.4% recycling rate by 2035 (notwithstanding that the original roll-out was planned from 2023 and the current roll-out is now planned for 2026).

However, this growth plan is substantially underpinned by the recycling of food and green waste, with dry recyclables equivalent to a c.17% increase in the period.

The largest element of dry recyclables not uniformly collected at present is PTT and plastic film, although, in the case of the current input streams, PTT is on the whole incorporated, as are cartons/Tetrapak. As a result, it is our view that tonnages are likely to increase, with an estimate range of between 5 to 17% of that presently received, equivalent to c. 200,000 to 700,000tpa.

In our opinion, for the commercial/NHM tonnage, the step change is far higher, moving from 35%[12] recycling to 70% recycling by 2035 (notwithstanding that the original roll-out was staggered from a planned 2023 start, with the current plan now staggered from 2025 for larger businesses and 2027 for smaller businesses).

Whilst this looks to have a substantial element of food waste in this target, recyclables (in the form of DMR and separately collected recyclables) would have to grow by 93% to meet the targets (equivalent to around 5.4 million tonnes in England).

In Monksleigh's opinion, this is highly unlikely (with delayed start, further clarity required – especially on payments and PRNs - and poor core data that may mean recycling is already higher than this level) and the lobbying from business may delay it further. The main driver may be the way the EPR is implemented, which drives change in the systems, and businesses themselves seeking to save money/improve recycling.

- Sampling Summary

The exact alignment between the current MRF requirements, those that will come into play from 2024, and Simpler Recycling is summarised in the table below.

Table 19: Materials to be Recycled/Measured (as at end 2023)

Current MRF Input	MRF Input from Oct. 2024	Simpler Recycling	Simpler Recycling (detail – Oct. 2023)
Glass	Glass	Glass	Bottles, condiment bottles, jars
Paper (includes card and fibre-based)	Paper	Paper (includes card and fibre-based)	Newspaper, writing paper
	Card		Cardboard packaging
	Fibre-based Composite		Food and drink cartons
Metal	Aluminium	Metal	Tins and cans, foil, foil trays, aerosols
	Steel		Tins and cans, aerosols
Plastic	Bottles	Plastic	Drinks, milk containers, detergent, shampoo
	PTT		Pots, tubs, trays
	Film and flexibles		Plastic film and flexible packaging
	Other plastic		Incl. tubes

[12] The estimates in the impact assessment were between 30 and 40% based on the vagaries of the data available.

In our opinion the material with the greatest uncertainty, but the largest potential implication for the collection and sorting systems, is plastic film. Trials are presently underway for plastic film collection, and as a result, it is Monksleigh's opinion that including these materials at a later stage roll-out from 2027 is sensible but still of some concern. The biggest issues for plastic film are:

- Surfaces can be heavily contaminated with food and other materials.
- There are presently very limited outlets/offtakes.
- It wraps itself around other materials and objects, making its removal in a mixed stream very difficult.
- The public will have very different views on what constitutes film (for example it might include nappies, crisp packets, carrier bags, food wrapping, dog waste bags etc.) which has implications for contamination, plastic mix/type, offtake arrangements, and plastic offtake arrangements.

Deposit Recovery Scheme (DRS)[13]

The implementation of DRS for England is now focused upon:

- Beverage/Drinks Cans (Aluminium and Steel)
- PET Drinks Bottles (all sizes up to 3 litres)

The target is to progressively implement reverse vending machine roll-out from 2025 to 2028 to achieve 70%, 80% and 90% recovery in each year.

In our opinion, the ramification for current MRFs of a fully implemented DRS hitting the target recovery levels is, therefore, a loss of 5.66% of tonnage at the target recovery rate, or higher in the case where it represents a metal/plastic separation system only. The loss from the collection systems is likely to impact commodity incomes for Local Authorities, which may or may not be offset by payments under the EPR.

If Scotland and Wales were to pursue glass in the DRS scheme, the impact on larger MRFs on managing glass would have a far wider impact.

On balance, the impacts to MRFs are unlikely to occur until around 2025 onwards but reporting is likely to include MRFs that focus on bulking up DRS material, and this may need to be captured as a separate category of MRF type in any future report.

[13] https://wikiwaste.org.uk/Deposit_Return_Scheme

Net Growth

The net effect of loss of materials to DRS, and the increase of collected target materials, leads Monksleigh to assume that tonnage of local authority materials to MRFs will increase by a net c. 500,000 tonnes per annum (also assuming an increase in segregated collection of materials occurs). At a scale of 50,000 tonnes per MRF, at an assumed capital cost of £20m per MRF, this represents a capital investment of £200m, excluding any capital costs of modifying or upgrading existing MRFs.

This increase will, however, be masked by reporting in the future as a wider range of MRFs fall into the reporting requirements.

Tonnage capacity in existing MRFs is likely to be limited due to permitting and space constraints and may indeed drop as the mix of material that is received in the future is likely to have a lower bulk density (i.e. similar volume capacity of conveyors but reduced tonnage capacity).

The delivery requirements for the NHM tonnage would be in addition to this tonnage, and whilst there could be a doubling of the tonnage required to be managed by MRFs with associated new capacity and investment requirements, without the clarity on policy and current recycling arrangements, the scale of delivery required is very uncertain.

8. Appendix 1: Sources of Data

- Environment Agency's (EA) Waste Data Interrogator tool[14] (referred to here as the WDI Tool) for England. The latest version is for the calendar year 2022.
- Natural Resource Wales (NRW) Waste Data Interrogator tool (referred to here as the WDI Tool) for Wales. The latest version is for the calendar year 2022.
- Scottish Environmental Protection Agency (SEPA) – Waste from all Sources Discover Data Tool[15] (subsequently referred to as the "SEPA Data Tool"). The latest version is for the calendar year 2022.
- Northern Ireland Environment Agency (NIEA) Waste Site Data Returns. The latest version for calendar year 2022.
- Data published by SEPA, the EA, and NRW as a result of quarterly returns by those MRFs in the scope of the2016 Environmental Permitting (England and Wales) Regulations. The latest data is for the calendar year 2022.
- National Packaging Waste Database published by the Environment Agency https://npwd.environment-agency.gov.uk/Public/PublicSummaryData.aspx
- Macro data from DEFRA's annual digest of waste and the associated support documents that are supplied by the UK's regulators from waste returns. https://www.gov.uk/government/statistics/uk-waste-data
- Macro data interpreted by Monksleigh from the 'Impact Assessment' associated with the 'Consistency in Household and Business Recycling'. https://consult.defra.gov.uk/waste-and-recycling/consistency-in-household-and-businessrecycling/supporting_documents/Consistency%20in%20recycling%20impact%20assessment.pdf
- Compositional analysis by WRAP used as a baseline for the Consistency in Household and Business Recycling, from a 2017 baseline study. https://wrap.org.uk/resources/report/quantifying-composition-municipal-waste
- WRAP Gate Fee report for 2022-23 (published March 2023) which acts as the main survey reference for Local Authorities. https://wrap.org.uk/resources/report/gate-fees-report-2022-23

[14] Published under open license.
[15] Published under open license.

