

What happens to your waste and recycling in Bexhill

A presentation for Bexhill Environmental Group on 22 February 2023

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Waste Team, East Sussex County Council

Agenda

- Waste responsibilities – District, County Council and Contractors
- The composition of your waste
- The journey of your waste and recycling
- What is recycled now and the current limitations
- What happens at the material recovery facility (MRF)
- End destinations for recycling
- Challenges
- Upcoming changes
- Questions

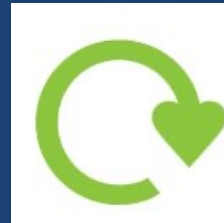
Local Authority Waste Management

Usually organised within the 'two tier' framework

Waste Collection Authorities **Collect** Your Waste



Waste Disposal Authorities **Recycle & Dispose** of Your Waste



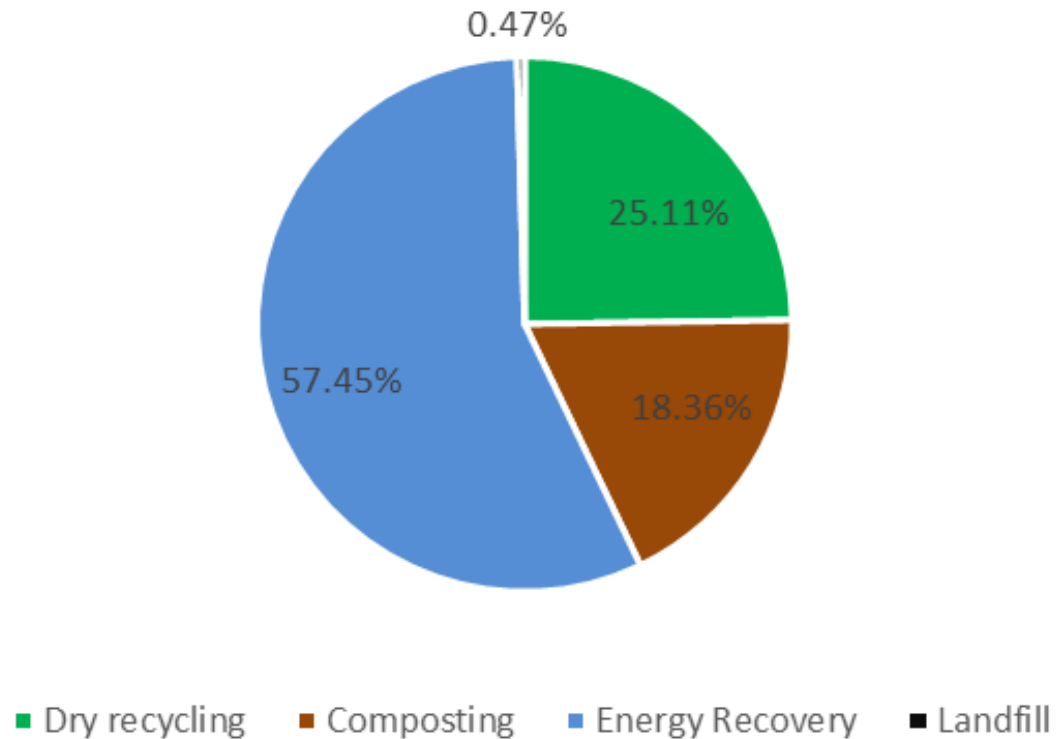
Unitary Authorities **Collect, Recycle & Dispose** of Your Waste.

How much waste is there?

East Sussex County Council is responsible for the disposal, recovery and recycling of **255,000** tonnes of domestic waste each year. Most of this is collected by our five District & Boroughs and about a quarter is brought by residents to our 10 Household Waste Recycling Sites (HWRSs).

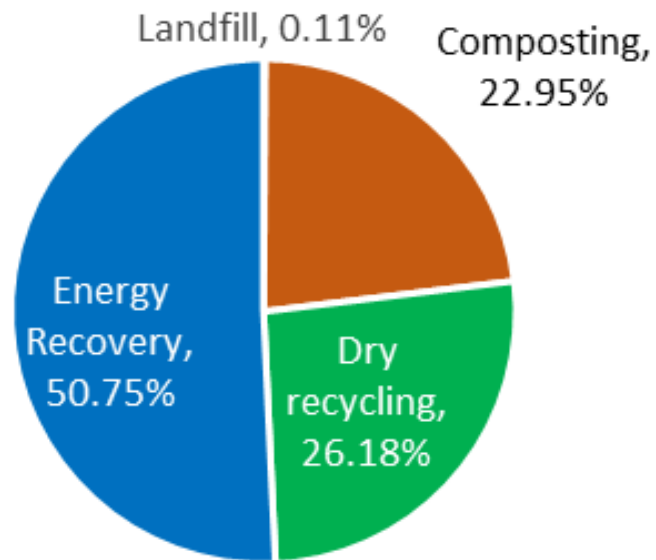
What happens to our waste?

East Sussex Waste Disposal Streams 2021/22



What happens to Rother's waste?

