

	<b>Overview of Market Conditions for Recyclable Materials</b>
<b>Committee</b>	Gloucestershire Joint Waste Committee
<b>Committee Date</b>	<b>4 October 2016</b>
<b>Decision?</b>	No
<b>Responsible Officers</b>	Steve Read, Head of Service, Gloucestershire Joint Waste Team (01823 625707; <a href="mailto:steve.read@gloucestershire.gov.uk">steve.read@gloucestershire.gov.uk</a> );
<b>Main Consultees</b>	None
<b>Purpose of Report</b>	To present an overview of trading conditions in the recyclable materials market
<b>Recommendations</b>	<p><b><i>It is recommended that the Committee:</i></b></p> <p>Notes the contents of the report</p>
<b>Resource Implications</b>	None

## 1. Background

- 1.1 At the Joint Waste Committee (JWC) meeting on 21st June 2016, members requested a briefing paper explaining the recycling materials commodity market, particularly with regard to market price variations over time.
- 1.2 The purpose of this report is to present an overview of how recycling commodities are managed by each of the JWC partner authorities, explain the role of macro-economic and industry-specific factors and detail how commodity prices have risen and fallen over recent years.
- 1.3 Each of the partner authorities has its own arrangements for managing recycling commodities as presented below;

<b>Partner</b>	<b>Contractual Arrangements</b>	<b>Income</b>	<b>Benefits/Risks</b>
Cheltenham Borough Council	Has contracts in place directly with recycling material re-processors	Receives income directly	Able to secure high end of available prices but takes risk of market variations
Cotswold District Council	Has a contract in place with a single recycling materials broker	Receives income directly	Able to secure good prices but takes risk of market variations
Forest of Dean District Council	Biffa markets materials on behalf of the council in consultation with JWT officers	Receives income via Biffa	Able to secure high end of available prices but takes risk of market variations (Note: Biffa takes all income for textiles and WEEE under the new service / contract extension arrangements)
Tewkesbury Borough Council	Co-mingled materials are delivered to the Grundon Materials Recycling Facility (MRF) and TBC pay a gate fee per tonne for processing. Grundons market the material derived	Income retained by MRF to offset some of the processing costs	Market and quality risk is taken by the contractor. The new contract currently out to tender will involve a risk/reward sharing formula to vary the gate fee according to market price variations
Gloucestershire County Council	Has new contracts in place directly with recycling material re-processors	Receives income directly	Able to secure high end of available prices but takes risk of market variations.

- 1.4 In summary, Cheltenham Borough Council, Cotswold District Council and Forest of Dean District Council have contracts in place with recycling re-processors/recycling material handlers (brokers) or their contactor and receive income derived from the recycling materials.
- 1.5 Tewkesbury Borough Council pays a gate fee to deliver into a Materials Recycling Facility (MRF), so the value of the material goes to offset some of the MRF operator's costs. This meant that the contractor took the full risk of variations in materials prices. This was no longer sustainable for them and therefore the contract will not be extended and is now out to tender.
- 1.6 Under Gloucestershire County Council's recently expired Household Recyclable Centre (HRC) contract with Kier, the contractor was responsible for marketing recyclable material brought to HRCs and retained all income to offset their costs. This also meant that the contractor took the full risk of variations in materials prices. This was no longer sustainable for them and Kier sought to negotiate a contract

extension on the basis of a higher contract price to recoup loss of income. JWT undertook an options appraisal and the decision was taken by the County Council to join Ubico to enable them to provide the service.

- 1.7 Ubico took over the contract on 7th August 2016 on the basis that this would provide a net saving in overall service cost, albeit the JWT now arranges the contracts with off-takers and GCC retains all income. This exposes the County Council to both upside and downside risks. The level of risk was accepted by GCC after a sensitivity analysis of market variations.

