



The Marketplace for PRNs

Market Status Report By Tom Rickerby, Head of Trading



Quarter 3 data suggests recycling markets appear to be functioning well despite a catalogue of challenges facing the industry, including inflationary pressure, a shipping and haulage crisis, high energy costs, supply chain disruption and personnel shortages. Global demand for secondary commodities is high and strong values reflect this. Trading on t2e during the period has seen the full spectrum of price

action across PRN markets; Paper and Wood have seen their earliest ever price collapse, whilst the Glass Remelt price soared to an all-time high.

A total of 384,149 tonnes traded on t2e during Q3, up 22% on Q2 and down 24% on the same period last year. 155,991t were traded in the 2021 Spot Market. 23,813t were traded in the 28 Day Rolling Market, 143,945t were traded in the 2021 Forward markets and 60,400t were traded in the 2022 Forward Markets.

Paper

The Paper market collapsed to its lowest ever Quarter 3 closing price as buying support evaporated in the face of strong supply data. Spot prices fell 74% to £0.50, 15p below the previous lowest Q3 paper price in 2016. Better value was found in the 2022 markets where opening prices of £3.50 per tonne were roughly in line with the 2021 Spot average. The Transitional Forward market opened at a slight discount at £3.00. Uptake in the 2022 forward markets remains slow as sellers weigh up the potential upside risk given the uncertain outlook. Paper volumes were up 78% on the previous Quarter and 3% on the same period last year.

Plastic

Despite strong polymer prices and high demand, recovered Plastics markets continue to be shackled by trade restrictions, regulation change and logistics problems, whilst on-going Environment Agency action behind the scenes threatens to destabilise PRN markets and undermine confidence in the supply data (another 8 Plastic accreditations were either cancelled or suspended in the period). The result has been another period of choppy price action as buyers and sellers arm wrestle for control of the market narrative. Early trading saw a continuation of the post-Q2 data sell off, Spot prices fell to an 8-month low of £20.00 in the spot before rebounding to a resistance level of £50.00. Limited buying support saw prices slide again in the latter stages of the quarter, closing the period at £35.00 per tonne. However weak Q3 supply data shows concerning signs of a market in contraction and represents an early red flag for the 2022 compliance year.

Steel

Steel's supply fundamentals have remained consistently strong across the compliance year so far maintaining persistent downward pressure on the PRN price. Values halved again in Q3, falling from £10.00 to £4.75 in the Spot market. Whilst the energy crisis has caused some disruption to domestic Steel manufacture, high scrap prices and strong global demand has maintained robust trade in ferrous grades throughout. A similar situation in Q4 is likely to see significant tonnage written off and a move towards General recycling prices in the final quarter.

Aluminium

Aluminium has followed a similar narrative to Steel this year. Surplus supply is likely to see 2021 recycling targets hit in the early part of Quarter 4 with Q3 price action reflecting this. Prices fell sharply in the period, dropping 83% from £18.00 to £3.00. Falling values brought renewed buying interest as trading volumes increased 169% on the previous Quarter. 2022 prices opened at £18.00.

Wood

Wood became the forerunner in the race to the bottom for General Recycling prices having met its material specific target in the first half of the compliance year. Wood continued to lead [cont'd on page 3]