What happened to Rother District Council Waste in 2021/22

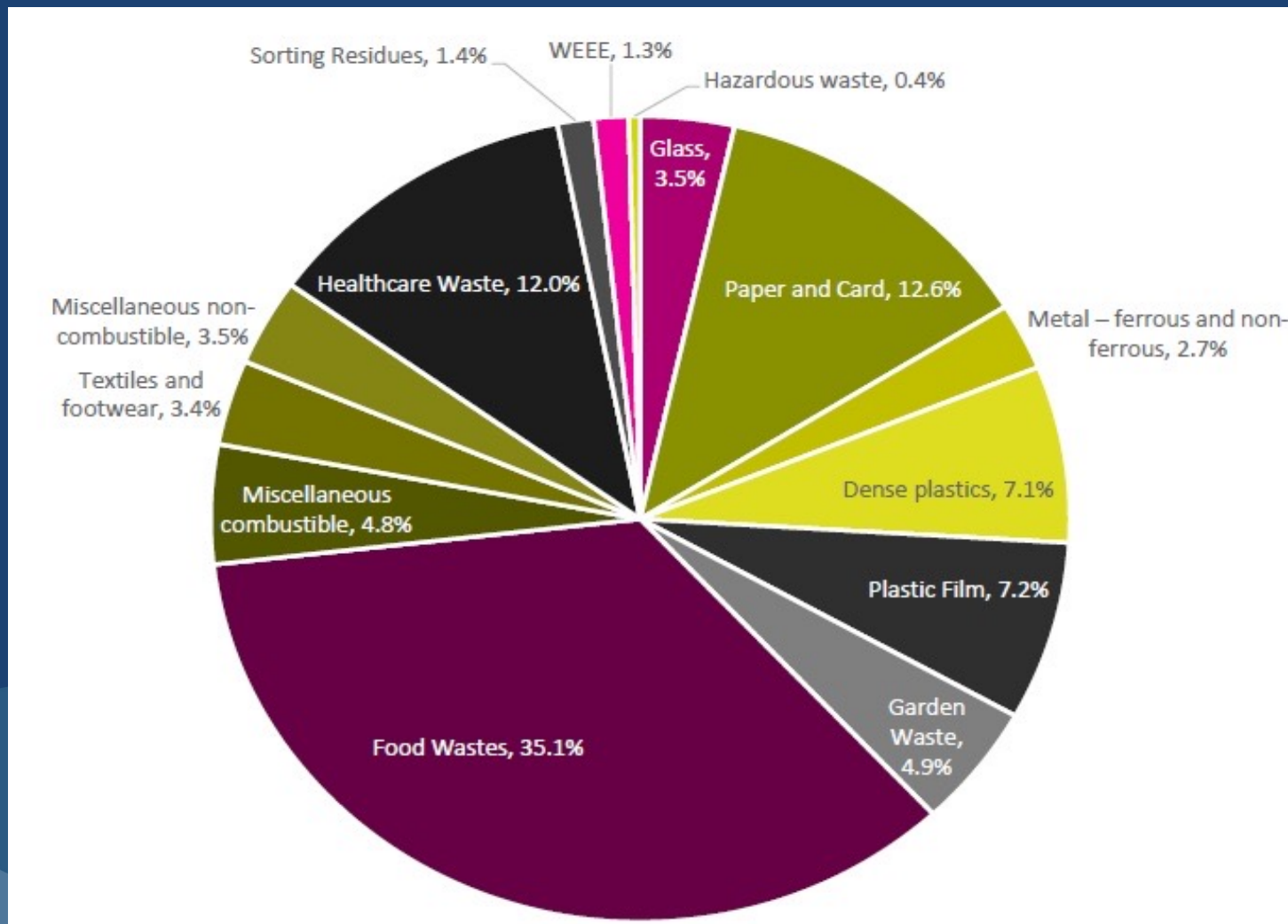


■ Landfill ■ Composting ■ Dry recycling ■ Energy Recovery

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What's in the black bag/bin?



East Sussex County Council – who we work with



- 3 + 2 + 2 years max end date 2026
- kerbside recyclate
- bring bank Recyclate



- 30 year PFI contract ends 2033
- build and maintain waste facilities
- kerbside black bag
- kerbside green
- Household Waste Recycling Site material

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What is the Veolia PFI contract?

Private Finance Initiative

- Long term partnership between local authority, central government and the private sector
- Disposal contract runs from 2003 to 2033
- East Sussex, Brighton & Hove and Veolia
- Defra is a key stakeholder and part fund the contract

What do we get for our money?

1. Newhaven Energy Recovery Facility
2. Hollingdean Materials Recovery Facility and Waste Transfer Station
3. Woodlands In Vessel Composting Facility
4. Maresfield Waste Transfer Station
5. A number of Household Waste Recycling Centre upgrades and replacements