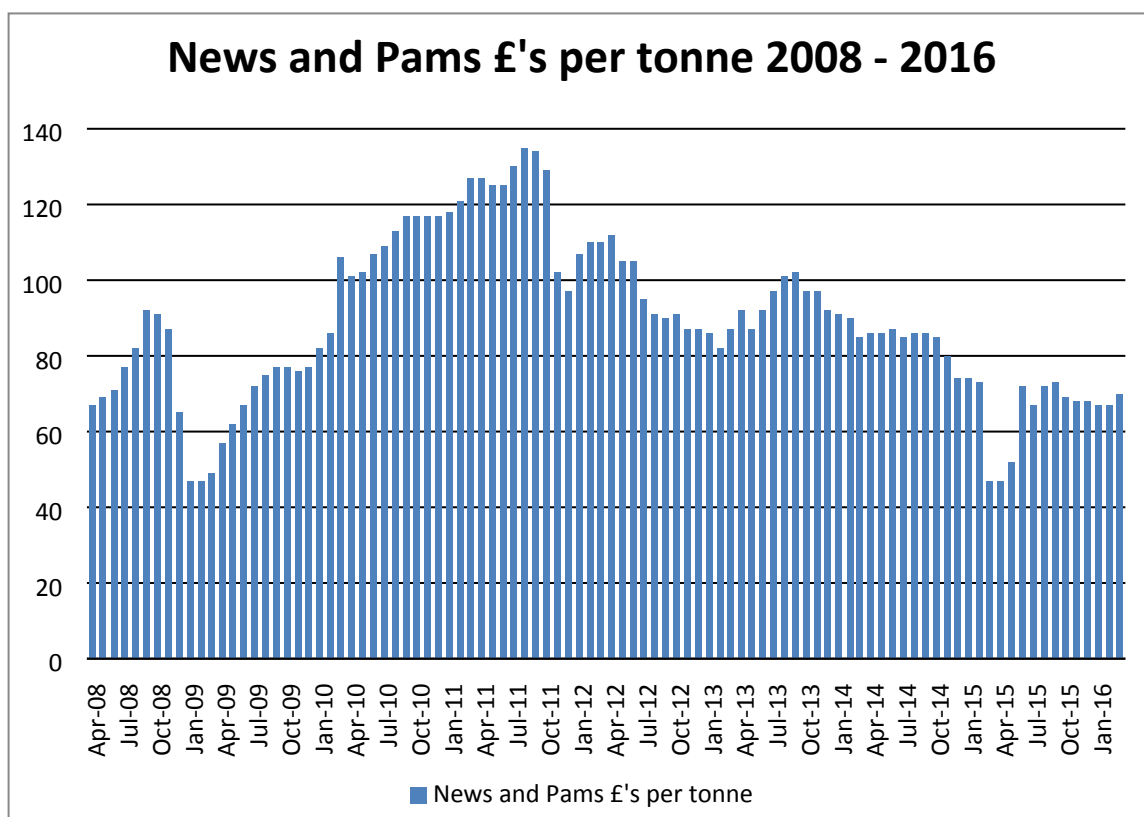
## **2. Macro-economic and Industry-specific Drivers**

- 2.1 The market for recyclable materials has seen high growth in volumes over the last 20 years as recycling schemes have been rolled out in the household and commercial sectors. There have been a number of “bubbles” when rising demand outstripped supply resulting in high prices followed by a rapid slump in prices as supply came into balance with demand. An early example occurred in the paper market in the late 1990s. This was not as a result of changes in the global economy but down to instability in an immature market.
- 2.2 A relatively stable period followed but since 2008, the recycling commodity market was affected by the global slowdown and the value of some material has not recovered to pre 2008 levels.
- 2.3 The recycling industry is to a degree an indicator of how the economy is doing as the supply and demand depend on the consumption of goods, and the willingness to invest in new processes and facilities which could stimulate demand and provide new outlets for secondary materials.
- 2.4 Commodity prices recovered slightly after 2008 but then fell in 2012 and again in 2013 by about 10%, although they were still generally higher than immediately before the crash. Recent trends have been towards less volatility but remaining lower than during the mid 2000s when a number of (now failed) businesses built their business model around sustained buoyancy.
- 2.5 It should be noted that each type of material has its own separate market and may be affected by industry specific issues so prices may rise and fall due to both macro and industry-specific factors. An example of the latter occurred in February 2015 when one of the three large newspaper mills in the UK (Aylesford, Kent) went into receivership without warning. This was in itself a reflection of reduced demand for newsprint, part of the declining role of printed media in society. The resultant glut of recycled newspapers and magazines caused a drop in prices and also allowed the two remaining UK mills to be more choosy about which material they took in. This also illustrated that kerbside sorted material has higher security of offtake as cleaner kerbside sorted material was taken in preference to much ex-MRF material. A further industry-specific example occurred in the cardboard sector at the end of 2015 when a number of smaller and middle-sized mills in China bought less or nothing at all as they were waiting for import licences.
- 2.6 Exports to China have firmed up again as a result of the licensing arrangements being resolved. In the UK Smurfit Kappa opened a new lightweight board manufacturing machine at Snodland, Kent in February this year. These have had a positive impact on demand and contributed to the price of brown cardboard improving in 2016.