9. Appendix 2: Qualifying MRFs (see Table 20 for reference numbers)

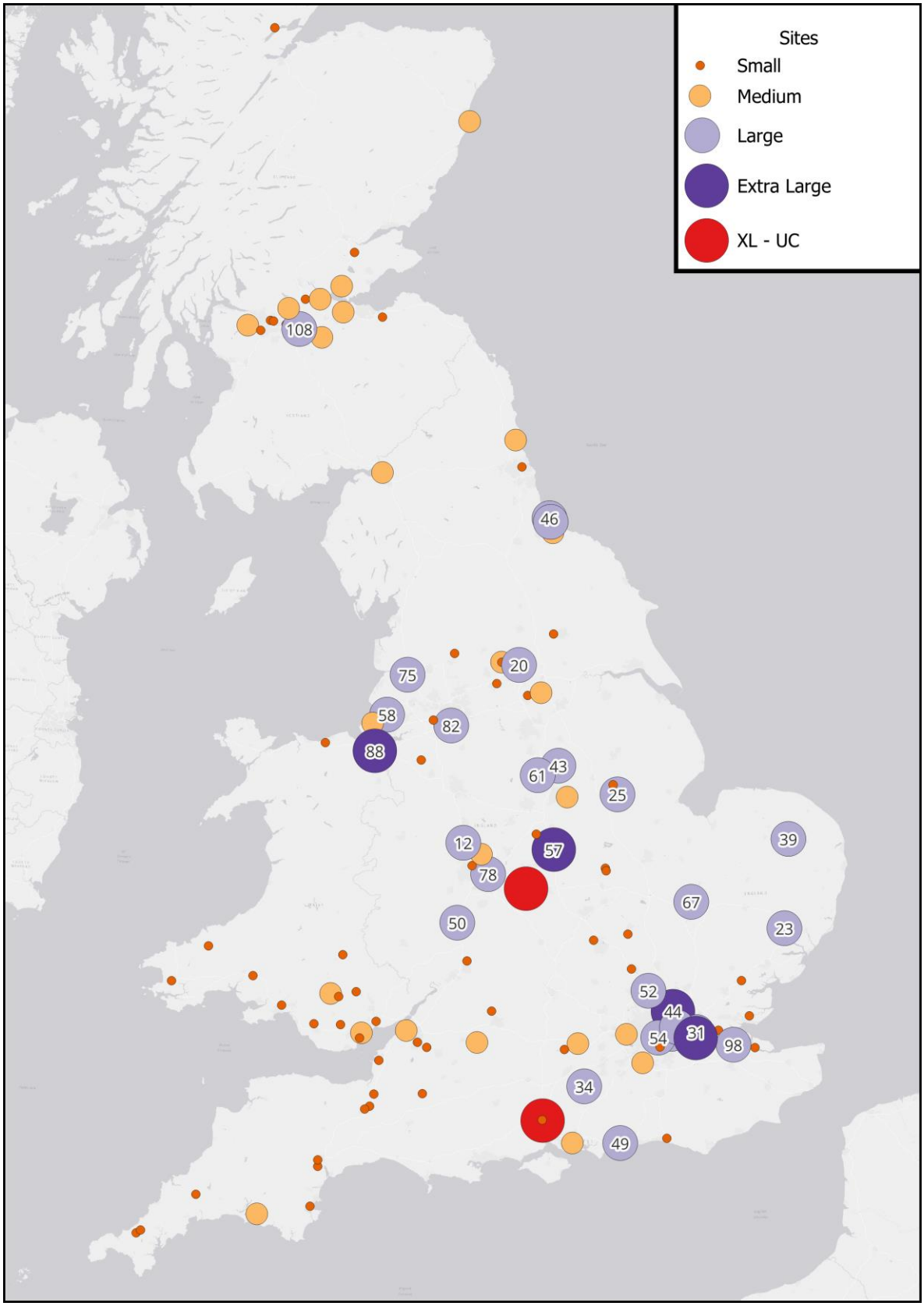


Figure 17: Qualifying MRFs (note: Sherborne Recycling was not operational in 2022)

Table 20: Input Tonnage to Qualifying MRFs in Scotland, Wales and England.

'Size' of MRF referred to in the tables below is by reference to Table 4 in the body of the report
1-S = Small
2-M = Medium
3-L = Large
4-XL = Extra Large

ID	Permit	Size	Operator	Site Name	Country	Permit Tonnes	20 03 01	Qualifying Tonnes
1	10023	2 - M	Viridor Waste Ltd	Pelican Reach (Plot L)	England	89,102		26,570
2	19979	2 - M	Veolia ES [UK] Ltd	Portsmouth MRF and H W R C	England	62,437	44,274	45,015
3	21603	1 - S	SWISCO Ltd	Torbay Transfer Station	England	50,285	32,677	1,839
4	21607	1 - S	Kenbury Wood Ltd	Kenbury Wood Landfill Site	England	90,286	24,610	11,211
5	21739	1 - S	Exeter City Council	Exeter City Council MRF	England	8,364	7,778	7,815
6	26031	1 - S	Bristol Waste Company Ltd	Bristol Waste Recycling Facility	England	48,683	7,328	7,328
7	26157	1 - S	Bath And North East Somerset Council	Keynsham Depot Transfer Station	England	22,347	44	2,989
8	26173	1 - S	SUEZ Recycling and Recovery UK Ltd	Evercreech Depot	England	35,524	4,661	4,661
9	27072	1 - S	Biffa Waste Services Ltd	Priorswood (Syracuse Waste Ltd)	England	32,000	3,603	5,752
10	40292	1 - S	North West Leicestershire District Council	Coalville Waste Transfer Station	England	9,662	1,083	1,083
11	40326	2 - M	Biffa Waste Services Ltd	Aldridge Waste Transfer Station	England	117,675	14,388	39,901
12	42150	3 - L	Veolia ES [UK] Ltd	Four Ashes MRF	England	75,259	32,702	75,259
13	48023	1 - S	S Grundon (Waste) Ltd	Wingmoor Farm	England	45,625	42,069	4,047
14	50392	2 - M	Veolia ES [UK] Ltd	Bidston Recycling Park	England	153,334	128,044	25,971
15	54424	1 - S	Norpol Recycling Ltd	Norpol Recycling Limited	England	51,219	14,729	14,156
16	60684	1 - S	UK Waste Management Ltd	Laisterdyke Transfer Station	England	23,442	10,325	12,416
18	65286	1 - S	SUEZ Recycling and Recovery UK Ltd	Vine Street Mrf	England	17,678	16,871	17,453
19	65300	1 - S	Glass Recycling (UK) Ltd	Carlton Road Site	England	260,961	12,126	12,126
20	65547	3 - L	H W Martin Waste Ltd	H W Martin Waste Ltd	England	83,102	36,229	81,729
21	66013	1 - S	Yorwaste Ltd	Harewood Whin Recycling Centre Facility	England	145,659	118,472	16,552
22	70101	1 - S	Biffa Waste Services Ltd	Milton Keynes MRF (Syracuse Waste Ltd)	England	20,778	11,612	2,949
23	71095	3 - L	Biffa Waste Services Ltd	Masons MRF (Syracuse Waste Ltd)	England	69,154	69,154	69,154
24	71431	1 - S	James Waste Management Llp	Brickfields Way Transfer Station	England	37,684	30,533	16,077
25	73004	3 - L	New Earth Solutions (West) Ltd	Copper Hill Industrial Estate	England	263,945	156,484	100,746
27	73127	1 - S	Biffa Waste Services Ltd	Corby Materials Recycling Facility	England	41,440	25,943	6,868

