

### **Recycling & recovery end use register 2013/14**

In 2013-14, over 38,000 tonnes of Bath & North East Somerset residents waste was reused and recycled

All of the material shown in this register is collected by Bath & North East Somerset Council and genuinely sent for reuse, recycling, or recovery.

All the material collected for reuse and recycling is sent for recycling within the UK where possible, however, due to demand or market availability, it is sometimes necessary to export some materials overseas. The percentage of materials exported for recycling and reuse 2013-14 was 2.74%.

In total we exported just over 20.1% of the 38,000 tonnes diverted away from landfill. The majority of this exported waste has been removed from residents' weekly bin waste at a facility in Avonmouth. We sent 24,746 tonnes of waste to this facility in 2013-14, and after all the recyclable and compostable waste has been taken out, the rest is exported for use in energy recovery.

Data on the carbon impact of all the waste we divert away from landfill.

This data does not represent a detailed carbon impact assessment for waste management in Bath & North East Somerset being based on national average greenhouse gas factors for CO<sub>2</sub> (kg CO<sub>2</sub>/tonne savings versus landfill) for England provided by the Waste and Resources Action Programme (WRAP).

These national factors are not calculated from detailed life cycle analysis and do not take into account different collection methods, treatment processes or transport.

In 2013-14, over 39,000 tonnes of CO<sub>2</sub> equivalent in emissions were avoided as a result of efforts made by residents of Bath & North East Somerset residents in diverting waste from landfill.

The following tables show a breakdown of the tonnes of material collected by each service and the carbon impact as described above, the amount sent to individual reprocessors and the materials final end use.

NB. The following represents only the Household Waste (also including C&D waste) diverted from landfill in Bath & North East Somerset