Waste contract costs

About £40m per year spent by both authorities

Costs – most to least expensive

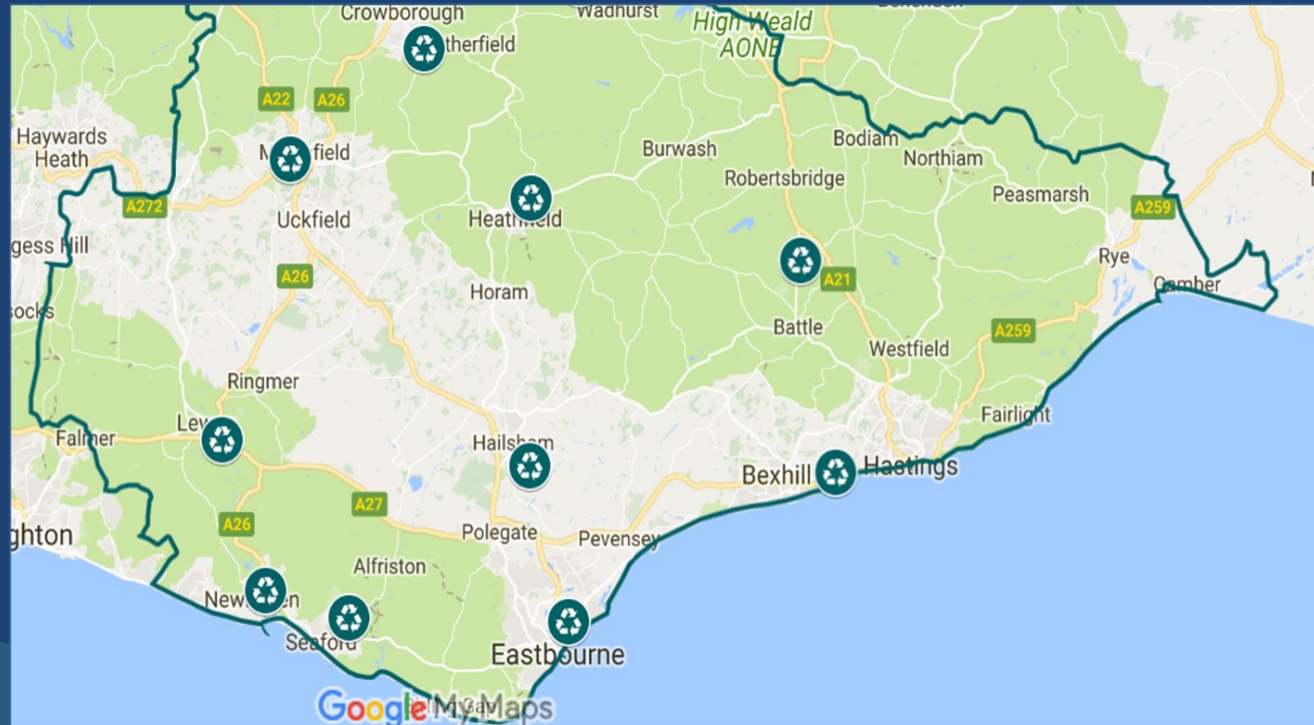
1. Landfill
2. Energy Recovery
3. Reuse
4. Composting/Recycling

What are the benefits?

- By working together over a long period of time we have built our own facilities - £1.3bn project.
- Long term stability
- All facilities handed back to East Sussex and Brighton & Hove in 2033
- The majority of East Sussex and Brighton's waste and recycling is dealt with in the county

Household waste recycling sites (HWRS)

1. Lewes
2. Newhaven
3. Eastbourne
4. Maresfield
5. Hastings
6. Mountfield
7. Heathfield
8. Crowborough
9. Seaford
10. Hailsham



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Hastings Household Waste Recycling Site

Our busiest site!

The site receives over 195,000 visits per year – over 60 visits per hour when open

The site handled 9,000 tonnes last year

The site has a recycling rate of 39%



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Waste transfer stations & processing facilities



Waste Transfer Stations

1. Hollingdean
2. Maresfield
3. Pebsham
4. Third party sites at Haulaway and Light Bros

Districts and boroughs deliver black bag, recycling and garden waste for bulking and onward haulage.



Newhaven Energy Recovery Facility (ERF)



- >220,000 tonnes/yr
- Exports 128,000 KWh/yr
- Enough to power more than 25,000 homes
- Metals, APCr and IBA

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Woodlands In Vessel Composting (IVC)



- Processes kitchen and garden waste
- Capable of processing up to 60,000 tonnes of biodegradable waste.
- Produces pro grow soil conditioners.
- Largest of our facilities and undercover. Able to quickly compost material all year round.

Hollingdean Materials Recovery Facility (MRF)

- Sorts all of Brighton & Hove's kerbside recycling and takes some of the recycling from the HWRSs
- Co-located with a Waste Transfer Station



Dry Mixed Recycling (DMR)



What is the N+P recycling contract?

- Short term partnership between East Sussex County Council and N+P
- Contract runs from 2019 to 2024 but can be extended to 2026
- Sorts approx. 50,000 tonnes of recycling per year at Crayford MRF
- Crayford Material Recovery Facility receives 340,000 tonnes from 35 local authorities each year. East Sussex makes up about 1/6th of material inputs
- ESCC receives 75% of the material value which can help to reduce costs, but only if material values are positive

Kerbside Collections of DMR

- What can I recycle at the kerbside?
 - Glass bottles and jars
 - Paper
 - Cardboard
 - Food tins and drink cans (rinsed)
 - Aluminium foil/trays (clean)
 - Aerosol cans (empty)
 - Plastic bottles (rinsed and squashed with lids put back on)
 - Plastic pots, tubs and trays
 - Plastic bags (not black ones)
 - Plastic film including magazine wrappers; tops of food trays
 - Plastic packaging

Kerbside Collections of DMR

What *can't* I recycle at the kerbside?