Q3 Aug - Oct 21	High	Low	Traded this Quarter	Quarterly Average Price	YTD Average Price	Total Volume
Paper						
Spot 2021	1.90	0.50	36,295	0.80	3.77	166,691
28 Day Rolling 2021	1.70	0.75	8,202	0.81	2.83	42,202
OCT Forward 2021	1.00	0.75	83,148	0.96	1.55	93,648
DEC Forward 2021	0.90	0.90	10,000	0.90	2.04	18,000
Transitional JAN Forward 2022	3.00	3.00	19,000	3.00	3.00	19,000
APR Forward 2022	3.50	3.50	16,500	3.50	3.50	16,500
JUL Forward 2022	3.50	3.50	20,500	3.50	3.50	20,500
OCT Forward 2022	3.50	3.50	3,000	3.50	3.50	3,000
			196,645			
Plastic						
Spot 2021	52.00	20.00	38,284	37.19	82.16	139,070
28 Day Rolling 2021	50.00	20.00	5,155	36.19	80.02	19,785
OCT Forward 2021	50.00	28.00	9,339	41.32	69.30	22,239
DEC Forward 2021	40.00	20.00	3,600	28.78	65.07	14,800
Transitional JAN Forward 2022	75.00	50.00	3,900	66.90	66.48	4,000
APR Forward 2022	70.00	50.00	3,000	59.17	59.17	3,000
JUL Forward 2022	75.00	60.00	2,250	65.00	65.00	2,250
OCT Forward 2022	75.00	75.00	250	75.00	75.00	250
			65,778			
Glass Other						
Spot 2021	11.00	6.00	25,304	7.78	10.00	66,849
28 Day Rolling 2021	8.00	8.00	2,029	8.00	8.92	3,529
OCT Forward 2021	8.00	8.00	1,000	8.00	11.56	14,400
DEC Forward 2021	8.00	7.00	3,000	7.33	8.56	10,900
			31,333			
Glass Remelt						
Spot 2021	90.00	38.00	25,838	53.81	40.06	65,055
28 Day Rolling 2021	60.00	40.00	6,631	45.66	38.13	15,131
			32,469			
Steel						
Spot 2021	10.00	4.75	10,519	8.32	12.60	37,485
28 Day Rolling 2021	9.00	7.50	1,100	8.86	9.40	2,100
OCT Forward 2021	8.00	8.00	2,000	8.00	10.64	5,500
DEC Forward 2021	8.00	4.75	704	5.69	8.22	1,704
			14,323			
Wood						
Spot 2021	1.65	0.50	14,027	1.07	2.90	76,386
28 Day Rolling 2021	0.95	0.95	196	0.95	2.65	16,186
OCT Forward 2021	1.25	1.25	3,159	1.25	5.05	12,909
DEC Forward 2021	0.75	0.75	2,750	0.75	1.37	5,000
Transitional JAN Forward 2022	4.00	4.00	1,000	4.00	4.00	1,000
APR Forward 2022	3.50	3.00	6,500	3.19	3.19	6,500
JUL Forward 2022	3.50	3.50	7,500	3.50	3.50	7,500
			35,132			
Aluminium						
Spot 2021	18.00	3.00	5,724	5.06	18.55	15,794
28 Day Rolling 2021	10.00	10.00	500	10.00	20.48	1,050
OCT Forward 2021	10.00	10.00	250	10.00	23.62	1,450
DEC Forward 2021	10.00	4.00	1,095	6.49	13.34	1,545
APR Forward 2022	18.00	18.00	900	18.00	18.00	900
			8,469			



Managing Director's Comments November 2021



Just when Covid was fading out of the news a new variant has appeared to disrupt lives and no doubt global logistics. It has moved COP 26 out of the headlines, which in turn had taken the Environment Bill out of the limelight. The latter has now been approved which signals the start point for putting Extended Producer Responsibility into law. The Deposit Return

Scheme still seems the first element to be introduced with the remainder following in 2024. Meanwhile the current system continues to overachieve with third quarter (Q3) data confirming market price predictions. Given the delays in The Environment Act, early consideration should be given to PRN targets for 2023 and 2024.

Percentage Change of Year on Year (YoY) and Quarter on Quarter (QoQ) 2021 NPWD Quarterly Packaging Waste Accepted Data



The Environment Act 2021

The Environment Act is a mighty document in more ways than one but from the perspective of Producer Responsibility it is Part 3, Sections 50, 51 and Schedules 4 and 5 that are important, whereas Sections 54, 55, 56 and Schedules 8 and 9 cover off Deposits and charges on single use items and carrier bags. As enabling legislation, it is a little light on detail but it does include three significant powers: the ability to establish scheme administrators, compliance schemes and individual registration. What is slightly disappointing is a difficulty identifying targets. The act refers to Sections, yet the table of contents refers to Parts, Chapters and Schedules. If a Section is the same as a Part then a demanding timetable has been set with a long-term Target (15 year) to be set by 31 October 2022 and a 5 year one with interim Targets to be set by 31 January 2023. All facilitated by an acceptance that due consultation could have taken place prior to the Environment Act coming into force. Pragmatic but slightly unsettling. Of equal interest is that there is no exclusion of Deposit Schemes from current legislation (e.g. PRNs) when they run concurrently. A simple solution to what might otherwise become a thorny issue to resolve.

Deposit Return Schemes

Although Deposit Return Schemes are popular with politicians and with

the public, ongoing concerns about its introduction are expressed by: the Glass industry; Local Authorities and those that have had prior experience of Deposit Schemes. Not only does it require the establishment of costly infrastructure, it also risks a double cost on the packaging industry of not only financing a Deposit Scheme but also financing a significantly more expensive household waste stream deprived of the income streams from used beverage containers. Deposit Schemes are also known to be expensive on Society. While it may be suitable for some items, it may not be suited for all materials and/or shapes and sizes of beverage containers.