KERBSIDE COLLECTIONS	RECYCLED (TONNES)	ENERGY RECOVERY (TONNES)	REUSED (TONNES)	CARBON SAVED (TONNES CO <sub>2</sub> EQUIVALENT)	COLLECTION CONTRACTOR	REPROCESSOR	EXPORTED (TONNES)	END USE
Aluminium Foil	6.01	0.00	0.00	55.69	Kier	Novelis UK Ltd., Warrington	0.00	Remelted for production of new aluminium cans
Aluminium Cans	89.59	0.00	0.00	830.19	Kier	Novelis UK Ltd., Warrington	0.00	
Steel Cans	475.04	0.00	0.00	854.69	Kier	Morris Metals, Doncaster DN11 0PS	475.04	Used in new steel products
Car Batteries	5.85	0.00	0.00	3.29	Kier	G&P Batteries, Darlaston, West Midlands	0.00	Separated into fractions and reprocessed into new batteries or reused as raw materials i.e. Scrap metal and plastic
Cardboard	2,614.67	0.00	0.00	2338.04	Kier	D S Smith Recycling, Avon Mill Lane, Bristol	0.00	Reprocessed into new cardboard
Clothing & Footwear	119.78	0.00	0.00	242.91	Kier	Bristol Textiles Recyclers Ltd, Bristol BS2 0TD	107.80	Exported to Africa, Eastern Europe and Indian sub-continent
Engine Oil	4.48	0.00	0.00	3.25	Kier	Eco-Oil Ltd, Avonmouth	0.00	Reprocessed into low-grade fuel oil for asphalt plants and generators
Food Waste	3,706.78	0.00	0.00	1813.63	Kier	Malaby Biogas Ltd Bore Hill Farm Biogester Deverill Road Warminster BA12 8BF	0.00	Reprocessed into usable compost, & for agricultural use
Food Waste	93.66	0.00	0.00	27.7	Kier	Cannington Enterprise Ltd Swang Farm Anaerobic Digestion Swang Farm, Bridgwater Somerset BA5 2NG	0.00	Reprocessed into usable compost, & for agricultural use
Fridges & Freezers	13.60	0.00	0.00	8.92	Bath & North East Somerset Council	CA Recycling, Newport	0.00	Degassed and broken up into separate components for recycling
Garden Waste	4,872.12	0.00	0.00	1322.78	Bath & North East Somerset Council	Bracken Down Ltd. On farm composting at Green Ore	0.00	Composted for agricultural use on site
	1,325.54	0.00	0.00	359.88		Hills Waste Management, Calne, Wiltshire	0.00	Reprocessed into usable compost
	98.72	0.00	0.00	26.8		Viridor Waste Ltd, Composting facility at Caste Cary	0.00	
Brown Glass	Combined with the Green glass			0	Kier	O-I Manufacturing UK., Harlow.	0.00	Reprocessed into new bottles and jars
Clear Glass	494.02	0.00	0.00	193.66	Kier		0.00	
Green Glass	3,659.70	0.00	0.00	1434.6	Kier		0.00	
Mixed Glass	300.98	0.00	0.00	70.25	Kier		300.98	
Household Batteries	2.68	0.00	0.00	9.51	Kier	G&P Batteries, Darlaston, West Midlands	0.00	Separated into fractions and reprocessed into new batteries or reused as raw materials i.e. Scrap metal and plastic
Paper/Mixed paper	4,847.71	0.00	0.00	3929.13	Kier	Aylesford Newsprint Ltd. Kent	0.00	Reprocessed into 100% recycled paper for newsprint
Mixed Plastics	1,268.62	0.00	0.00	1541.41	Kier	Eco Plastics Ltd, Lincolnshire	0.00	Sorted, graded and shredded. Recycled into new plastic items including pipes, films, compost bins and fleece jackets
Mobile Phones				2.76	Kier	Sims	0.00	Reused and recycled by Fonebank
Toner Cartridges	1.62	0.00	0.00	0	Kier	Greensource Solutions, Bristol	0.00	Re-filled and re-used, or recycled.
Small WEEE	38.62	0.00	0.00	34.28	Kier	Sims	0.00	Individual components recycled