Textiles, Food waste, Refuse, Black plastic bags and sacks, Wood, Nappies and other sanitary waste, Food/drink/Tetra Pak cartons, Batteries, Garden waste, Polystyrene, Bubble wrap, Hard plastics (e.g. toys and plant pots), CDs/DVDs and their cases, Foil-lined plastic pouches and bags (e.g. crisp packets), Toothpaste tubes, Medical blister packs; cling-film, Pyrex/ovenproof glassware; drinking glasses, Crockery, Window panes, mirrors; light bulbs, Tyres, Scrap metal, Wet paper and card, Sand and building materials, Electrical equipment, Toxic/hazardous chemical bottles/cans/aerosols, Oil/pesticide containers.

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Kerbside Collections of DMR

Why not cartons / tetrapaks

- These are a 'composite' material – very difficult to recycle
- Previously being bailed with cardboard
- Now categorised as a 'contaminant'
- Mechanical separation is not a common Technology in the UK
- Preserving quality of the other recycling is of key importance



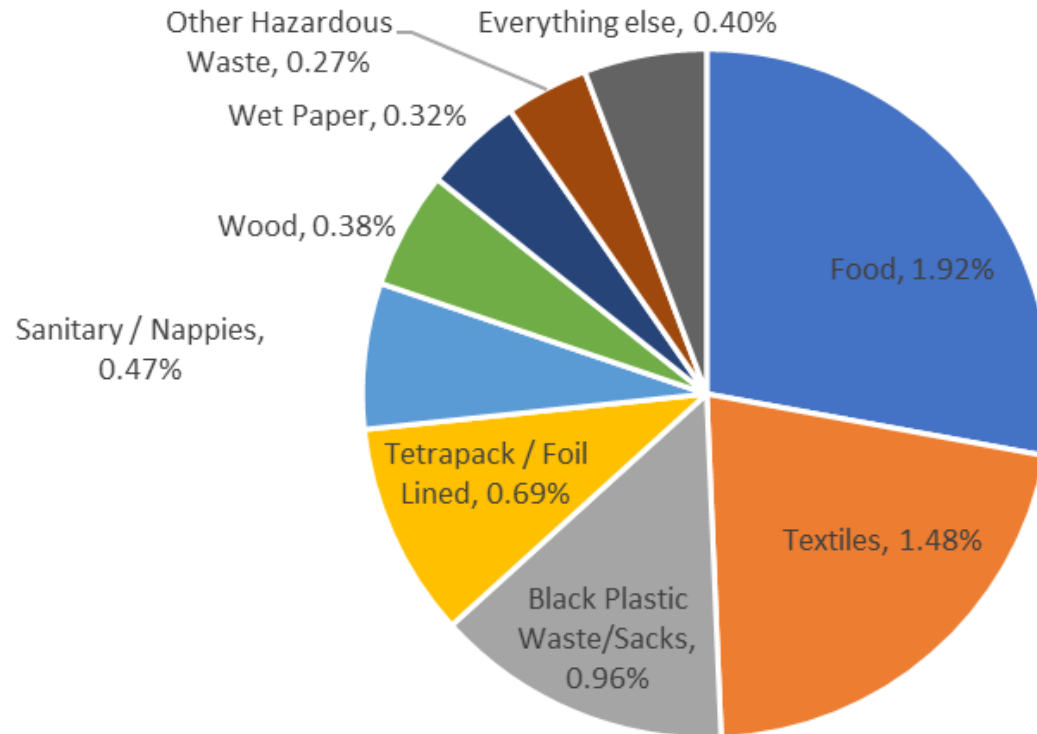
DMR input sampling

Supplier	East Sussex Pebsham												
ContaminationCategory	Material	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Acceptable	Aluminium Cans	1.17%	1.31%	1.51%	1.56%	1.56%	1.65%	1.92%	1.91%	1.88%	1.26%	1.36%	1.39%
	Cardboard	17.09%	14.50%	15.51%	14.91%	13.20%	13.84%	17.63%	12.97%	13.77%	14.81%	13.16%	16.63%
	Glass Mixed	27.07%	26.76%	22.55%	26.32%	27.40%	30.60%	28.72%	30.36%	28.33%	29.23%	27.30%	25.64%
	HDPE Coloured	0.59%	0.97%	0.77%	0.78%	0.59%	0.65%	0.64%	0.67%	0.54%	0.85%	0.38%	0.50%
	HDPE Natural	1.44%	1.58%	1.76%	1.67%	1.83%	1.74%	1.63%	1.73%	1.81%	1.51%	1.69%	1.63%
	Mixed Paper	25.15%	21.99%	22.66%	21.62%	22.12%	18.61%	18.73%	21.68%	17.39%	20.19%	24.48%	22.55%
	News & Pams	9.16%	12.25%	10.96%	11.04%	9.73%	10.71%	10.07%	8.66%	10.46%	12.15%	10.67%	7.93%
	PET Clear	1.99%	2.96%	2.86%	3.16%	2.98%	2.81%	3.50%	3.37%	3.17%	2.15%	2.19%	2.34%
	PET Coloured	0.42%	0.47%	0.49%	0.73%	0.32%	0.58%	0.47%	0.61%	0.78%	0.73%	0.58%	0.40%