ID	Permit	Size	Operator	Site Name	Country	Permit Tonnes	20 03 01	Qualifying Tonnes
29	80126	1 - S	Renewi UK Services Ltd	Ilford Recycling Centre	England	13,024	7,263	7,263
30	80601	1 - S	FCC Recycling (UK) Ltd	Luton Transfer Station	England	78,212	71,366	7,191
31	80704	3 - L	Veolia ES [UK] Ltd	Rainham MRF	England	125,321	3,215	90,537
32	80744	3 - L	Bywaters (Leyton) Ltd	Bywaters Recycling and Recovery Centre	England	112,613	93,327	86,517
33	83184	1 - S	SUEZ Recycling and Recovery UK Ltd	Mitcham Transfer Station	England	171,262	81,717	14,484
34	83426	3 - L	Veolia ES [UK] Ltd	Alton Material Recycling Facility	England	78,488	73,044	59,136
35	83440	2 - M	Grundon Waste Management Ltd	Tanhouse Farm MRF	England	78,034	59,791	26,776
36	83464	4 - XL	N&P Crayford MRF Ltd	Crayfords Materials Recycling Facility	England	321,284	264,558	316,311
37	83513	2 - M	Grundon Waste Management Ltd	Leatherhead MRF	England	31,595	31,420	31,419
38	86170	1 - S	Jeremy Mark Freeth	Kingshill Recycling Centre	England	77,445	1,690	1,690
39	100179	3 - L	Norse Environmental Waste Services Ltd	Costessey Resource Recovery Park	England	96,769	93,380	93,380
40	100185	1 - S	Veolia ES [UK] Ltd	Hollingdean MRF & W T S Facility	England	94,755	82,459	19,318
41	100243	2 - M	FCC Recycling (UK) Ltd	Smallmead Waste Management Centre	England	117,884	80,320	25,973
43	100283	3 - L	Veolia ES [UK] Ltd	Crown Farm Materials Recycling Facility	England	68,899	55,371	56,788
44	100373	4 - XL	Biffa Waste Services Ltd	Edmonton (Atlas) MRF	England	281,426	134,041	263,562
45	100379	1 - S	Biffa Waste Services Ltd	Hadrian Yard Central	England	126,090	55,977	557
46	100384	3 - L	J & B Recycling Ltd	J & B Recycling Limited, Windermere MRF	England	132,221	93,296	118,462
47	100467	2 - M	SUEZ Recycling and Recovery UK Ltd	West Sleekburn Materials Recycling Facility	England	108,438	98,301	30,995
48	100619	1 - S	Biffa Waste Services Ltd	Irlam - Material Resource Centre	England	105,867	67,656	10,314
49	100630	3 - L	Biffa Waste Services Ltd	Ford MRF (Syracuse Waste Ltd)	England	77,371	74,053	74,027
50	100768	3 - L	Severn Waste Services Ltd	Envirosort	England	79,797	79,417	79,797
51	101179	2 - M	HELIUM MIRACLE 189 LIMITED	Middlesbrough Container Sorting Line	England	37,064	25,248	29,613
52	101299	3 - L	Pearce Recycling Company Ltd	Pearce Recycling Limited	England	130,517	93,512	94,576
54	101352	3 - L	Cory Environmental Ltd	Smugglers Way Transfer Station / MRF	England	63,896	63,662	63,600
55	101397	1 - S	SUEZ Recycling and Recovery UK Ltd	Taunton Depot	England	34,241	4,704	4,704
56	101437	1 - S	Recycle Force Ltd	Recycle Force Ltd	England	46,711	30,558	18,767
57	101523	4 - XL	GAE Smith (Holdings) Ltd	Casepak Material Recycling Facility	England	152,045	152,045	152,045
58	101533	3 - L	Veolia ES [UK] Ltd	Gillmoss Materials Recovery Facility	England	85,523	83,940	84,555
59	101680	1 - S	SUEZ Recycling and Recovery UK Ltd	Bodmin Materials Recycling Facility	England	32,011	20,885	3,267
60	101838	1 - S	SUEZ Recycling and Recovery UK Ltd	Pool Materials Recycling Facility	England	26,772	15,936	2,912