Looking forward to 2022

Meanwhile the current Producer Responsibility system continues to perform above expectation. Despite the obligation reaching new heights, PRN supply, fed on high secondary raw material prices driven by a global recovery only restrained by logistics and supply issues, is striving to meet these new heights. Challenges remain for Glass Re-melt, where in year recycling is unlikely to meet the 2021 Target, and Plastic, which is reaching its Target but only just. The result is that both will require growth, in the region of 7 and 4% respectively, to meet the 2022 Targets. Recycling overall and exports, Plastics in particular, are declining Year on Year and Quarter on Quarter. While this reflects both the fall in PRN prices and increased regulatory activity by the Environment Agencies, it poses a challenge for 2022 where carry forward from 2021, while still sizeable, will be lower than into 2021, creating tension in the General Recycling Target, which is tighter than many would find comfortable.

2021	2020 Carry Forward	Potential 2021 Carry Forward	Change
Aluminium	8,326	13,475	5,149
Glass (Re-melt)	80,657	10,460	-70,197
Glass (Aggregate)	26,429	47,629	21,200
Total Glass	107,086	58,089	-48,997
Paper	299,118	314,498	15,380
Plastic	90,553	84,870	-5,683
Steel	33,644	36,229	2,585
Wood	46,634	54,051	7,417
Total	692,447	561,213	-131,234

Reprocessors and exporters, if suspended by the Agencies, are automatically suspended by t2e. This means that they must fulfil their t2e commitments but are no longer permitted to trade. Sadly on occasion we find ourselves having to suspend participants who fail our audit processes prior to the Agencies taking action.

Thank you to Matt Demmon for his words of wisdom. Welcome to Todd and Shelley. It was good to see everyone at various shows across the Autumn. We remain in challenging times. Thank you to all, we look forward to being of service to you in the future. May I wish you a happy Festive Season when it comes. Stay safe.

Angus Macpherson
Managing Director



Q3 Supply Analysis

By Andrew Letham, Operations Manager



PRN prices started to tumble in Q3 as recycling rates slumped to the worst quarterly return since Q1, 2018. The 1,959,602 tonnes(t) reported as recycled is down 60,907t on Q2 making it the 2nd time this year we have seen a decline Quarter on Quarter (QoQ). Much of this decline was seen in Paper and Plastic which were down 41,250t (4.4%) & 25,345t (8.8%) respectively but due to an excellent first half of the year all materials with the exception of Glass Remelt look on course to be in significant surplus come the end of the year.

A further 149 producers have been added since the Q2 data release 276 shy of the total registered at close of play 2020 (7,255) and bringing the total number currently registered to 6,979. Obligations have also significantly increased with the 89,739t added from Q2 bringing the Year to date (YTD) total to 7,797,567t, which is 180,631t ahead of last year end (7,616,936t).

Glass Remelt has likely already caused a few sleepless nights as prices began to soar after the Q3 data did not produce the bumper quarter the monthly data had suggested. A steady 343,646t were reported, down 2,406t QoQ and compliance continues to look tight. This year's obligation is now sitting 110,835t ahead of 2020 at 1,393,963t with a further 403,049t (29%) required to meet target in year. If current recycling levels can be maintained in Q4 compliance will be achievable with a large helping of the 80,657t carry-in but this comes at the expense of next year's security blanket which will cause issues if the Remelt obligation remains at similar levels in 2022.

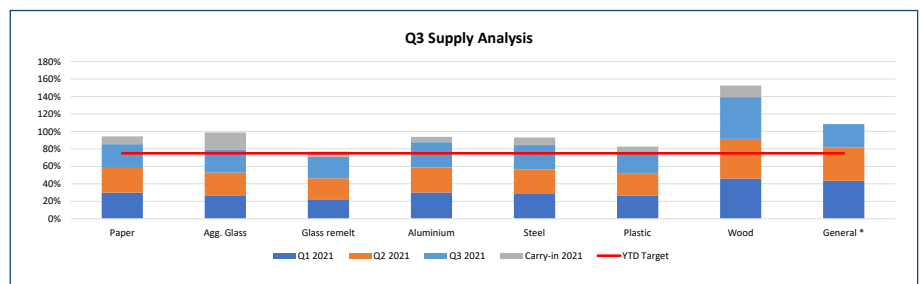
Plastic fell 25,345t (8.8%) from Q2 as export restrictions continued and increased scrutiny of accredited sellers by the Agency finally showed itself in the data. The 261,595t reported as recycled in Q3 leaves 287,944t of the current 1,133,868t obligation needed to meet compliance in year. Given the level of carry-in compliance looks certain however multiple Agency suspensions and cancellations and the threat of the removal of PRNs already entered on the system has led to volatile market conditions and a scenario where a substantial amount of the 90,553t will need to be held in year with late buyers having to compete with 2022 buyers on price.