	Pots Tubs and Trays	4.65%	5.27%	5.63%	5.48%	5.42%	5.30%	5.47%	5.95%	4.87%	4.77%	5.26%	4.61%
	Steel Cans	2.47%	2.90%	2.87%	2.75%	2.81%	2.96%	2.45%	2.03%	2.30%	2.50%	2.89%	2.98%
Total Acceptable		91.21%	90.97%	87.56%	90.01%	87.96%	89.46%	91.23%	89.94%	85.30%	90.17%	89.96%	86.59%
Objectionable	Hard Plastics	0.00%	0.04%	0.20%	0.00%	0.12%	0.07%	0.07%	0.11%	0.22%	0.00%	0.00%	0.00%
	Plastic Bags Clear & Coloured	2.23%	2.43%	2.43%	3.04%	2.36%	2.46%	2.29%	2.61%	2.75%	1.88%	2.44%	2.10%
	Plastic Film Clear	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Scrap Metals	1.46%	1.26%	1.71%	1.14%	1.91%	1.81%	1.02%	1.72%	1.71%	1.38%	0.90%	1.12%
	Total Objectionable		3.69%	3.74%	4.33%	4.19%	4.40%	4.33%	3.37%	4.44%	4.67%	3.26%	3.34%
Prohibitive	Black Plastic Waste/Sacks	0.22%	0.19%	1.17%	0.48%	0.88%	1.09%	0.18%	0.46%	3.13%	1.76%	0.88%	1.09%
	Ceramics & Pyrex	0.03%	0.01%	0.09%	0.12%	0.15%	0.03%	0.07%	0.07%	0.17%	0.18%	0.14%	0.03%
	Expanded Polystyrene	0.10%	0.04%	0.14%	0.13%	0.09%	0.13%	0.11%	0.14%	0.06%	0.05%	0.08%	0.10%
	Food	1.55%	1.51%	2.28%	1.60%	1.70%	1.85%	1.92%	1.45%	2.52%	1.83%	1.58%	3.25%
	Green Waste	0.02%	0.03%	0.00%	0.01%	1.21%	0.02%	0.00%	0.00%	0.06%	0.13%	0.00%	0.00%
	Oil/Pesticides Container	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Other Hazardous Waste	0.42%	0.43%	0.30%	0.10%	0.14%	0.11%	0.05%	0.11%	0.39%	0.06%	0.21%	0.91%
	Plastic Laminates / Waxed Paper	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Sand/Building Materials	0.00%	0.21%	0.02%	0.00%	0.19%	0.00%	0.28%	0.00%	0.00%	0.00%	0.25%	0.07%
	Sanitary / Nappies	0.44%	0.38%	0.41%	0.67%	0.40%	0.46%	0.63%	0.59%	0.50%	0.20%	0.48%	0.50%
	Tetrapack / Foil Lined	0.68%	0.69%	0.71%	0.74%	0.70%	0.87%	0.67%	0.79%	0.73%	0.56%	0.59%	0.59%
	Textiles	1.20%	1.24%	1.82%	1.47%	1.62%	1.40%	1.09%	1.58%	2.13%	1.07%	1.49%	1.60%
	Wet Paper	0.05%	0.17%	0.56%	0.04%	0.20%	0.00%	0.00%	0.08%	0.00%	0.60%	0.65%	1.47%
	Wood	0.41%	0.37%	0.61%	0.43%	0.36%	0.25%	0.39%	0.35%	0.35%	0.11%	0.35%	0.58%
Total Prohibitive		5.10%	5.29%	8.11%	5.80%	7.64%	6.21%	5.40%	5.62%	10.03%	6.57%	6.70%	10.19%



