

The Marketplace for PRNs

Market Status Report August-October 2016 *By Tom Rickerby, Head of Business Development*



Q3 was another strong trading quarter on t2e with all markets being well supported by both buyers and sellers. Prices fell universally across all materials reflecting good trading conditions and PRN generation in the underlying recycling markets. Exporters of packaging waste material received a particular boost this quarter with the post-Brexit collapse in

the value of the pound.

The 3rd quarter also saw a significant shift toward forward trading as sellers looked to lock in prices in a falling spot market and buyers turned their attention to the 2017 markets. With the exception of wood and glass aggregate, all materials saw trading in the January Transitional Forward Markets providing an early price picture for the 2017 compliance year. Plastic and Steel also opened in the 2017 April Forward market.

329,624 tonnes traded during the period, up 27% on the previous quarter and 54% on the same period last year. 121,162 tonnes were traded in the Spot market and 208,462 tonnes were traded in the Forward markets, of which 6,450 tonnes were traded in the 2017 Forward markets.

Paper

Paper volumes were broadly in line with the previous quarter; however spot prices fell 18% during the period to £0.69. Volume orders attracted even better value in the December forward market where Paper hit a year low of £0.60. The Transitional January Forward market opened at £0.70 in excellent volume, providing little encouragement for sellers hoping for a recovery in the 2017 markets. Q3 recycling figures show paper is still on course to meet both the paper specific obligation and 100% of the general recycling requirements.

Plastic

The downward price trend seen at the end of the 2nd quarter continued unabated into the 3rd quarter as plastic spot values fell 55% in the first 2 months of trading. By late September the market eventually found its floor price when it hit a year low of £14.00 in both the Spot and October forward market. However a spike in buy orders and a drop in availability saw prices briefly rebound to £25.00 per tonne. However the swing towards a seller's market was short lived and the £25.00 price failed to 'stick'. With little appetite from buyers to support higher prices the spot price quickly fell back into decline, closing the quarter at £15.50. Trading opened at £25.00 in both the January Transitional and April Forward markets in good volume setting an early benchmark for the 2017 compliance year.

Traded volume was up 25% on the same period last year; however the average spot price of £21.16 was down 58% on 2015 prices.

Glass Aggregate

Despite the continued shortfall in Glass Aggregate PRNs, PRN prices fell during the period, dragged down by a similar fall in the Remelt price. Early trading took place at £12.00 but softened to £11.00 by the close of the quarter. The quarter on quarter average spot price fell 9%. The Glass aggregate price continues to track £1.00 to £1.50 below the Remelt price.

Glass Remelt

The drop in the Aggregate price was matched by a similar fall in

Remelt. Spot prices opened the quarter at £12.75 before falling to a quarter low of £11.50 by mid-September. Whilst buyers saw the drop in price as a fair reflection of the apparent oversupply in the Remelt market, the price correction found little support from sellers. The result was a deepening of the stand-off that has characterised much of this year's market. By the end of the quarter, spot prices had rebounded to £13.00, albeit in light volume. The January Transitional Forward market opened in dramatic style with 33,000 tonnes trading at £12.00, setting an early and established benchmark for the 2017 price.

Steel

The strength of the Q2 recycling and export data set the Steel market on a downward spiral that would span the entire 3rd quarter. 62% was wiped of the PRN value during this period as prices fell