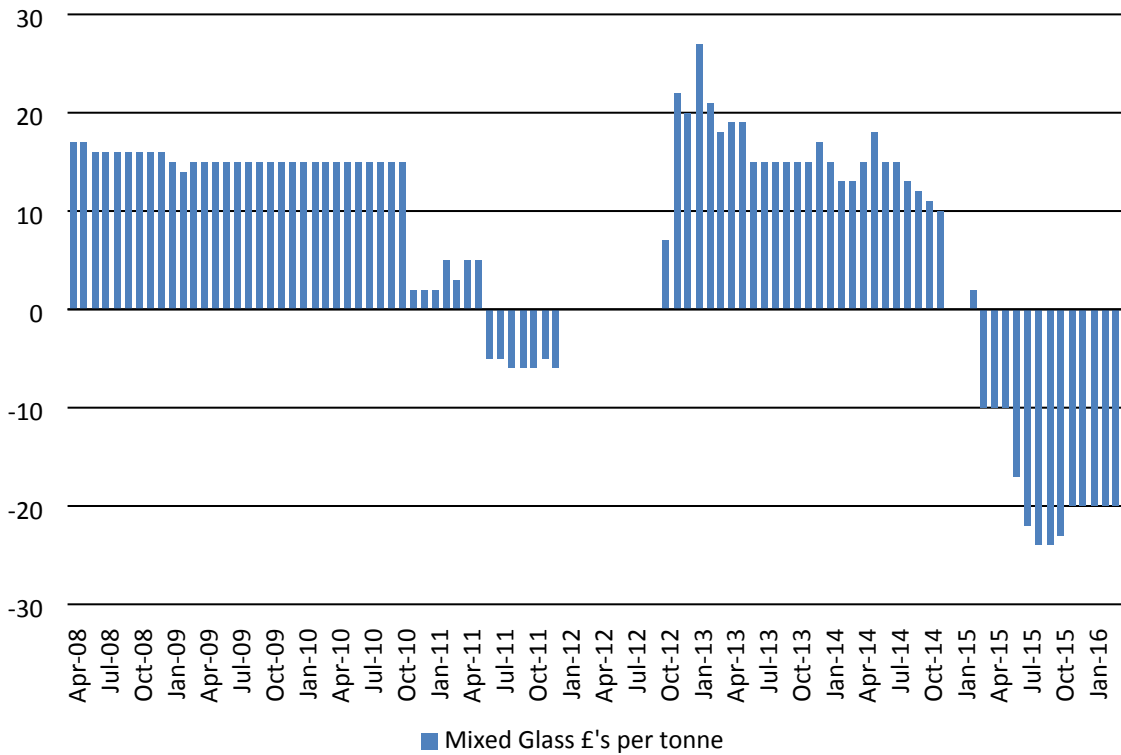
- 2.7 However the outlook for mixed fibre grades is less positive. Mixed paper usually consists of grey board, and lower grade papers after newspapers, magazines, pamphlets and office grade paper have been largely removed. Again the quality of the material is a factor: the higher the level of contamination, the more pre-processing is needed to clean it up, which adds cost to the manufacturing process, so prices are lower accordingly. Another factor which the recovered paper / cardboard sector is having to take on board is moisture content. Unsurprisingly re-processors do not wish to pay for water and several exporters to China are now imposing penalty charges on material that is wet. More stringent tests are being imposed and buyers are adopting a stricter approach.
- 2.8 The Vote to leave the EU has weakened the pound which has made exports from the UK more attractive. Early signs are that this has had a positive impact on commodity prices. The long term impact on aspects such as confidence to invest in new and replacement plant in the UK is, of course, still to be determined.
- 2.9 Whilst not having the ability to directly affect the market, authorities stand the best chance in being able to secure competitive prices and having guaranteed outlets for materials collected by providing good quality recycling materials.