DMR Contamination

Pebsham WTS average composition of contamination in 2022



Rejected loads

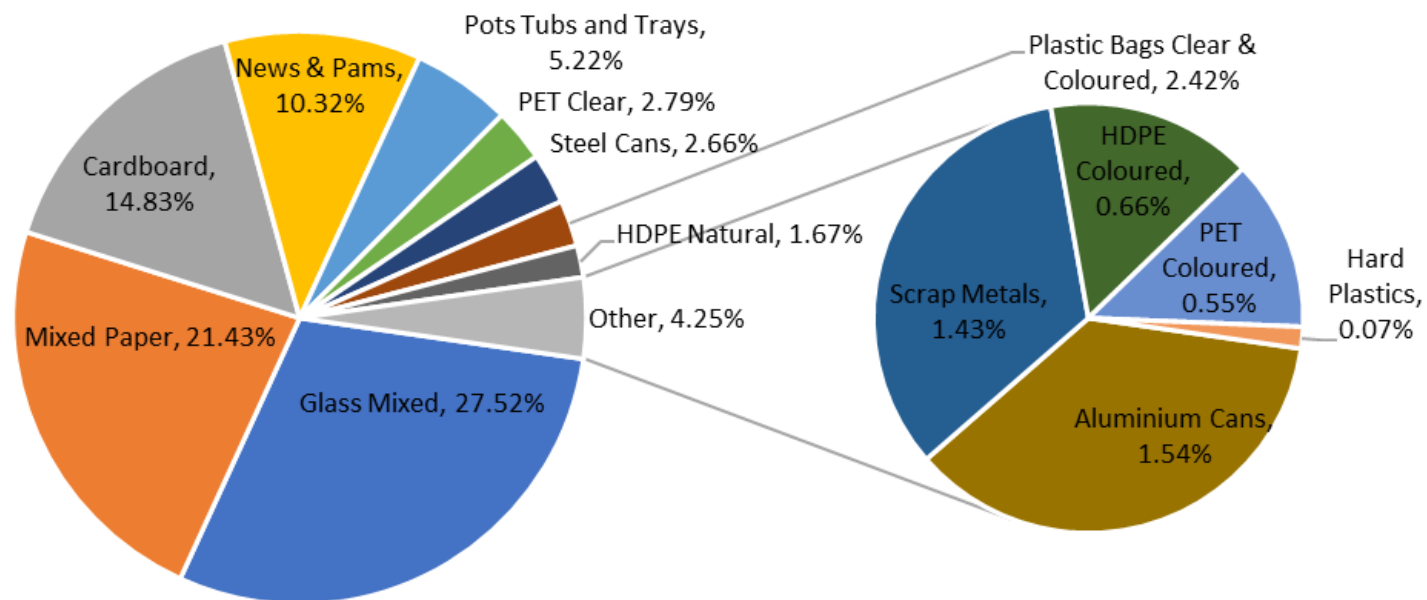


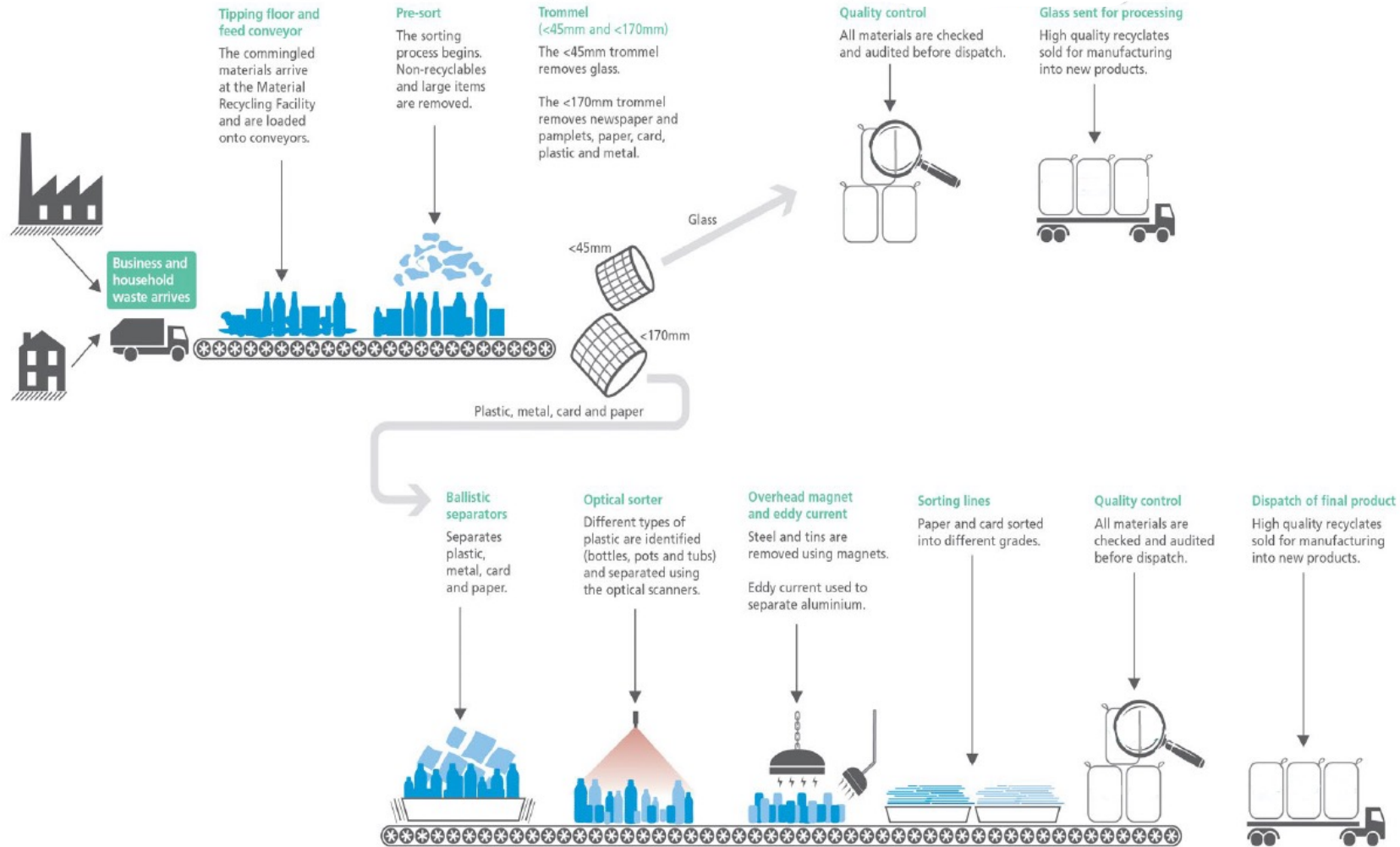
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DMR composition – recyclable material

Pebsham WTS average composition of recyclable material in 2022





End Destinations

“Where does our recycling end up?”