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	High	Low	Traded This Quarter	Quarter Average Traded Price	YTD Average Traded Price	Year to date aggregated traded
Paper						
Spot 2016	£0.80	£0.65	18,948	£0.69	£0.84	72,750
Oct Fwd 2016	£0.75	£0.75	1,961	£0.75	£1.09	123,117
Dec Fwd 2016	£0.60	£0.60	32,500	£0.60	£0.90	144,500
Tran Jan Fwd 2017	£0.70	£0.70	32,500	£0.70	£0.70	32,500
Plastic						
Spot 2016	£31.50	£14.00	54,662	£21.16	£31.91	150,882
Oct Fwd 2016	£28.00	£14.00	12,491	£22.51	£30.69	27,991
Dec Fwd 2016	£27.00	£15.00	5,972	£19.46	£29.97	13,472
Tran Jan Fwd 2017	£25.00	£25.00	4,300	£25.00	£25.00	4,300
Apr Fwd 2017	£25.00	£25.00	4,200	£25.00	£25.00	4,200
Glass Aggregate						
Spot 2016	£12.00	£11.50	9,088	£11.33	£11.69	23,259
Glass Remelt						
Spot 2016	£13.00	£11.50	4,156	£11.92	£12.39	31,342
Oct Fwd 2016	£12.30	£12.30	5,800	£12.30	£12.01	27,200
Tran Jan Fwd 2017	£12.00	£12.00	33,000	£12.00	£12.00	33,000
Steel						
Spot 2016	£13.00	£4.95	19,142	£7.86	£17.70	55,044
Oct Fwd 2016	£10.00	£5.80	4,750	£7.96	£12.01	7,850
Dec Fwd 2016	£10.00	£4.00	3,000	£7.50	£12.92	6,000
Tran Jan Fwd 2017	£11.00	£9.50	3,000	£10.50	£10.50	3,000
Apr Fwd 2017	£13.50	£11.50	2,250	£12.39	£12.39	2,250
Wood						
Spot 2016	£2.95	£1.35	6,155	£1.84	£2.41	21,520
Oct Fwd 2016	£2.15	£1.35	13,550	£1.55	£1.65	19,025
Dec Fwd 2016	£1.35	£1.35	12,000	£1.35	£1.48	14,000
Aluminium						
Spot 16	£15.00	£10.00	1,605	£11.97	£18.63	4,663
Tran Jan Fwd 2017	£10.00	£10.00	1,000	£10.00	£10.00	1,000
Recovery						
Spot 2016	£0.65	£0.45	7,406	£0.55	£0.70	25,222
Oct Fwd 2016	£0.55	£0.55	1,129	£0.55	£0.69	2,477
Dec Fwd 2016	£0.40	£0.40	10,559	£0.40	£0.40	10,559
Tran Jan Fwd 2017	£0.40	£0.40	24,500	£0.40	£0.40	24,500

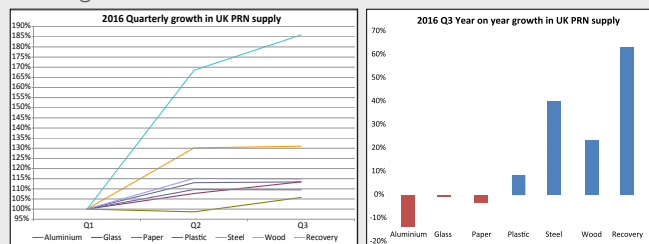
Managing Director's Comments - November 2016



How things change. At this stage last year there was anxiety as participants grasped that the shortfall in Recovery PRNs was placing tension on the general recycling pool of PRNs and relief that the new aluminium protocols were creating sufficient supply to meet the annual obligation. Despite cries of concern as PRN prices rose that the PRN system would fail to deliver, the targets were met with a reduced carry over and the tightest margin to date. The consequences of that shock roll on as there has been increased pressure for greater transparency of the use of PRN income and the Environmental Services Association (ESA) has conducted a review of producer responsibility systems. In response to the desire for increased transparency t2e will encourage all PRN sellers to publish in 2017 a review of how they intend to spend their PRN income.

Q3 Statistics

On the surface Q3 data is very encouraging. Recovery PRNs are back and the UK is on course to meet its targets in all materials by some margin. Any anxieties over Aluminium have faded and the growth in plastic targets should be met. UK reprocessing, if one overlooks the slightly unusual Q4 2012, has hit its highest level since Q4 2011. This is mildly surprising, since to date the only visible impact of the Brexit result has been a fall in the value of the £. One possible interpretation is that reprocessors were rapidly buying in at pre-currency fall prices and using it plus old stock to sell finished product on the post-currency fall market so there must be a question mark against whether these levels can be sustained. Additionally although there has been growth in all sectors the bulk of the growth is in wood reprocessing, which may reflect a downturn in the biomass market, and steel whose challenges have been well documented.