BRING BANKS	RECYCLED (TONNES)	ENERGY RECOVERY (TONNES)	REUSED (TONNES)	CARBON SAVED (TONNES CO <sub>2</sub> EQUIVALENT)	COLLECTION CONTRACTOR	REPROCESSOR	EXPORTED (TONNES)	END USE
Aluminium Cans	0.00	0.00	0.00	0	Kier	Novelis UK Ltd., Warrington	0.00	Smelted into aluminium ingots for production of new aluminium cans
Steel Cans	0.00	0.00	0.00	0	Kier	Morris Metals, Doncaster DN11 0PS	0.00	Used in new steel products
Paper - Books	0.00	0.00	4.81	3.9	Oxfam	Oxfam	0.00	Sold in charity shops, if not sold recycled by Precycle
Textiles	0.00	0.00	3.14	18.8	Oxfam	Waste Saver	3.14	Majority sent abroad, if unsuitable then recycled
	0.00	0.00	5.37	32.16	Traid	Lawrence M Barry & Co	5.37	Sold in charity shops or sent abroad to Africa and Eastern Europe
Food & drink cartons	0.96	0.00	0.00	-1.66	Recresco Ltd, on behalf of Tetrapak	Lefarge, Sweden	0.96	Pulped and different materials are separated. Cardboard used to make new paper/cardboard, plastic and aluminium is used in either furniture or burnt for energy or turned into more aluminium products
Brown Glass	0.00	0.00	0.00	0	Kier	O-I Manufacturing UK., Harlow, Doncaster or Knottingley	0.00	Reprocessed into new bottles and jars
Clear Glass	0.00	0.00	0.00	0			0.00	
Green Glass	0.00	0.00	0.00	0			0.00	
Mixed Glass	0.00	0.00	0.00	0			0.00	
Paper	0.00	0.00	0.00	0	Kier	Aylesford Newsprint Ltd. Kent	0.00	Reprocessed into 100% recycled paper for newsprint
RECYCLING CENTRES	RECYCLED (TONNES)	ENERGY RECOVERY (TONNES)	REUSED (TONNES)	CARBON SAVED (TONNES CO <sub>2</sub> EQUIVALENT)	COLLECTION CONTRACTOR	REPROCESSOR	EXPORTED (TONNES)	END USE
Bicycles	0.00	0.00	3.92	0	Jole Rider, local charity		0.00	Reconditioned for reuse
Bric-a-brac	0.00	0.00	0.23	0	Shaw Trust, local charity		0.00	Sold on for reuse
Books	0.00	0.00	32.00	0	British Heart Foundation		0.00	Sold on in shops for reuse
Aluminium Cans	0.00	0.00	0.00	0	Kier	Novelis UK Ltd., Warrington	0.00	Smelted into aluminium ingots for production of new aluminium cans
Steel Cans	9.14	0.00	0.00	16.44	Kier	Morris Metals, Doncaster DN11 0PS	0.00	Used in new steel products
Car Batteries	22.32	0.00	0.00	12.57	Sims Metals, Avonmouth		0.00	Separated into fractions and reprocessed into new batteries or reused as raw materials i.e. Scrap metal and plastic
Cardboard	641.80	0.00	0.00	361.33	Bath & North East Somerset Council & May Gurney Ltd.	D S Smith Recycling, Avon Mill Lane, Bristol	0.00	Reprocessed into new cardboard
Cardboard	45.95	0.00	0.00	87.76	JW Waste Disposal	DS Smith, Watchet, Somerset, TA23 0AY	0.00	Reprocessed into new cardboard
Clothing	0.00	0.00	167.46	1002.58	Kier	Bristol Textiles Recyclers Ltd, Bristol BS2 0TD	150.71	Exported to Africa, Eastern Europe and Indian sub-continent
Footwear	0.00	0.00	25.29	0	European Recycling Company,		25.29	Exported to developing countries for reuse.
Engine Oil	14.43	0.00	0.00	10.46	West Oils Environmental, Gloucester		0.00	Reprocessed into low-grade fuel oil for asphalt plants and generators
Fluorescent Tubes	3.45	0.00	0.00	0	Mercury Recycling Ltd, Manchester		0.00	Separated into component fractions and recycled