ID	Permit	Size	Operator	Site Name	Country	Permit Tonnes	20 03 01	Qualifying Tonnes
61	102429	3 - L	H W Martin Waste Ltd	Alfreton Recycling Centre	England	130,437	119,785	119,735
62	102968	1 - S	Cheshire West Recycling Ltd	Winsford Depot	England	18,124	1,401	1,093
65	103737	1 - S	BPR Group Europe Ltd	Juliette Way Materials Recycling & WEEE ATF	England	15,034	5,548	1,491
66	103834	3 - L	Biffa Waste Services Ltd	Teesside Recycling Facility	England	139,064	104,115	93,661
67	104133	3 - L	Thalia WB ODC Ltd	Waterbeach Materials Recycling Facility	England	78,120	76,136	76,136
68	104294	1 - S	Biffa Waste Services Ltd	Redruth Waste Transfer Station	England	30,720	23,230	4,041
69	104898	2 - M	Cumbria Waste Management Ltd	Hespin Woods MRF	England	56,775	6,280	43,574
70	401444	2 - M	Biffa Waste Services Ltd	Chelson Meadow MRF (Syracuse Waste Ltd)	England	24,819	23,345	23,353
71	402072	1 - S	Cheshire West Recycling Ltd	C W & C Canalside Operations Hub	England	30,202	1,098	2,158
72	403218	1 - S	Biffa Waste Services Ltd	Eastleigh Waste Transfer And Recycling Facility	England	75,118	58,924	6,599
73	403235	1 - S	North Somerset Environment Company Ltd	Westlands Distribution Park	England	25,817	6,074	3,852
74	406191	2 - M	Hills Waste Solutions Ltd	Sand's Farm Facility	England	43,937	31,578	31,578
75	AP3937KS	3 - L	Lancashire Renewables Ltd	Leyland Waste Treatment Facility	England	131,509	57,327	55,396
76	CP3938JU	1 - S	Biffa Waste Services Ltd	Biffa Tipton Waste Transfer Station	England	64,859	52,225	9,958
77	DP3236HH	2 - M	SUEZ Recycling and Recovery UK Ltd	Bristol Resource Recovery Park	England	46,771	23,306	37,639
78	FP3335RJ	3 - L	SUEZ Recycling and Recovery UK Ltd	Landor Street IRRC	England	133,633	91,801	91,801
79	JP3934WW	2 - M	Enva Ltd	Enva Colwick RRRF	England	304,939	98,950	42,136
80	KP3539AJ	1 - S	Countrystyle Recycling Ltd	Countrystyle Recycling Limited	England	149,345	62,667	5,068
81	PP3737GT	3 - L	Veolia ES [UK] Ltd	Southwark Integrated Waste Management Facility	England	220,211	164,410	104,647
82	RP3636QW	3 - L	SUEZ Recycling and Recovery UK Ltd	South Manchester Resource Recovery Centre	England	247,678	182,844	97,061
83	SP3832WD	1 - S	Veolia ES [UK] Ltd	Padworth IWM Facility	England	85,066	45,304	55
84	VP3535CL	2 - M	Renewi UK Services Ltd	South Kirkby WMF	England	145,270	119,945	30,602
85	AB3191ZE	1 - S	Newport Wastesavers	Wastesavers Resource Centre	Wales	20,351		3,800
86	AP3199FE	2 - M	Cynon Valley Waste Disposal Co Ltd	Bryn Pica Waste Operations	Wales	66,001	49,636	29,773
87	BB3092HJ	1 - S	Merthyr Tydfil CBC	MTCBC Waste Transfer Station	Wales	18,806	9,159	1,490
88	BT4885IT	4 - XL	UPM-Kymmene (UK) Ltd	Shotton Paper	Wales	355,912	171,983	171,983
89	EP3995FL	2 - M	Cardiff Council	Lamby Way Depot	Wales	79,576	48,618	22,533
91	HP3591EZ	1 - S	Conwy County Borough Council	Gofer Bulking Station	Wales	15,667	15,243	15,243
93	MP3895FT	1 - S	Silent Valley Waste Services Ltd	Silent Valley Waste Transfer Station	Wales	28,153	21,609	4,601
94	QB3032RW	1 - S	City & County of Swansea	The Baling Plant	Wales	131,490	62,735	8,256

ID	Permit	Size	Operator	Site Name	Country	Permit Tonnes	20 03 01	Qualifying Tonnes
95	RP3399FC	1 - S	Powys County Council	Brecon Transfer Station - Cwrt Y Plyffin	Wales	14,053	7,908	2,290
96	SP3795FZ	1 - S	Biffa Waste Services Ltd	Nationwide Works	Wales	22,947	1,730	3,094
97	XB3393HM	1 - S	Project Red Recycling Ltd	Project Red Recycling Ltd	Wales	85,293	23,367	16,270
98	406721	3 - L	P & D Material Recovery Ltd	Berth 6, Basin 3	England	77,722	32,933	77,506
99	0020001	2 - M	Levenseat Ltd	Levenseat Ltd	Scotland	147,326	2,383	42,726
100	0020083	2 - M	Cireco Lochhead	Cireco Lochhead	Scotland	244,270	46,621	21,506
101	0020002	2 - M	Biffa Waste Services Ltd	Biffa Broxburn	Scotland	41,944	14,866	48,299
102	0020112	1 - S	Falkirk Council	Falkirk Council	Scotland	7,600	2,216	9,964
103	0120034	2 - M	Biffa Waste Services Ltd	Biffa Grangemouth	Scotland	21,878		25,618
107	1109747	1 - S	Hamilton Waste & Recycling Ltd	Hamilton Waste & Recycling Ltd	Scotland	62,446	353	2,843
108	1117120	3 - L	Viridor Waste Ltd	Viridor Newhouse	Scotland	42,553		74,266
109	1137739	2 - M	SUEZ Recycling and Recovery UK Ltd	Suez Aberdeen	Scotland	47,657	47,322	24,652
111	0000026	1 - S	Biffa Waste Services Ltd	Biffa Glasgow	Scotland	46,291	36,056	11,577
112	0020110	2 - M	Enva Ltd	ENVA Linwood	Scotland	222,106	37,952	22,373
114	0020181	1 - S	Glasgow City Council	Glasgow City Council	Scotland	15,374		14,022
115	0022002	1 - S	J&M Murdoch Ltd	J&M Murdoch Ltd	Scotland	33,549	408	963
116	0220257	2 - M	Saica Natur [UK] Ltd	Saica Natur [Uk] Ltd	Scotland	15,433	345	28,242
117	JP3998FN	1 - S	AJ Recycling Ltd	Meigan Wells	Wales	9,310	2,154	2,154
118	QP3098FL	1 - S	Resources Management UK Ltd	Withyhedge MRF	Wales	129,752	11,929	801
119	104820	1 - S	Essex Reclamation Ltd	Essex Reclamation	England	57,766	4,194	3,068
120	200000	2 - M	City of Bradford MDC	Bradford Bulk Transfer Loading Station	England	137,300	99,562	24,765
121	404056	1 - S	Lampton Recycle 360 Ltd	Southall Lane Depot	England	21,924	4,365	2,103
UNDER DEVELOPMENT								
UC	TBC	XL	Sherbourne Recycling Ltd	Sherbourne Resource Park	England	175,000	Opened August ‘23	
UC	TBC	XL	Hampshire/Veolia	Eastleigh MRF	England	135,000	Planned delivery ‘25	
UC	TBC	XL	Glasgow City Council	Easter Queenslie Road	Scotland	30,000	To tender Oct ’23 for Jul ’23 delivery	
FIRES REPORTED								
9	27072	1 - S	Biffa Waste Services Ltd	Priorswood (Syracuse Waste Ltd)	England	32,000	3,603	5,752
28	75004	1 - S	Veolia ES [UK] Ltd	Elstow MRF	England	64,924	52,723	No Tonnage
42	100277	2 - M	Pure Recycling Warwick Ltd	Ettington Materials Recycling Facility	England	No tonnage reported in period		

ID	Permit	Size	Operator	Site Name	Country	Permit Tonnes	20 03 01	Qualifying Tonnes
92	KB3097TU	1 - S	CWM Environmental Ltd	Nantycaws Resource Management Centre	Wales	32,422	27,138	No Tonnage
109	1137739	2 - M	SUEZ Recycling and Recovery UK Ltd	Suez Aberdeen	Scotland	47,657	47,322	24,652
PREVIOUSLY REPORTED BUT NO QUALIFYING TONNES IN 2022								
26	73021	1 - S	New Earth Solutions (West) Ltd	Materials Recycling Facility	England	105,161	21,212	
28	75004	1 - S	Veolia ES [UK] Ltd	Elstow MRF	England	64,924	52,723	
53	101349	1 - S	SUEZ Recycling and Recovery UK Ltd	Colley Lane	England	15		
90	GP3690LR	1 - S	May Gurney Ltd	Tondu Waste Transfer Station	Wales	20,874	4,774	
92	KB3097TU	1 - S	CWM Environmental Ltd	Nantycaws Resource Management Centre	Wales	32,422	27,138	
104	0220286	1 - S	Binn Skips	Binn Skips	Scotland	40,720	9,790	
105	1028820	1 - S	Viridor Waste Ltd	Viridor Bargeddie	Scotland	90,811	90,633	
110	0220249	1 - S	Wm Munro Construction Ltd	Wm Munro Construction Ltd	Scotland	5,807	3,400	