### 3. Material Specific Trends

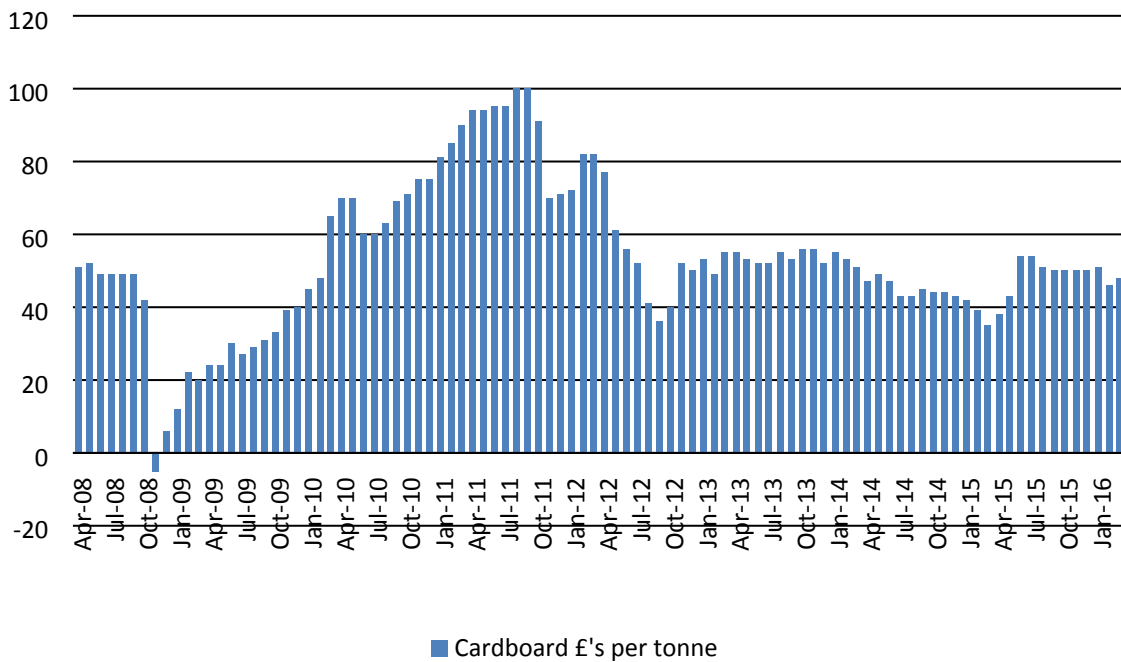
- 3.1 The graphs below show how prices have varied on a product by product basis during the period April 2008 to March 2016. In the main, the prices have an upper and lower threshold and re-processors use this as a guide when offering prices to the market. We have taken the mid-point where there is an upper and lower threshold.