Food & drink cartons	0.00	0.00	0.00	0	Rescresco Ltd, on behalf of Tetrapak	Lefarge, Sweden	0.00	Pulped and different materials are separated. Cardboard used to make new paper/cardboard, plastic and aluminium is used in either furniture or burnt for energy or turned into more aluminium products
Fridges & Freezers	185.23	0.00	0.00	121.51	Sims		0.00	Degassed and broken up into separate components for recycling
Furniture	0.00	0.00	9.27	8.54	Bath & North East Somerset Council	Bath & North East Somerset Council	0.00	Sold on for reuse at low prices to people on low incomes
Garden Waste	1,368.77	0.00	0.00	371.62	Bath & North East Somerset Council	Bracken Down Ltd. On farm composting at Green Ore	0.00	Composted for agricultural use on site
	1,558.56	0.00	0.00	423.15		Viridor Waste Ltd, Composting facility at Caste Cary	0.00	Reprocessed into usable compost
	1,581.38	0.00	0.00	429.34		Hills Waste Management, Calne, Wiltshire	0.00	
Gas bottles	0.00	0.00	5.86	0	Manufacturer		0.00	Reuse if returnable otherwise materials are recycled
	0.00	0.00	0.00	0	Bale Group Ltd, Honiton			Reuse if returnable otherwise materials are recycled
Mixed Glass	182.66	0.00	0.00	42.64	Kier	O-I Manufacturing UK., Harlow, Doncaster or Knottingley	0.00	Reprocessed into new bottles and jars
Electricals - White goods	201.95	0.00	0.00	255.6	SIMS Metals, Newport	Valpack, Warwickshire	0.00	Broken down into separate components for recycling
Electricals - Small mixed goods	445.78	0.00	0.00	660.47	SIMS Metals, Newport	Valpack, Warwickshire	0.00	Broken down into separate components for recycling
Paper	316.19	0.00	0.00	256.28	Kier	Aylesford Newsprint Ltd. Kent	0.00	Reprocessed into 100% recycled paper for newsprint
Plasterboard / Gypsum based products	218.30	0.00	0.00	30.31	Commercial Recycling		0.00	Shredded and either sent for use in either manufacture of new plasterboard or cement
	67.68	0.00	0.00	9.4	Hills Waste Solutions		0.00	Shredded and either sent for use in either manufacture of new plasterboard or cement
Mixed Plastics	21.48	0.00	0.00	26.1	Kier	Eco Plastics Ltd, Lincolnshire	0.00	Sorted, graded and shredded. Recycled into new plastic items including pipes, films, compost bins and fleece jackets
Rubble	4,976.24	0.00	0.00	44.68	Bath & North East Somerset Council	MJ Church Plant, Star Farm, Marshfield	0.00	Screen and crushed to for resale as aggregates
Scrap Metal	1,000.41	0.00	0.00	2239.8	Sims Metals, Avonmouth		0.00	Separated by metal type and recycled
TV's & Monitors	276.03	0.00	0.00	0	SIMS Metals, Newport	Valpack, Warwickshire	0.00	Broken down into separate components for recycling
Tyres	40.62	0.00	0.00	77.59	RJ Kings, Farrington Gurney	Western Tyres, Avonmouth	0.00	Shredded and used to make new rubber products such as new tyres and running tracks
Vegetable Oil	4.11	0.00	0.00	0	C&D Oils Ltd, Newport		0.00	Reprocessed into Biodiesel and lubricants
Wood	1,405.09	0.00	0.00	1792.85	Bath & North East Somerset Council	Viridor Waste Ltd, Filton Transfer Station, Bristol	0.00	Chipped for reuse in new products
<b>OTHER RECYCLING</b>	<b>RECYCLED (TONNES)</b>	<b>ENERGY RECOVERY (TONNES)</b>	<b>REUSED (TONNES)</b>	<b>CARBON SAVED (TONNES CO<sub>2</sub> EQUIVALENT)</b>	<b>COLLECTION CONTRACTOR</b>	<b>REPROCESSOR</b>	<b>EXPORTED (TONNES)</b>	<b>END USE</b>
Leaf litter from street sweepings	0.00	0.00	0.00	0	Bath & North East Somerset Council	Bracken Down Ltd. On farm composting at Green Ore	0.00	Composted for agricultural use on site
	0.00	0.00	0.00	0	Bath & North East Somerset Council	Hills Waste Management, Calne, Wiltshire	0.00	Reprocessed into usable compost
	0.00	0.00	0.00	0	Bath & North East Somerset Council	Viridor Waste Ltd, Composting facility at Caste Cary	0.00	
Other mixed items	0.00	0.00	2.00	0	Residents of Bath & North East Somerset	Residents of Bath & North East Somerset	0.00	Reused by residents of Bath & North East Somerset
<b>WASTE RECOVERED FROM WEEKLY COUNCIL BLACK SACK COLLECTION</b>	<b>RECYCLED (TONNES)</b>	<b>ENERGY RECOVERY (TONNES)</b>	<b>REUSED (TONNES)</b>	<b>CARBON SAVED (TONNES CO<sub>2</sub> EQUIVALENT)</b>	<b>CONTRACTOR</b>	<b>REPROCESSOR</b>	<b>EXPORTED (TONNES)</b>	<b>END USE</b>
Aluminium	0.00	9.11	0.00	0	New Earth Solutions, Avonmouth	Sims Metals, Avonmouth	9.11	Exported for remelting
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	Reliance Scrap Metal Merchants (Parkstone) Ltd, Poole	0.00	Processed for remelting
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	European Metal Recycling, Birmingham	0.00	Exported for remelting
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	N Brookes & Brothers Ltd, Cradley Heath	0.00	Remelted for production of new aluminium products
	0.00	11.08	0.00	0	New Earth Solutions, Avonmouth	Alutrade Limited, Redditch	0.00	Remelted for production of new aluminium products
Steel	0.00	242.76	0.00	2249.55	New Earth Solutions, Avonmouth	Sims Metals, Avonmouth	242.76	Exported for remelting
	0.00	262.64	0.00	2433.8	New Earth Solutions, Avonmouth	Sims Metals, Newport	262.64	Exported for remelting
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	Sait Systems, Barnsley	0.00	Processed for remelting
	0.00	11.52	0.00	4.52	New Earth Solutions, Avonmouth	Alutrade Limited Redditch	0.00	Remelted for production of new ferrous products
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	BW Riddle Lincs	0.00	Remelted for production of new aluminium products
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	N Brookes & Brothers Ltd Cradley Heath	0.00	Remelted for production of new ferrous products
Mixed Plastics	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	Hanbury Plastics Recycling Ltd Stoke	0.00	Reprocessed into new plastic
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	TJL Industries, Gloucestershire	0.00	Granulated for reuse
	0.00	5.04	0.00	4.08	New Earth Solutions, Avonmouth	J&A Young, Derbyshire	0.00	Recovery of scrap plastic
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	New Earth Solutions, Gloucestershire	0.00	Recovery of scrap plastic
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	AWS Ecoplastics Limited, Gainsborough	0.00	Reprocessed into new plastic bottles
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	N+P International BV, Netherlands	0.00	Assessment of recycling potential
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	Leeds Paper Recycling Ltd, Leeds	0.00	Recovery of scrap plastic
	0.00	0.00	0.00	0	New Earth Solutions, Avonmouth	Transwaste Recycling & Aggregates Ltd, North Humberside	0.00	Assessment of recycling potential
0.00	24.08	0.00	27.84	New Earth Solutions, Avonmouth	Sanderson Environmental (West Yorkshire)	0.00	Used for landfill site restoration	
0.00	345.19	0.00	588.4	New Earth Solutions, Avonmouth	Buckingham Group (Leicester)	0.00	Used for landfill site restoration	