Table 21: Input to Qualifying MRFs in Scotland, Wales and England by Qualifying Material Split

ID	Operator	Site Name	Size	Avg % Glass	Avg % Metal	Av % Paper	Avg % Plastic
1	Viridor Waste Ltd	Pelican Reach (Plot L)	2 - M	0.9	1.5	11.3	76.2
2	Veolia ES [UK] Ltd	Portsmouth MRF and H W R C	2 - M	0.0	5.6	73.2	6.8
3	SWISCO Ltd	Torbay Transfer Station	1 - S	0.0	35.7	0.0	60.6
4	Kenbury Wood Ltd	Kenbury Wood Landfill Site	1 - S	0.6	9.2	41.9	30.8
5	Exeter City Council	Exeter City Council MRF	1 - S	0.0	3.1	65.0	9.8
6	Bristol Waste Company Ltd	Bristol Waste Recycling Facility	1 - S	2.4	36.0	1.8	55.8
7	Bath And North East Somerset Council	Keynsham Depot Transfer Station	1 - S	2.9	37.0	1.8	57.3
8	SUEZ Recycling and Recovery UK Ltd	Evercreech Depot	1 - S	0.0	36.2	0.0	60.0
9	Biffa Waste Services Ltd	Priorswood (Syracuse Waste Ltd)	1 - S	2.2	3.8	60.3	7.5
10	North West Leicestershire District Council	Coalville Waste Transfer Station	1 - S	0.0	35.0	0.0	55.6
11	Biffa Waste Services Ltd	Aldridge Waste Transfer Station	2 - M	38.2	13.8	0.0	28.9
12	Veolia ES [UK] Ltd	Four Ashes MRF	3 - L	26.8	18.4	0.0	38.0
13	S Grundon (Waste) Ltd	Wingmoor Farm	1 - S	7.3	9.3	58.0	13.8

ID	Operator	Site Name	Size	Avg % Glass	Avg % Metal	Av % Paper	Avg % Plastic
14	Veolia ES [UK] Ltd	Bidston Recycling Park	2 - M	16.0	5.9	65.2	3.0
15	Norpol Recycling Ltd	Norpol Recycling Limited	1 - S	56.2	13.0	0.0	18.6
16	UK Waste Management Ltd	Laisterdyke Transfer Station	1 - S	0.0	15.3	79.1	6.9
18	SUEZ Recycling and Recovery UK Ltd	Vine Street Mrf	1 - S	0.0	7.1	59.2	7.9
19	Glass Recycling (UK) Ltd	Carlton Road Site	1 - S	17.5	24.3	0.0	43.5
20	H W Martin Waste Ltd	H W Martin Waste Ltd	3 - L	0.0	6.5	58.0	16.1
21	Yorwaste Ltd	Harewood Whin Recycling Centre Facility	1 - S	42.0	14.9	3.1	33.8
22	Biffa Waste Services Ltd	Milton Keynes MRF (Syracuse Waste Ltd)	1 - S	0.0	6.2	55.4	17.3
23	Biffa Waste Services Ltd	Masons MRF (Syracuse Waste Ltd)	3 - L	1.0	8.1	58.5	15.7
24	James Waste Management Llp	Brickfields Way Transfer Station	1 - S	5.1	1.4	68.3	3.2
25	New Earth Solutions (West) Ltd	Copper Hill Industrial Estate	3 - L	20.8	7.3	29.4	14.2
27	Biffa Waste Services Ltd	Corby Materials Recycling Facility	1 - S	2.3	1.6	78.7	4.2
29	Renewi UK Services Ltd	Ilford Recycling Centre	1 - S	14.7	9.0	0.0	13.3
30	FCC Recycling (UK) Ltd	Luton Transfer Station	1 - S	3.1	4.7	47.5	16.1
31	Veolia ES [UK] Ltd	Rainham MRF	3 - L	24.9	17.6	0.0	24.1
32	Bywaters (Leyton) Ltd	Bywaters Recycling and Recovery Centre	3 - L	10.3	11.2	34.3	15.2
33	SUEZ Recycling and Recovery UK Ltd	Mitcham Transfer Station	1 - S	1.0	1.5	75.5	4.1
34	Veolia ES [UK] Ltd	Alton Material Recycling Facility	3 - L	0.0	6.4	71.5	8.7
35	Grundon Waste Management Ltd	Tanhouse Farm MRF	2 - M	11.9	5.0	44.7	12.6
36	N&P Crayford MRF Ltd	Crayfords Materials Recycling Facility	4 - XL	8.3	7.9	51.5	20.1
37	Grundon Waste Management Ltd	Leatherhead MRF	2 - M	27.4	5.1	50.6	8.1
38	Jeremy Mark Freeth	Kingshill Recycling Centre	1 - S	0.6	8.2	0.0	86.8
39	Norse Environmental Waste Services Ltd	Costessey Resource Recovery Park	3 - L	34.8	4.4	36.2	8.6
40	Veolia ES [UK] Ltd	Hollingdean MRF & W T S Facility	1 - S	0.0	2.8	83.4	3.7
41	FCC Recycling (UK) Ltd	Smallmead Waste Management Centre	2 - M	1.1	6.6	60.7	14.2
43	Veolia ES [UK] Ltd	Crown Farm Materials Recycling Facility	3 - L	0.0	5.6	68.3	7.8
44	Biffa Waste Services Ltd	Edmonton (Atlas) MRF	4 - XL	18.5	3.1	51.3	11.4
45	Biffa Waste Services Ltd	Hadrian Yard Central	1 - S	3.1	1.8	57.1	5.8
46	J & B Recycling Ltd	J & B Recycling Limited, Windermere MRF	3 - L	7.2	6.5	60.2	15.7
47	SUEZ Recycling and Recovery UK Ltd	West Sleekburn Materials Recycling Facility	2 - M	0.0	7.7	59.7	9.6