Glass Aggregate supply has remained remarkably stable this year as it looks almost certain to be the first year it will meet its obligation in year. 141,718t recycled in Q3 mean only 113,437t are required to meet the target with the 26,429t carry-in still available for 2021 compliance.

Material	Carry In	Q1	Q2	Q3	2021 Obligation	YTD Supply + Carry In	Balance
Paper	299,118	993,256	939,240	897,990	3,315,826	3,129,604	-186,222
Aggregate Glass	107,086	145,751	141,191	141,718	542,097	535,746	-6,351
Glass remelt	80,657	301,216	346,052	343,646	1,393,963	1,071,571	-322,392
Aluminium	8,326	41,631	39,672	39,974	138,254	129,603	-8,651
Steel	33,644	109,904	108,042	108,119	386,145	359,709	-26,436
Plastic	90,553	297,389	286,940	261,595	1,133,868	936,477	-197,391
Wood	46,634	160,527	159,372	166,560	349,172	533,093	183,921
General *	0	234,843	205,678	144,771	539,323		
Total	585,361	2,049,674	2,020,509	1,959,602	7,798,648	5,624,232	-563,522

*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.



Packaging handled in **Paper** has now crept above 2020 levels with the 3,315,826t obligation 200,137t higher than last year. Recycling rates dipped in Q3 with support from the PRN now non-existent. 897,990t were recorded which is 45,505t below the year-to-date average but with only 485,350t required to meet is material specific target and a 299,118t carry-in all of December's tonnage will be available for 2022.

The 166,560t of **Wood** reported as recycled in Q3 mean that 486,459t of Wood have now been recorded against an obligation of 349,172t and large numbers of PRNs will be written off come the end of the year. The target is set to remain the same for 2022 and without intervention from the agency another soft year is expected.

Despite a 13% (15,837) rise in obligation from last year **Aluminium** remains on track to meet its obligation in year with the 39,974t recycled in Q3 leaving only 16,977t to be met before the 8,326t carry-in is considered. If Recycling continues at similar levels to the 40,425t YTD average then we can expect a c. 6% uplift in Recycling from last year.

Steel has been tracking slightly behind last year's average of 110,381t all year however it should still easily meet its current obligation of 386,145t with the 108,119t recycled in Q3 leaving a modest 60,080t to meet target in year.

[cont'd from page 1] the market lower in Q3, falling 70% to an all-time low Quarter 3 price of £0.50. Opening 2022 forward prices matched those of Paper but already show signs of weakness, with April's price falling 15% to £3.00.

Glass

The Remelt market tightened again in Q3, missing its target for the 3rd Quarter in a row. Prices responded by hitting all-time highs in the Spot market. Despite a surge in values in the latter part of the quarter, early trading saw prices soften to a quarter low of £38.00 per tonne on the back of poor buying support. However, the market started to gather upward momentum again in September,

culminating in a 137% increase to £90.00 by the quarter close – Matching the previous highest Remelt price set in 2013. Whilst compliance still look achievable, it is likely to rely heavily on a significant contribution from the 80,000 tonne carry-in to offset the in-year deficit. Energy, transport and COVID disruption also remain a major threat to supply in the final quarter and will only add to the pressure mounting in the PRN market.

Contrary to Remelt, the Glass Aggregate market saw another quarter of oversupply and the PRN price head in the opposite direction. Spot Prices fell 45% to a year low of £6.00 per tonne. Attractive pricing saw strong trading in the period, up 11% on the previous quarter.



Q and A with Matthew Demmon

Managing Director of MKD32, President of British Glass and ACP Glass Representative



Q: Glass Remelt PRN prices recently hit all-time highs. What are the key factors that have led to this surge in values?

The increase in the Remelt Target from 67 to 72% was well overdue in my opinion and has been beaten in most recent years. On its own, it would have raised the Remelt target by c100KT, which would have been easily achievable, even combined with the evolution of the target from 80 to 81% which added c20KT. The unexpected factor was the pandemic and subsequent lockdown which shut hospitality and small businesses and concentrated sales of glass in 2020 into the hands of major retailers. Business obligations rose by 80KT, meaning that the 2021 Obligation is around 200K bigger than last year. The system deals well with evolutionary increases but 200KT or over 15% in one year has proven a serious challenge. Nevertheless, the target plus carry-in is only 35KT above the 2020 performance, so why has it been so difficult to achieve? Firstly, it appears that there is a little less glass around than in 2020. Secondly, issues such as collection of high quantities of MRF glass with lower Remelt yields (councils are still moving to, rather than away from co-mingled collection), the slow re-opening of Hospitality, shortages of labour, haulage and even of ships for export, and similar problems in export destinations have all led to the position that we now face, with compliance in the balance.