Compost like material	0.00	641.39	0.00	744.35	New Earth Solutions, Avonmouth	4 Recycling (Nottinghamshire)	0.00	Used for landfill site restoration
	0.00	30.59	0.00	27.15	New Earth Solutions, Avonmouth	4 Recycling (Hertfordshire)	0.00	Used for landfill site restoration
	0.00	63.38	0.00	69.57	New Earth Solutions, Avonmouth	4 Recycling (Rochester)	0.00	Used for landfill site restoration
	0.00	52.22	0.00	49.49	New Earth Solutions, Avonmouth	4 Recycling (Leicester)	0.00	Used for landfill site restoration
	0.00	330.19	0.00	409.27	New Earth Solutions, Avonmouth	4 Recycling (Derby)	0.00	Used for landfill site restoration
	0.00	285.37	0.00	196.33	New Earth Solutions, Avonmouth	MJ Church (Swindon)	0.00	Used for landfill site restoration
Other	0.00	2,742.91	0.00	1887.12	New Earth Solutions, Avonmouth	AVR Afvalverwerking BV, Netherlands	2,742.91	Exported for energy recovery
	0.00	2.90	0.00	0	New Earth Solutions, Avonmouth	SITA Ridham Waste Transfer	0.00	Energy recovery
	0.00	6,201.94	0.00	0	New Earth Solutions, Avonmouth	HVC AfValcentrale, The Netherlands	6,201.94	Exported for energy recovery
	0.00	1,423.08	0.00	0	New Earth Solutions, Avonmouth	Weener Energie	1,423.08	Exported for energy recovery
	0.00	1,067.60	0.00	0	New Earth Solutions, Avonmouth	Churngold Recycling, Avonmouth	0.00	Energy recovery
	0.00	159.96	0.00	0	New Earth Solutions, Avonmouth	Tilmanstone Works, Kent	0.00	Energy recovery
	0.00	8.80	0.00	0	New Earth Solutions, Avonmouth	Boomeco Ltd, Avonmouth	0.00	Energy recovery
	0.00	771.26	0.00	0	New Earth Solutions, Avonmouth	AVG Koln mbH Geestemunder	0.00	Exported for energy recovery
	0.00	221.30	0.00	0	New Earth Solutions, Avonmouth	New Earth Solutions, Canford	0.00	Energy recovery
	0.00	5,645.59	0.00	7203.58	New Earth Solutions, Avonmouth	New Earth Energy, Avonmouth	0.00	Energy recovery

recycling	recovery	reuse	Co2 equivalent	all export	11,951.74	20.1%
38,628.32	20,559.89	259.36	39,332.64	just recycling & reuse	1,583.81	2.7%
Total 59,447.57						

			variance
Kerbside	24,039.79	24039.79	0.00
RC	14,831.61	14790.05	41.56
Banks	14.28	14.28	0.00
MBT	20,559.89	20559.51	0.38
Other	2.00	2.00	0.00