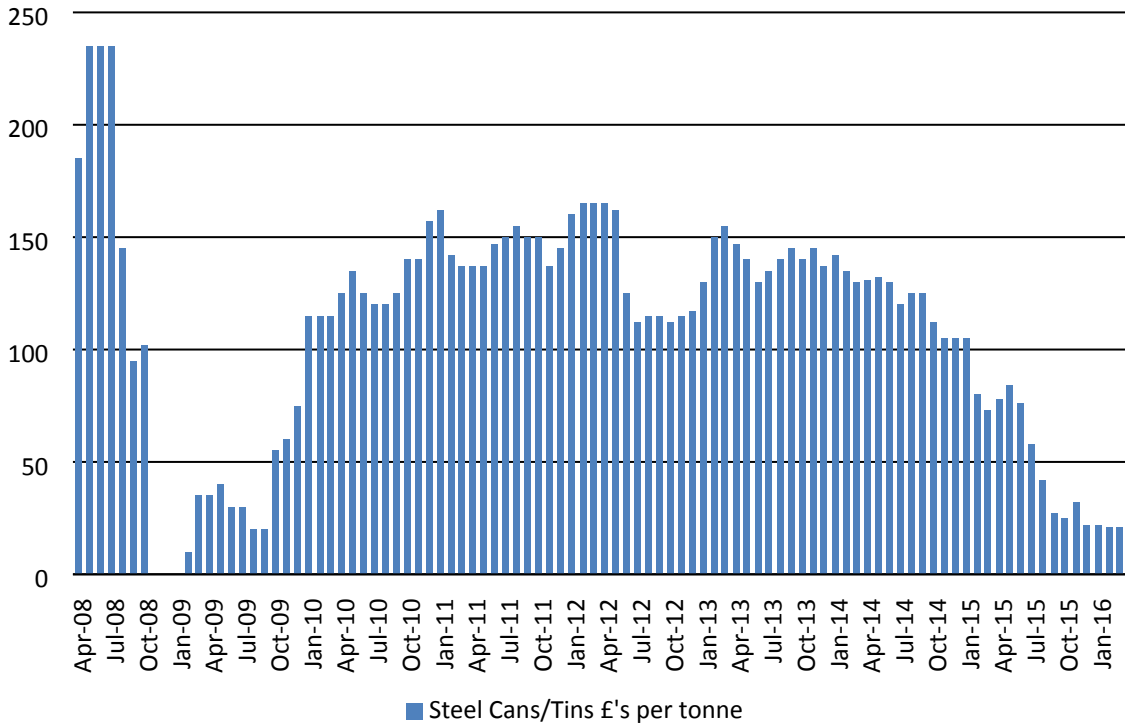
## Mixed Glass £'s per tonne 2008 - 2016