ID	Operator	Site Name	Size	Avg % Glass	Avg % Metal	Av % Paper	Avg % Plastic
48	Biffa Waste Services Ltd	Irlam - Material Resource Centre	1 - S	0.0	0.2	53.2	7.4
49	Biffa Waste Services Ltd	Ford MRF (Syracuse Waste Ltd)	3 - L	35.3	4.9	44.1	8.0
50	Severn Waste Services Ltd	Envirosort	3 - L	17.9	4.4	57.2	7.9
51	HELIUM MIRACLE 189 LIMITED	Middlesbrough Container Sorting Line	2 - M	28.5	7.2	26.1	11.6
52	Pearce Recycling Company Ltd	Pearce Recycling Limited	3 - L	17.1	7.0	48.3	19.7
54	Cory Environmental Ltd	Smugglers Way Transfer Station / MRF	3 - L	20.2	3.0	49.4	9.4
55	SUEZ Recycling and Recovery UK Ltd	Taunton Depot	1 - S	0.0	26.8	0.0	55.8
56	Recycle Force Ltd	Recycle Force Ltd	1 - S	27.0	6.8	34.7	12.2
57	GAE Smith (Holdings) Ltd	Casepak Material Recycling Facility	4 - XL	26.6	4.8	46.3	11.4
58	Veolia ES [UK] Ltd	Gillmoss Materials Recovery Facility	3 - L	19.5	4.9	48.3	6.5
59	SUEZ Recycling and Recovery UK Ltd	Bodmin Materials Recycling Facility	1 - S	1.0	27.8	0.3	67.6
60	SUEZ Recycling and Recovery UK Ltd	Pool Materials Recycling Facility	1 - S	1.6	30.4	0.9	53.6
61	H W Martin Waste Ltd	Alfreton Recycling Centre	3 - L	21.3	14.3	22.7	26.6
62	Cheshire West Recycling Ltd	Winsford Depot	1 - S	0.0	12.0	0.0	85.3
65	BPR Group Europe Ltd	Juliette Way Materials Recycling & WEEE ATF	1 - S	3.3	3.1	35.3	6.0
66	Biffa Waste Services Ltd	Teesside Recycling Facility	3 - L	22.3	5.0	41.4	10.1
67	Thalia WB ODC Ltd	Waterbeach Materials Recycling Facility	3 - L	30.0	3.1	46.7	9.2
68	Biffa Waste Services Ltd	Redruth Waste Transfer Station	1 - S	0.0	5.0	61.5	5.0
69	Cumbria Waste Management Ltd	Hespin Woods MRF	2 - M	46.7	11.8	0.0	35.6
70	Biffa Waste Services Ltd	Chelson Meadow MRF (Syracuse Waste Ltd)	2 - M	19.2	5.3	44.2	10.5
71	Cheshire West Recycling Ltd	C W & C Canalside Operations Hub	1 - S	0.0	17.6	0.0	78.7
72	Biffa Waste Services Ltd	Eastleigh Waste Transfer And Recycling Facility	1 - S	0.6	3.0	60.2	4.4
73	North Somerset Environment Company Ltd	Westlands Distribution Park	1 - S	0.0	33.5	0.0	44.1
74	Hills Waste Solutions Ltd	Sand's Farm Facility	2 - M	0.0	6.6	63.6	11.8
75	Lancashire Renewables Ltd	Leyland Waste Treatment Facility	3 - L	37.6	19.2	2.1	34.9
76	Biffa Waste Services Ltd	Biffa Tipton Waste Transfer Station	1 - S	0.0	0.2	76.2	13.2
77	SUEZ Recycling and Recovery UK Ltd	Bristol Resource Recovery Park	2 - M	10.9	5.1	50.2	12.4
78	SUEZ Recycling and Recovery UK Ltd	Landor Street IRRC	3 - L	11.9	9.4	20.3	10.4
79	Enva Ltd	Enva Colwick Recycling and Resource Recovery Facility	2 - M	13.4	6.4	45.8	14.2
80	Countrystyle Recycling Ltd	Countrystyle Recycling Limited	1 - S	0.0	1.2	81.7	2.2

ID	Operator	Site Name	Size	Avg % Glass	Avg % Metal	Av % Paper	Avg % Plastic
81	Veolia ES [UK] Ltd	Southwark Integrated Waste Management Facility	3 - L	11.0	3.1	59.5	10.5
82	SUEZ Recycling and Recovery UK Ltd	South Manchester Resource Recovery Centre	3 - L	58.5	11.2	0.0	11.9
83	Veolia ES [UK] Ltd	Padworth IWM Facility	1 - S	1.0	28.2	2.1	63.9
84	Renewi UK Services Ltd	South Kirkby WMF	2 - M	20.1	5.9	44.3	11.4
85	Newport Wastesavers	Wastesavers Resource Centre	1 - S	0.9	24.3	1.0	69.2
86	Cynon Valley Waste Disposal Co Ltd	Bryn Pica Waste Operations	2 - M	15.5	5.8	39.3	17.3
88	UPM-Kymmene (UK) Ltd	Shotton Paper	4 - XL	17.7	7.0	50.2	11.6
89	Cardiff Council	Lamby Way Depot	2 - M	9.4	8.3	40.9	28.2
91	Conwy County Borough Council	Gofer Bulking Station	1 - S	1.1	24.6	0.6	60.5
93	Silent Valley Waste Services Ltd	Silent Valley Waste Transfer Station	1 - S	0.0	35.8	0.0	50.1
94	City & County of Swansea	The Baling Plant	1 - S	65.5	26.5	0.0	0.0
95	Powys County Council	Brecon Transfer Station - Cwrt Y Plyffin	1 - S	0.0	18.0	0.0	79.5
96	Biffa Waste Services Ltd	Nationwide Works	1 - S	0.7	1.3	52.9	4.8
97	Project Red Recycling Ltd	Project Red Recycling Ltd	1 - S	6.6	4.4	23.1	26.6
98	P & D Material Recovery Ltd	Berth 6, Basin 3	3 - L	4.9	6.2	29.6	48.5
99	Levenseat Ltd	Levenseat Ltd	2 - M	3.5	11.1	0.0	13.6
100	Cireco Lochhead	Cireco Lochhead	2 - M	0.0	7.4	20.2	39.5
101	Biffa Waste Services Ltd	Biffa Broxburn	2 - M	0.0	5.4	32.4	13.2
102	Falkirk Council	Falkirk Council	1 - S	0.0	7.8	26.5	18.6
103	Biffa Waste Services Ltd	Biffa Grangemouth	2 - M	0.1	10.6	0.0	77.5
107	Hamilton Waste & Recycling Ltd	Hamilton Waste & Recycling Ltd	1 - S	0.0	11.5	0.0	20.0
108	Viridor Waste Ltd	Viridor Newhouse	3 - L	99.3	0.5	0.0	0.0
109	SUEZ Recycling and Recovery UK Ltd	Suez Aberdeen	2 - M	3.4	6.3	37.5	13.6
111	Biffa Waste Services Ltd	Biffa Glasgow	1 - S	0.0	2.3	21.7	3.1
112	Enva Ltd	ENVA Linwood	2 - M	0.0	3.9	20.2	8.1
114	Glasgow City Council	Glasgow City Council	1 - S	0.0	6.5	45.6	6.4
115	J&M Murdoch Ltd	J&M Murdoch Ltd	1 - S	0.0	7.1	9.0	4.0
116	Saica Natur [UK] Ltd	Saica Natur [UK] Ltd	2 - M	0.0	0.1	33.6	0.0
117	AJ Recycling Ltd	Meigan Wells	1 - S	0.0	36.2	0.0	60.2
118	Resources Management UK Ltd	Withyhedge MRF	1 - S	3.0	2.1	15.5	3.9