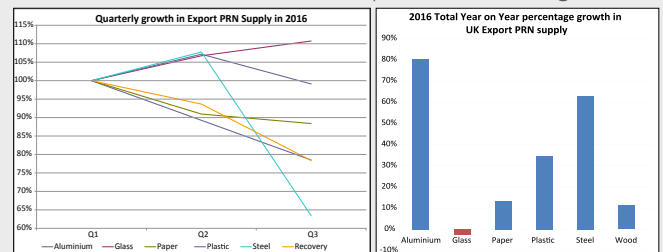


More surprisingly although still some 100,000 tonnes greater year on year overall exports declined by the same amount from the record Q1 to Q3. While this decline is led by falling quarter on quarter paper exports to China, despite the revised protocol for mixed papers, it is reflected in all materials with the notable exception of glass, which has increased quarter on quarter in 2016 while the only material to show a year on year decrease overall.

Overall buoyed by strong Recovery PRN production the UK has reached a total PRN supply of over 2 million per quarter for the fourth quarter in a row. However if the Recovery PRNs are extracted the market looks tighter with the last four quarters producing 7.4 million tonnes to meet 2016's recycling obligation of 7.1 million.

Looking forward to 2017

Does this provide any guidance for 2017? Indications are that China will continue to reduce its paper buying, reflecting growth in their domestic collection and a reduction in global demand. While the former may hit a plateau, the latter looks to continue as a result of re-adjustment of global wealth, and hence buying patterns, and increasing isolationism. New markets will open. There are hints elsewhere in Asia, although possibly not at the same prices. Plastic exports continue to defy expectations with demand apparently exceeding supply in most of the packaging compounds. Closures in China have rebalanced the demand/supply balance in metals but there is little to indicate that scrap prices will rise. Currently glass seems to sail serenely along and UK volume growth in 2016 looks to be sustainable. Beyond a commitment to steel, whether the UK volumes remain in the other materials is unclear. Wood in particular is an enigma.



Targets for total recovery, aluminium, steel and plastic will increase in 2017 adding some 100,000 tonnes to the obligation. With over 100,000 tonnes traded, many have already decided that the uncertainties of next year are too great and opted for the certainty of the 2017 forward markets. There is much to recommend in following this approach.

As more than a million tonnes have already traded in this compliance year, we look to be heading for a record year. Thank you all for your support. We look forward to continue being of service to you in the future. Thank you in particular to Ben Frost for his contribution. We all wish you a very happy festive period.

Angus Macpherson

Angus Macpherson
Managing Director



Q3 Supply analysis *By Andrew Letham, Sales and Marketing Manager*



The Q3 supply figures were released with little fanfare on the 22nd October. With Prices of most materials on a downward trajectory since the positive Q2 supply figures were released, the Q3 result had little effect on what were already relatively stable

markets. The dramatic reactions often seen following a release of the supply data last year seem to have been managed to some extent by the introduction of monthly reporting, which although not perfect certainly gives an early indication as to the health of a market in the final month of a quarter.

Another very strong quarter for plastic and while not at the record breaking levels of Q2 it leaves plastic in a very healthy position heading into the final quarter of the year. 252,998 tonnes were recycled this quarter as prices continued to slide throughout August and September from a high of £31.50 down to a yearly low of £14.00. In early October with prices on the floor and sellers eager to offload tonnage, larger buyers returned to the market looking to take advantage of the lower prices. Supply very quickly tightened up and with very little availability the price jumped back to £25.00 before buyers pulled away from the market and it returned to £16.00 within a week before closing the quarter at £15.50.

As the quarter opened Steel prices were already in freefall and seemed to soften with every subsequent trade. Prices hit £4.95 two weeks prior to the release of the Q3 figures representing a 75% fall in value from the beginning of the quarter. 96,463 tonnes were recycled in Q3 leaving a balance of only 57,801 tonnes to achieve target and that's before the 23,201 tonne carry is taken into consideration.

Aluminium prices had dropped 33% by the start of September from £15.00 down to £10.00. Very little demand lead the market to stagnate before news of two-week shutdown at Novellis just prior to the release of the Q3 results stimulated a bounce back to £15.00. 21,724 tonnes were recycled in Q3 meaning the impact of the Novellis situation won't be felt until Q4 but with another strong performance it would take more than the suspected 2,000 tonne loss to drastically effect the market.

Wood had its biggest quarter of the year with 112,401 tonnes recycled in Q3. It is now 67,709 tonnes over the annual target of 242,192 before Carry in. Prices reflected the oversupply dropping 55% from a quarterly high of £2.95 to close the quarter at £1.35.