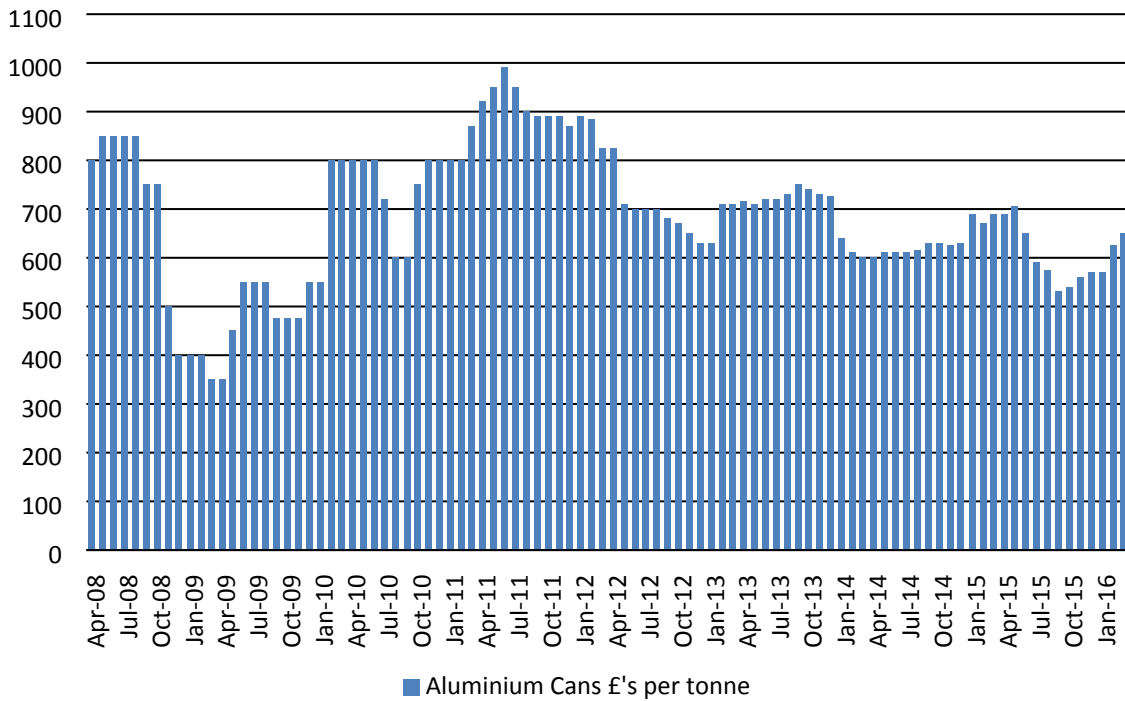
## Cardboard £'s per tonne 2008 - 2016



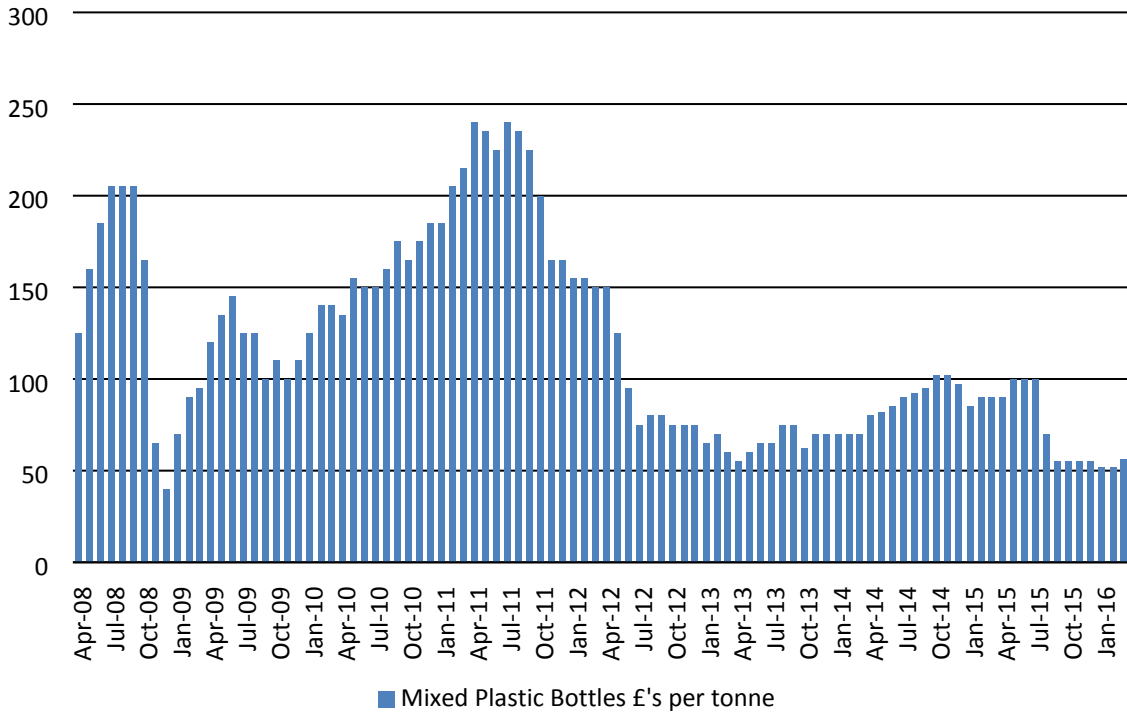
## Steel Cans £'s per tonne 2008 - 2016



## Aluminium Cans £'s per tonne 2008 - 2016



# Mixed Plastic Bottles £'s per tonne 2008 - 2016



Appendix 1 – Published Commodity Prices 2008/9 to 2015/16 (source = letsrecycle.com)