N+P and Veolia operate in global markets selling quality recyclate to commercial third parties

Reprocessors in overseas countries offer a capacity to handle material that isn't always available in the UK

Companies need a range of outlets for materials in order to provide resilience and business continuity

The *process* is arguably more important than the *location*

UK processing capacity



	UK Processing Capacity	UK Collected Material
OCC	4 million tonnes	7.5-8million tonnes
Paper		
HDPE		
PET		
Aluminium	3.5 million tonnes	10.5 million tonnes
Steel		

Estimates, based on recent reports we've received at N+P

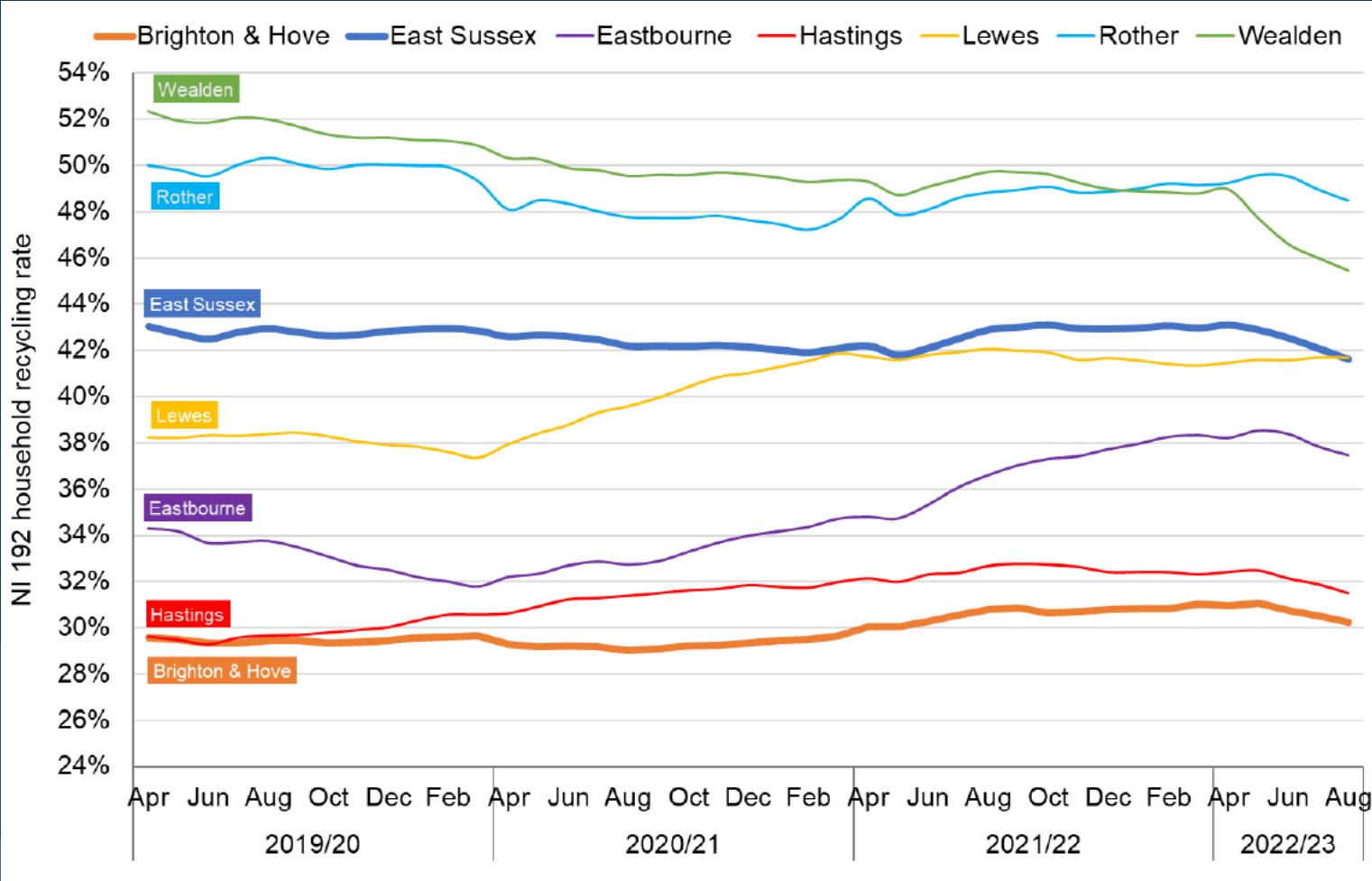
End Destinations – WDF snapshot

WDF MATERIAL	COUNTRY OF DESTINATION	PRODUCT CODE	PRODUCT DESCRIPTION	CUSTOMER	CONSIGNEE NAME	CONSIGNEE ADDRESS	EPR Reference	Oct-22	Nov-22	Dec-22	Grand Total	Split of Commodity
Mixed Glass	UK	GLSMRFMXD0-50	MIXED COLOUR GLASS RESIDUALS 0 - 50 MM FROM A MATERIALS RECYCLING FACILITY (with some fines)	SILICA DEVELOPMENTS LIMITED	SILICA DEVELOPMENTS LTD	ALBION ROAD, SHOREHAM PORT, DOCK GATE NO.3, SOUTHWICK, BRIGHTON, EAST SUSSEX BN42 4ED	WEX032617	366.74	281.06	227.90	875.70	4%
Mixed Glass	UK			GLASS RECYCLING (UK) LTD	GLASS RECYCLING (UK) LTD	418 CARLTON ROAD CARLTON BARNSELY S YORKS S71 3HX	GP3792ZE/V003	2,219.26	2,463.28	3,168.88	7,851.42	38%
Mixed Glass	UK			URM GROUP LIMITED	URM GROUP LIMITED	BERTH 46C TILBURY DOCKS TILBURY RM18 7HS	WEX210752	3,535.32	3,668.28	3,494.98	10,698.58	51%
Mixed Glass	UK			RECRESO LTD.	RECRESO LTD	MANISTY WHARF TERMINAL, NORTH ROAD, ELLESMERE PORT, CHESHIRE CH65 1AB	BP3790SQ/V003	256.64			256.64	1%
Mixed Glass	UK			ALTON WASTE TRANSFER & RECYCLING CENTRE	ALTON WASTE TRANSFER & RECYCLING CENTRE	WATERBROOK ROAD ALTON HAMPSHIRE GU34 2UD	KB3206LN/T001	407.36	411.00	406.50	1,224.86	6%
Aluminium Cans	Greece	METALCANS	ALUMINIUM CANS BALED					156.96		145.78	302.74	25.68%
Aluminium Cans	Germany							275.62	377.28	223.20	876.10	74.32%
Steel Cans	UK	METSTCANS	STEEL/TIN COATED CANS - BALED	GLJ RECYCLING LIMITED	SOUTH WALES EXPORTS	31 WIMBOURNE ROAD BARRY DOCK BARRY CF63 3DH	BB3293NH	149.98	311.44		461.42	19%
Steel Cans	UK			AMG RESOURCES LIMITED	AMG RESOURCES LTD (LLANELLI)	NEVILLS DOCK LLANELLI SA15 2HD	BM2381IQ	127.02	488.10	375.18	990.30	40%
Steel Cans	UK			MORRIS & CO. (HANDLERS) LTD.	MORRIS & CO. (HANDLERS) LTD.	Top Yard, Neath Abbey Wharf Skewen Neath Port Talbot SA10 6BL	BB3394CL	308.42			308.42	13%