ID	Operator	Site Name	Size	Avg % Glass	Avg % Metal	Av % Paper	Avg % Plastic
119	Essex Reclamation Ltd	Essex Reclamation	1 - S	0.4	8.7	64.8	17.7
120	City of Bradford MBC	Bradford Bulk Transfer Loading Station	2 - M	16.1	10.8	2.9	10.6
121	Lampton Recycle 360 Ltd	Southall Lane Depot	1 - S	2.9	10.5	2.4	79.8

10. Appendix 3: MRFs in Northern Ireland (see Table 22 for reference numbers)

Figure 18: MRFs in Northern Ireland

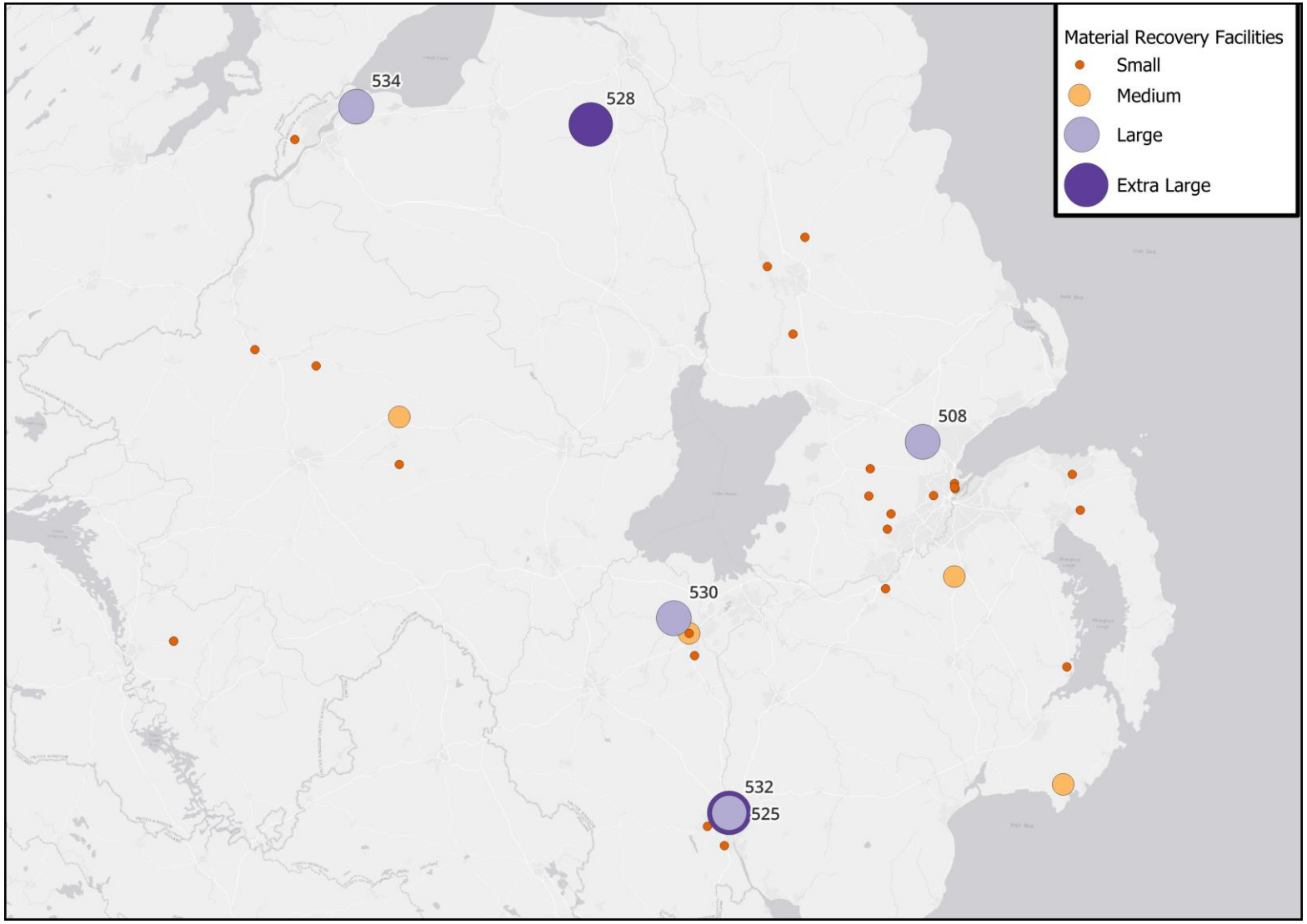


Table 22: Input Tonnage to MRFs in Northern Ireland.

The following table captures all those sites registered as MRFs in Northern Ireland with a primary focus on Municipal Waste. The layout is the same as that for Table 20 above but as qualifying tonnage is not available this column has been shaded grey.

As there is no qualifying tonnage data, the size of the MRFs (and as shown in the map) has been based on upon the 20 03 01 received at the site. As noted elsewhere in the report, this is not entirely accurate as a waste code for qualifying material, but it gives a degree of interpretation for the sites similar to the other table.

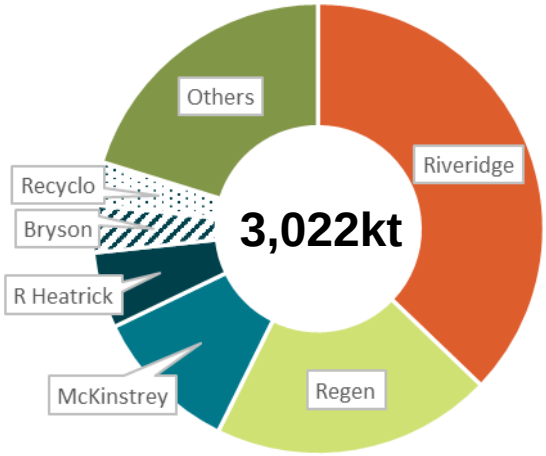
Since 2021 the data for sites #528 and #529 have merged, has have #534 and #535. Site #521 has no reporting for the year and site #533 has changed site classification to landfill/transfer.