Lets Recycle Commodity Prices												
2008/09	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	65 - 70	67 - 72	70 - 72	75 - 80	80 - 85	85 - 100	85 - 98	80 - 95	60 - 70	45 - 50	45 - 50	47 - 52
Mixed Glass £'s per tonne	15 - 20	15 - 20	14 - 19	14 - 18	13 - 21	13 - 20	13 - 19	13 - 19	13 - 19	13 - 18	13 - 16	13 - 17
Cardboard £'s per tonne	48 - 55	50 - 55	48 - 50	48 - 50	48 - 50	48 - 50	40 - 45	0 - 10	5 - 8	10 - 15	20 - 25	15 - 25
Steel Cans/Tins £'s per tonne	185	235	235	235	145	95	95 - 110	0	0	0	10	25 - 45
Aluminium Cans £'s per tonne	800	850	850	850	850	750	750	500	400	400	400	350
Mixed Plastic Bottles £'s per tonne	100 - 155	130 - 200	140 - 230	180 - 230	180 - 230	180 - 230	150 - 180	40 - 90	40	40 - 100	60 - 120	70 - 120
2009/10	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	55 - 60	60 - 65	65 - 70	70 - 75	70 - 80	75 - 80	75 - 80	72 - 80	75 - 80	80 - 85	85 - 87	103 - 110
Mixed Glass £'s per tonne	13 - 17	13 - 17	13 - 17	13 - 17	13 - 18	13 - 18	13 - 18	13 - 18	13 - 18	13 - 18	13 - 18	13 - 18
Cardboard £'s per tonne	22 - 27	22 - 27	23 - 38	25 - 30	27 - 32	29 - 34	30 - 36	37 - 42	38 - 43	40 - 50	42 - 55	60 - 70
Steel Cans/Tins £'s per tonne	25 - 45	30 - 50	20 - 40	20 - 40	10 - 30	10 - 30	40 - 70	45 - 75	70 - 80	100 - 130	100 - 130	100 - 130
Aluminium Cans £'s per tonne	350	450	550	550	550	475	475	475	550	550	800	800
Mixed Plastic Bottles £'s per tonne	90 - 150	110 - 160	130 - 160	100 - 150	100 - 150	70 - 130	80 - 140	60 - 140	80 - 140	100 - 150	120 - 160	120 - 160
2010/11	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	98 - 105	98 - 106	105 - 110	107 - 112	112 - 115	115 - 120	115 - 120	115 - 120	115 - 120	116 - 122	119 - 125	125 - 130
Mixed Glass £'s per tonne	13 - 18	13 - 18	13 - 18	13 - 18	13 - 18	13 - 16	13 - 16	0 - 5	0 - 5	0 - 5	0 - 10	0 - 7
Cardboard £'s per tonne	65 - 75	65 - 75	55 - 65	55 - 65	60 - 67	65 - 73	67 - 75	70 - 80	70 - 80	75 - 87	80 - 90	85 - 95
Steel Cans/Tins £'s per tonne	110 - 140	120 - 150	110 - 140	110 - 130	110 - 130	110 - 140	130 - 150	130 - 150	150 - 165	150 - 175	130 - 155	125 - 150
Aluminium Cans £'s per tonne	800	800	800	720	600	600	750	800	800	800	800	870
Mixed Plastic Bottles £'s per tonne	110 - 160	130 - 180	130 - 170	130 - 170	140 - 180	160 - 190	150 - 180	160 - 190	160 - 210	160 - 210	180 - 230	190 - 240
2011/12	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	125 - 130	120 - 130	120 - 130	125 - 135	130 - 140	129 - 139	123 - 135	100 - 105	95 - 100	105 - 110	105 - 115	105 - 115
Mixed Glass £'s per tonne	0 - 10	0 - 10	-5	-5	-6	-6	-6	-5	-6	0	0	0
Cardboard £'s per tonne	88 - 100	88 - 100	90 - 100	90 - 101	95 - 105	95 - 105	88 - 95	65 - 75	67 - 75	70 - 75	80 - 85	80 - 85
Steel Cans/Tins £'s per tonne	125 - 150	120 - 155	130 - 165	135 - 165	135 - 175	130 - 170	135 - 165	120 - 155	130 - 160	145 - 175	150 - 180	165
Aluminium Cans £'s per tonne	920	950	990	950	900	890	890	890	870	890	885	825
Mixed Plastic Bottles £'s per tonne	210 - 270	200 - 270	180 - 270	210 - 270	200 - 270	180 - 270	160 - 240	120 - 210	120 - 210	110 - 200	110 - 200	110 - 190