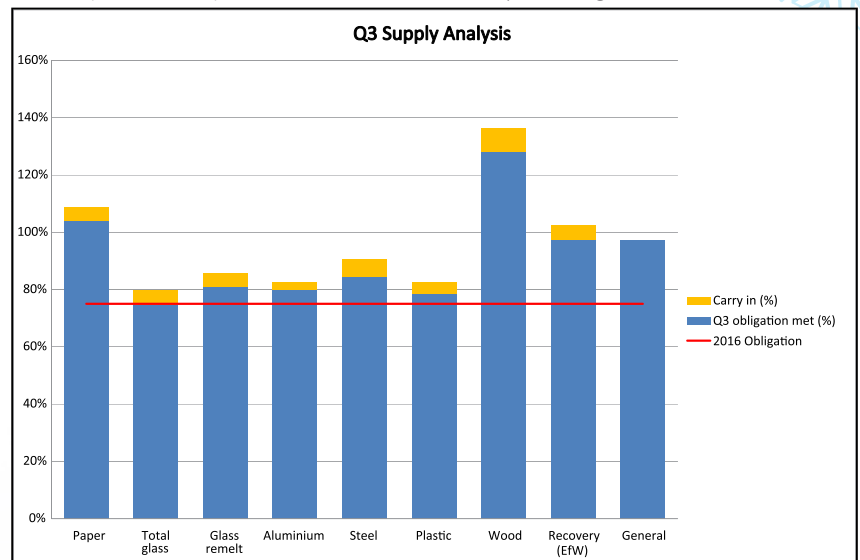
Glass as expected showed a slight upturn in Q3. As aggregate remained undersupplied but stable with a return of 108,505 very similar to that of the first two quarters, remelt grew by 20,000 tonnes from Q2 with a return of 313,956 tonnes. In total 408,640 tonnes are required in Q4 to hit the overall glass target and with an 80,815 tonne carry in this should be easily achieved.

Paper and recovery continued in abundant supply as both materials again produced substantial oversupplies in Q3. 941,498 tonnes and 187,831 tonnes were reported in Q3 respectively. Paper prices moved from a high of £0.80 down to £0.65 with an average spot price of £0.69 whilst Recovery traded at an average price £0.55 with a high of £0.65 and a low of £0.45.

Material	Carry In	Q1	Q2	Q3	75% Obligation	YTD Supply + Carry In	Annual Obligation	Balance
Paper	128,418	1,009,035	939,728	941,498	2,084,697	3,018,679	2,779,596	933,982
Total Glass*	80,815	377,704	406,095	422,461	1,211,086	1,287,075	1,614,781	75,989
Glass remelt	49,856	266,829	294,408	313,956	811,487	925,049	1,081,983	113,562
Aluminium	2,224	22,699	22,916	21,724	63,197	69,563	84,262	6,367
Steel	23,021	94,730	120,126	96,463	276,840	334,340	369,120	57,500
Plastic	37,596	247,065	266,686	252,998	732,384	804,345	976,512	71,961
Wood	19,945	85,802	111,698	112,401	181,644	329,846	242,192	148,202
ErW	29,944	179,201	195,774	187,831	434,252	592,750	579,003	158,498
General *	0	320,419	350,633	330,929	772,138	1,001,982	1,029,517	229,844
Total	371,819	2,283,065	2,357,431	2,349,332	5,756,237	8,363,629	8,756,966	2,607,392

*Total Glass consists of the combined total supply of Glass Remelt and Glass aggregate.

* Please note the general supply figure has been generated from calculating the surplus material prns in each quarter and does not include carry in tonnage.



Meet the Team

Robyn Tustin has joined the t2e trading team this quarter as the new Account Manager. Robyn is a University of Edinburgh graduate who has since gained experiences in hospitality, debt recovery and asset finance. Robyn is passionate about the Environment and promotes the importance of recycling, reducing food waste, and self-sustainability. Outside of work and working on her allotment, Robyn is also a keen performer and stays creative through dance, music and theatre.

The Marketplace for PRNs

Meet the Market: Independent Producer, Ben Frost Indirect & Packaging Contracts Manager, Yeo Valley



Yeo Valley is a British, independent and proud producer of the highest quality yogurts, desserts and ice cream for our Yeo Valley Organic Brand as well as a number of the UK's major retailers own label lines. We now produce over 20% of the UK's yogurt. We are based in Blagdon, on the edge of the beautiful Mendip Hills in Somerset where the business originated. It currently

comprises of 4 production sites a distribution centre and Head Office all in the South West of England employing a total of 1,700 staff.