ID	Authorisation Reference	Size	Operator	Address	Total Tonnes	20 03 01	Qualifying Tonnes
501	WML 01/18 LN/13/45/V2	S	McKinstry Skip Hire Ltd	81-83 Belfast Road	283,615	14,860	
502	WML 07/46 LN/13/30	S	McKinstry Skip Hire	4 Northern Road	35,954	10,360	
503	WML 12/14 LN/13/50/V4	M	Portadown Recycling & Skip Hire Ltd	Unit 1 Brownstown Business Park	21,976	21,976	
504	WML 12/43 LN/15/19	S	R Heatrick Ltd	76-78 Church Street	50,323	91	
505	WML 19/36/T LN/10/35/T/M	S	R Heatrick Ltd	39 Groganstown Road	114,062	265	
506	WML 23/17 LN/13/24/V2	M	Bryson Recycling Ltd	Belfast Road	102,815	45,680	
507	WML 25/33 LN/11/15	M	Recyco Ltd	Mountfield Quarry	93,249	42,585	
508	WML 28/02/T LN/20/15	L	River Ridge (Mallusk) Ltd	Building 4	132,922	88,126	
509	WML 29/03 LN/16/38	S	Wright Waste Management Ltd	Rockmount Quarry	2,718	62	
510	WML 29/08 LN/19/04	S	Balloo Skip Hire Ltd	19 Balloo Drive	7,854	1,183	
511	WML 29/10 LN/21/08		William Brown (Ards Containers)	Lands between 276 and 278 Killaughey Road	12,970	-	
512	WML 31/02/T LN/18/01	S	Ace Bates Skip Hire Ltd	1 Duncrue Pass	77,443	5,798	
513	WML 33/28 LN/19/21	S	Milltown Gravel Ltd	76 STRABANE ROAD	5,476	168	
514	WML 34/03 LN/16/47	S	Skip Services Enniskillen Ltd	27 Largy Road	14,808	9,688	
515	WML 34/04 LN/16/42	S	Tereco Ltd	1 Minnadinna Road	966	430	
516	WML 34/13 LN/18/04	S	Baxter Waste Solutions (NI) Ltd	Lands at 36 Liscabble Road	76	8	
517	WML 35/01 LN/15/26	S	McQuillan Envirocare Ltd	15 Sycamore Road	25,475	4,552	
518	WML 35/12 LN/19/02		R Heatrick Limited (Skipway)	5 Sheepwalk Road	6,174	-	

ID	Authorisation Reference	Size	Operator	Address	Total Tonnes	20 03 01	Qualifying Tonnes
519	WML 35/14 LN/20/01	M	Irish Waste Services Ltd	94-96 Hillsborough Road	90,964	31,970	
520	WML 35/15 LN/19/13	S	Huhtamaki (Lisburn) Ltd	66 Ravarnet Road	47,628	432	
522	WML 36/06 LN/18/09	S	John Logan & Liam Logan (Hire A Skip)	145 Fenaghy Road	12,630	7,829	
523	WML 36/07/T LN/20/04	S	CM Skips Ltd	Lands 160m North of 10 Island Road	933	260	
524	WML 38/05 LN/17/29	S	Mr Gerard Kinney	78 Chancellors Road	6,425	278	
525	WML 38/10 LN/17/16	XL	ReGen Waste Ltd	Unit 7, Shepherds Drive	299,848	154,051	
526	WML 38/17 LN/18/06	S	Elvis Kirk (K C Skip Hire & Recycling)	The Tannery	5,168	61	
527	WML 38/18 LN/18/14	S	Envirogreen Polymers Ltd	121 Camlough Road	32,205	15	
528	WPPC 10/01 P0087/05A/T1/V11	XL	River Ridge Recycling (Portadown) Ltd	Craigmore Landfill & MRF	516,051	163,961	
530	WPPC 12/06 P0489/15A	L	River Ridge Recycling (Portadown) Ltd	91 Moy Road	241,065	90,052	
531	WPPC 14/06 P0478/15A	M	MacNabb Bros (Waste Management) Ltd	23 Downpatrick Road	54,824	29,251	
532	WPPC 22/04 P0418/13A/V1	L	ReGen Waste Ltd	Unit 7, Shepherds Drive	308,109	121,991	
534	WPPC 33/02 P0534/16A/T1	L	River Ridge Recycling (Portadown) Ltd	19 Electra Road	233,793	77,693	
536	WML 36/02 LN/16/39	S	Woodbine Skips Ltd	72 Cloughwater Road	8,648	4,190	
537	WML 31/10 LN/08/06/M/V3	S	Irish Waste Services Ltd	78 & 116/126 Duncrue Street	23,061	1,506	
538	WML 33/03 LN/16/08	S	Brickkiln Skip Hire Co. Ltd	23 Heather Road	51,129	122	
539	WML 38/13 LN/17/45	S	Mark Trainor (Mark Skip hire)	126 Greencastle Road	1,619	171	
540	WML 34/03 LN/16/47/V2	S	Skip Services Enniskillen Ltd	27 Largy Road	13,561	9,034	
541	WML 35/19 LN/22/03	S	Natural World Products Ltd (NWP)	Glenside Waste Transfer & some processing	35,656	4,420	
542	WML 12/44 LN/16/32	S	Portadown Recycling & Skip Hire Ltd	Unit 1 Brownstown Business Park	44,096	7,645	
543	WML 31/11 LN/17/30/V2	S	Ulster Supported Employment Ltd (USEL)	182-188 Cambrai Street	6,179	117	

Table 23: MRF Market Share by Tonnage Received

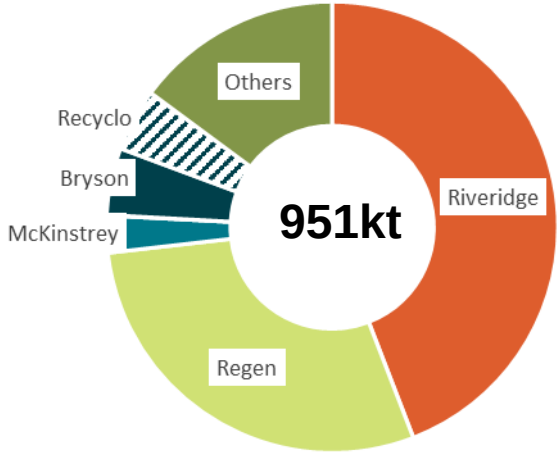
Operator	Total	Split	Sites
River Ridge	1,123,831	37%	4
ReGen	607,597	20%	2
McKinstry	319,569	11%	2
R Heatrick	164,384	5%	3
Bryson	102,815	3%	1
Recyclo	93,249	3%	1
Others	611,020	20%	26
TOTAL	**3,022,465**		**39**



Note: the total tonnage includes all tonnage received at MRFs in Northern Ireland that also reported receiving 20 03 01 in 2021 or 2022.

This results in 39 sites out of 72 MRFs that reported in NI being ‘captured’.

Operator	20 03 01	Split	Sites
River Ridge	419,833	44%	4
ReGen	276,042	29%	2
McKinstry	25,220	3%	2
R Heatrick	355	0%	2
Bryson	45,680	5%	1
Recyclo	42585	4%	1
Others	141,165	15%	24
TOTAL	**950,880**		**37**



Note the 20 03 01 tonnage includes only this tonnage, but as previoulsy noted this code is not just used for DMR material. As a result this is far higher and not directly comparable to the qualifying tonnage in the main body of the report.

In 2022 of the 39 sites receiving 20 03 01 in 2021 two did not in 2022.

RGgen received c.93kt from Britain for processing in 2024.