Steel Cans	UK			ASM METAL RECYCLING LTD.	ASM METAL RECYCLING LTD.	THE RECYCLING CENTRE GRIFFIN LANE AYLESBURY BUCKS., HP19 8BB	SP3495EX/A001	248.82	196.64	51.04	496.50	20%
Steel Cans	UK			GLJ RECYCLING LIMITED	GLJ RECYCLING LIMITED	LOWER CHAPEL BRIDGE YARD CWMCARN NEWPORT NP11 7NL	DB3097TJ/T001			203.38	203.38	8%
Other scrap metal	UK	METSCRNO1NO2	SCRAP METAL - No. 1 & No. 2 OLD STEEL	S NORTON & CO LTD	HUMPHRIES LTD	DOCKLANDS WHARF, 72-76 RIVER ROAD, BARKING, ESSEX, IG11 0DS	CB3807HV/V002			13.98	13.98	6%
Other scrap metal	UK	METSCRFEFEGASC ANDEPRESS	OLD FERROUS GAS CYLINDERS DE-PRESSURISED AND NON HAZARDOUS	GLJ RECYCLING LIMITED	GLJ RECYCLING LIMITED	LOWER CHAPEL BRIDGE YARD CWMCARN NEWPORT NP11 7NL	DB3097TJ/T001	3.16			3.16	1%
Other scrap metal	UK		USED BALING WIRE AND STRAPPING	S NORTON & CO LTD	HUMPHRIES LTD	DOCKLANDS WHARF, 72-76 RIVER ROAD, BARKING, ESSEX, IG11 0DS	CB3807HV/V002		8.78		8.78	4%
Other scrap metal	UK	METFEALILS	IRONY ALUMINIUM - LOOSE	ASM METAL RECYCLING LTD.	ASM METAL RECYCLING LTD.	THE RECYCLING CENTRE GRIFFIN LANE AYLESBURY BUCKS., HP19 8BB	SP3495EX/A001	75.1	76.32	70.76	222.18	90%

End Destinations – UK V's The World

	UK tonnage	Export tonnage	% UK	% Export
Glass	20,907	0	100%	0%
Steel cans	2,460	0	100%	0%
Scrap metal	248	0	100%	0%
Mixed plastics	6,604	0	100%	0%
WEEE	139	0	100%	0%
Plastic bags	4,930	174	97%	3%
Plastic bottles	2,918	190	94%	6%
Paper	0	24,368	0%	100%
Card	0	8,368	0%	100%
Aluminium Cans	0	1,179	0%	100%
Total	38,206	34,278	53%	47%

Recycling Rates



Carbon Emissions

- Carbon Emergency declared
- Pledge Net Zero by 2050 at latest
- What are the emissions from waste activities?
- Newhaven ERF likely main source
- However positive impact of recycling not included
- Work underway to calculate waste services carbon footprint
- Opportunities to reduce emissions:
 - Recycle more (especially plastics and aluminium)
 - Carbon capture, utilisation and storage (CCUS) technology is in its infancy
 - Low emission vehicles & biofuels

Environment Act – reducing waste and increasing recycling

Things that will happen –

- Introduction of weekly food waste collections
- Consistent set of recycling materials
- Packaging paid for by producers
- Return scheme for drink containers

Things that might change –

- New recycling materials (plastic films, cartons, foil)
- Charges for garden waste collections

Thank you for listening!