2012/13	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	110 - 115	100 - 110	100 - 110	90 - 100	86 - 96	85 - 95	87 - 95	85 - 90	85 - 90	82 - 90	80 - 85	85 - 90
Mixed Glass £'s per tonne	0	0	0	0	0	0	5 - 10	10 - 35	5 - 35	20 - 35	15 - 28	12 - 25
Cardboard £'s per tonne	75 - 80	58 - 65	53 - 60	50 - 55	35 - 48	30 - 43	35 - 45	45 - 60	45 - 55	48 - 58	38 - 60	48 - 62
Steel Cans/Tins £'s per tonne	165	150 - 175	110 - 140	100 - 125	105 - 125	105 - 125	105 - 120	110 - 120	110 - 125	125 - 135	145 - 155	150 - 160
Aluminium Cans £'s per tonne	825	710	700	700	700	680	670	650	630	630	710	710
Mixed Plastic Bottles £'s per tonne	110 - 190	80 - 170	50 - 140	30 - 120	30 - 130	30 - 130	25 - 125	25 - 125	25 - 125	15 - 115	20 - 120	20 - 100
2013/14	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	90 - 95	85 - 90	90 - 95	95 - 100	98 - 103	100 - 105	95 - 100	95 - 100	90 - 95	90 - 93	88 - 93	83 - 88
Mixed Glass £'s per tonne	12 - 27	9 - 30	5 - 25	5 - 26	5 - 25	5 - 25	5 - 25	5 - 25	8 - 27	5 - 25	4 - 23	2 - 24
Cardboard £'s per tonne	45 - 65	47 - 60	45 - 60	47 - 60	50 - 60	45 - 62	45 - 68	43 - 70	40 - 65	45 - 65	45 - 61	45 - 57
Steel Cans/Tins £'s per tonne	140 - 155	135 - 145	125 - 135	130 - 140	135 - 145	140 - 150	135 - 145	140 - 150	130 - 145	135 - 150	130 - 140	125 - 135
Aluminium Cans £'s per tonne	715	710	720	720	730	750	740	730	725	640	610	600
Mixed Plastic Bottles £'s per tonne	20 - 90	30 - 90	30 - 100	30 - 100	40 - 110	30 - 100	30 - 95	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100
2014/15	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	83 - 90	83 - 90	85 - 90	80 - 90	82 - 90	82 - 90	80 - 90	75 - 85	69 - 80	69 - 79	69 - 77	45 - 50
Mixed Glass £'s per tonne	2 - 28	8 - 28	5 - 25	5 - 25	5 - 22	5 - 20	5 - 18	5 - 15	-10 - 10	0	-15 - 10	-30 - 10
Cardboard £'s per tonne	38 - 57	43 - 56	42 - 53	35 - 52	34 - 52	35 - 55	33 - 55	36 - 53	33 - 53	35 - 50	32 - 47	25 - 45
Steel Cans/Tins £'s per tonne	125 - 137	125 - 139	125 - 135	115 - 125	120 - 130	120 - 130	105 - 120	100 - 110	100 - 110	100 - 110	75 - 85	68 - 78
Aluminium Cans £'s per tonne	600	610	610	610	615	630	630	625	630	690	670	690
Mixed Plastic Bottles £'s per tonne	50 - 110	50 - 115	50 - 120	55 - 125	60 - 125	65 - 125	70 - 135	70 - 135	65 - 130	65 - 105	70 - 110	70 - 110
2015/16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
News and Pams £'s per tonne	45 - 50	50 - 55	70 - 75	65 - 75	68 - 79	68 - 79	64 - 74	64 - 72	65 - 72	65 - 70	65 - 70	68 - 73
Mixed Glass £'s per tonne	-30 - 10	-30 - 10	-25 - 10	-30 - 15	-33 - 15	-33 - 15	-35 - 11	-31 - 9	-30 - 10	-30 - 10	-31 - 10	-31 - 10
Cardboard £'s per tonne	28 - 48	32 - 54	46 - 60	46 - 60	45 - 57	45 - 56	45 - 55	45 - 55	46 - 56	47 - 55	40 - 52	43 - 54
Steel Cans/Tins £'s per tonne	73 - 83	78 - 90	70 - 82	52 - 65	35 - 50	20 - 35	20 - 30	30 - 35	15 - 30	15 - 30	15 - 27	15 - 27
Aluminium Cans £'s per tonne	690	705	650	590	575	530	540	560	570	570	625	650
Mixed Plastic Bottles £'s per tonne	70 - 110	80 - 120	80 - 120	80 - 120	50 - 90	35 - 75	35 - 75	35 - 75	35 - 75	30 - 75	30 - 75	35 - 80