Q: How long have you been independently obligated?

Yeo Valley has been independently managing its obligation for 4 years, previously having been with a compliance scheme provider since obligations began.

Q: What were the key drivers in choosing this route of compliance?

As the Indirect and Packaging Contracts Manager for Yeo Valley one of my key priorities is to seek best value. After approaching t2e we decided that our current method of compliance was not the most cost effective solution. t2e gives us the flexibility to buy our PRNs when we want and provides us with the most transparent, secure and direct route to the market.

Q: What features of the t2e platform and service do you like the most and how do these help you meet your compliance objectives?

The platform is quick to use and provides the integrity of scale to provide an instant snap shot of the market without the overburden of detail. Market operators are always on hand to answer questions.

Q: The Yeo Valley brand has a strong sustainability ethos. How does this reflect in your approach to packaging?

We are constantly looking at reducing our impact on the environment by working with the best suppliers, using the most appropriate packaging materials or value engineering where appropriate. Our packaging development team are constantly scouring the supply market for innovative ways to use materials differently. For example we were the first in the UK to use snapable PET twin pot yogurts allowing the used yogurt pots to go in to domestic recycle bins.

Q: What are some of your other sustainability initiatives and achievements?

Yeo Valley is committed to reducing the impact of its operations on the environment and has achieved accreditation to ISO 14001:2015 across all manufacturing and distribution sites. We set environmental objectives and targets for reducing energy, water & raw material consumption, waste and pollution. We measure the carbon footprint of our manufacturing operations and purchase green electricity across all sites. Our sites are working hard to find a solution to achieving zero waste to landfill, with our Cannington and Newton Abbot sites having already met this important milestone. Initiatives to reduce our environmental impact have included LED lighting, biomass heating at our head office and solar PV electricity generation on our Blagdon farm.

Q: How has the Brexit vote impacted on your business?

More negatively than we might have expected. Although our milk and other dairy ingredients are predominately sourced from the UK, many

of our other ingredients and some packaging are either sourced from abroad directly or via suppliers who are sourcing materials from abroad so the foreign exchange impact has been significant and ultimately will have to be recovered from consumers for the supply chains to remain sustainable.

Q: What is the most enjoyable part of your job?

The daily variety of procurement opportunities. I am fortunate to be able to work with management and teams throughout the business on a variety of projects. I get the greatest satisfaction from delivering an initiative that will perpetually improve our cost position and Yeo Valley's competitive advantage.

Q: The dairy industry is under constant price pressure from the supermarkets. How does Yeo Valley address this?

By working with our customers to take out costs in every part of the supply chain but without impacting on the quality of the products or the service that we provide, and to build great value with our customers around Yeo Valley brand.

Q: What advice would you give other producers that are considering the independent route of compliance?

To independently manage your compliance is not as complicated or time consuming as you may think. Start with setting up a buying strategy that reflects your business's level of buying risk and discuss this with t2e. They can then advise on size and timings of bids to fulfil the strategy. In terms of administration, the Environment Agency are excellent in providing administration support in setting your business up as an independent. Go to an EA seminar on the subject to learn and network with others.

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from £13.00 to £4.95 in the spot market. Crisis talk during the early months of the compliance year seems a distant memory now. With fresh investment in UK steel capacity, a recovery in scrap prices and a weak pound providing a boost to exports, 2017 is on course to be a record year for Steel PRN generation. Traded volume was up 62% on the previous quarter, boosted by strong trading in the early 2017 forward markets. The price picture for 2017 is slowly emerging with trading already showing a low of £9.50 in the January Transitional market and a high of £13.50 for April delivery.

Wood

Traded Wood volume was up 100% on the previous quarter representing the best volume traded on t2e since Q4 2014. Buyers were attracted by falling prices as Wood PRN values fell more than 50% to £1.35 in the spot and across the 2016 October and December forward markets – the lowest wood price since January 2015.

Recovery

It was a record trading quarter on t2e for recovery PRNs with 43,914 tonnes trading across all markets. Prices fell as low as £0.40 for volume in the December forward market and this price was matched in the January Transition Market giving some buyers an early low cost base for 2017 compliance. Average spot prices were down 27% on the same period last year.