Q: How can higher PRN values help to rebalance supply and demand in Glass?

High PRN prices encourage commercial collectors to find extra glass and prevent it from being lost to general waste; it supports the collection supply chain. In the longer term, it leads to investment in infrastructure. The increase in capacity cannot be immediate but the companies that recycle glass are committed to their craft and businesses and will invest in equipment for both capacity and quality. The sector has committed to a 90% Collection for Recycling Target by 2030 and this will potentially bring 500KT more glass back into the recycling loop, requiring significant investment in plant and technology. The PRN money helps to fund and to justify that investment.

Q: How has the pandemic changed consumption of glass packaging and the recovery and recycling of this packaging?

The obvious change, seen from the glass recycler perspective, have been the long-term closure and slow reopening of the hospitality sector, pushing much more glass to local authorities. It is clear that kerbside collection is an extremely efficient and positive way of collecting glass. However, it is also clear that co-mingling leads to a dramatic loss of quality and yield, and that too much glass is collected comingled, and there is not enough capacity to process all that glass. The straightforward solution is to collect glass separately. Mandating Local Authorities and all hospitality businesses to collect glass separately is

the cheapest, most efficient, and most effective way to achieve very high levels of recycling to Remelt. TEEP has been a disaster for glass quality and is partly responsible for the current situation.

Q: What are the major threats and opportunities to the Glass Recycling sector in the coming years?

The biggest opportunity is EPR, based upon Consistency in Collections. High Remelt targets, mandated separate collections across businesses and households combined with material-based campaigns and regular education will see collection rates soar, and allow high recycling rates. Recycling to remelt is the objective and any absence of remelt targets will lead to failure. Collection rates alone are irrelevant. High recycling rates are the objective.

The biggest single threat to glass recycling is a DRS. It will reduce recycling rates, lead to material switching towards plastic and cost a fortune to achieve little.

Q: How is the proposed Deposit Return Scheme viewed by the Glass sector?

We have proposed a more effective, cheaper, and more user-friendly solution. The current system hits its targets; Better performance follows higher targets. The misguided reduction in the glass target by 6% in 2015 set glass recycling back 6 years. If we had a target of 87% now, there would be no need for novel ideas. To make this right we need Consistent Collections, separate glass collections for all households, businesses mandated to separate their wastes, education, high remelt targets all supported by EPR payments. Wales already achieve 87% collection; Scotland has a good Waste Charter but has never fully implemented it. EPR can take the best of these systems and apply them across the 4 nations. Increasing the targets in line with the 90% Collection for Recycling Target that the sector has committed to will achieve the same results in almost the same time frame at far lower cost, with less aggravation for consumers, a lower carbon footprint and with better quality, leading to higher recycling rates. This is the right solution.

Q: What would you like to see in the upcoming changes to Extended Producer Responsibility Regulations?

My answers to questions 4, 5 and 6 are intimately linked; at the core is the belief that each material needs its own solution. A one-size-fits-all for all types of packaging overlooks that all packaging is not the same, that the job it does is different and that each material suits contains different products, with some cross-over. Packaging helps to reduce consumption. Recycling which helps achieve a circular economy. To achieve best results for any material, it needs its own policy, targets, and strategy. A plastic policy that catches metals, glass, wood, and paper within it is bound to miss the opportunity that we have to take the best parts of existing policy, proposed solutions, and to develop successful individual policies for each of the materials.



Shelley Wynne

Shelley Wynne has now joined the team as Office Manager in October. After leaving a large corporate investment firm, Shelley was keen to get back to a smaller team for a more involved and challenging role. With no experience in the Environmental industry, Shelley feels this new venture will certainly be a challenge and is keen to learn all about the markets going forward. In her spare time, she

enjoys showing and racing her Siberian Huskies all over the UK.



Todd Lines

Todd Lines has joined t2e as Account Manager and Trading Assistant. After graduating from Edinburgh Napier University with a degree in Business Management, he feels the role at The Environment Exchange is an ideal starting point to his career, combining a business degree with his personal interest in environmental services.

Away from work he rides and competes on his horse and enjoys spending time with friends.