THE ENVIRONMENT EXCHANGE
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Quarterly Report 90
May 2021

smart, simple, safe trading

The Marketplace for PRNs

Market Status Report By Tom Rickerby, Head of Trading

It has been a slow start to the compliance year as weak PRN prices sucked the urgency out of the market allowing buyers to focus on packaging data submissions. The release of the consultations on EPR, DRS and collections has been a source of further distraction, sparking much debate on their viability. The EA's announcement that they may cancel PRNs found to issued fraudulently as well as Brexit, lockdown disruption, shipping chaos, data reporting errors, surging secondary commodity prices and export restrictions have all contributed to general market uncertainty in Q1.

A total of 288,136 tonnes (t) traded in Q1, down 48% on Q4 2020 and 24% on Q1 last year. 157,107t were traded in the 2021 Spot Market. 33,199t in the 28 Day Rolling Market and 97,830t in the 2021 Forward markets.

Paper

Buoyant recovered Paper markets contributed to the best opening Paper return since 2016, up 10% year on year (YoY). Strong supply saw buying interest cool over the period resulting in early downward pressure on the PRN price. The Spot market fell to £4.95 and held until the release of the Q1 supply data. This triggered a further correction, with Spot prices closing Q1 46% down at £3.50.

Plastic

Q1 has seen the Plastic market rocked by PRN price volatility, data controversy and continued suspicions of widespread abuse. The year opened with Brexit, Basel convention amendments, a temporary ban on export to non-OECD countries and new export restrictions to Turkey. Despite a brief dip following strong January monthly data, uncertainty over export disruption saw prices rise to a year high of £155.00 in early March. However, strong February data calmed supply fears triggering a reversal of the trend and a 6 week sell off. By the release of the Q1 data, Plastic had lost over 60% of its value. The initial Q1 data release was marred by confusion as reporting errors led to questions over its reliability and prices briefly rallied to £80.00 on the expectation the data would be revised down. However, confusion turned to disbelief on confirmation of another 300,000+ tonne quarter and prices fell to £60.00. Record export volumes to Turkey in Q1 despite the restrictions has raised serious concerns of widespread abuse in the market.

Glass Other

The change to the Glass target split has resulted in the decoupling of the Glass markets as evidenced by the price differential in Q1. The average Q1 Glass Other Spot price (£10.90) was 56% lower than Remelt's (£24.75). Despite a reduced obligation and a surplus Q1 (up 37% YoY), Glass Other markets strengthened, rising 40% to £12.50 in the Forward markets, buoyed by Remelt's price action.

Glass Remelt

Pressure in Glass Remelt grew throughout Q1 as packaging data filtered in confirming significant obligation growth amongst the large retailers. Spot prices saw a consistent upward trend, doubling in value to a 28 month high of £36.00. Prices were helped by poor supply as generation fell 10% YoY due to the closure of the hospitality sector during lockdown and a weakened export market. Growth will be needed to hit this year's target, but improvements to the Remelt price may help to stimulate the market and divert Glass away from Aggregate markets.

Steel

News of Liberty Steel's financial troubles and the absence of one major domestic reprocessor from the 2021 accreditation register saw Steel prices recover 20% to £18.00 in the first half of Q1. However, these factors showed little impact in the Q1 data, with Steel's PRN generation showing a consistency with the 2020 average. Prices had fallen back to £16.00 at the quarter close as weak buying demand saw trading volume drop more than 50% YoY.

Aluminium

Record PRN generation in Q1 is further evidence of a sector on the up. Whilst a significant obligation increase is anticipated, current recycling performance should offset this. Opening trading was slow with prices strengthening to £31.00 to compensate for a lack of seller engagement. However, the monthly data indicated healthy Aluminium supply. The March data saw a 16% correction to £25.00 which held for the remainder of the quarter. Aluminium was one of only two materials to see trading volume growth on t2e in Q1, up 190% YoY.

Wood

Reports of a strong rebound in the Wood recycling sector were backed up by the Q1 data. A strong Q1 surplus is likely to add to buyer apathy in a market already in decline due to the anticipated target induced fall in obligation. Prices consistently undercut Paper during the quarter in an attempt to stimulate General Recycling demand, falling 50% to £3.00 per tonne at the close.

Q1 Feb - Apr 21	High	Low	Traded this Quarter	Quarterly Average Price	YTD Average Price	Total Volume
Paper						
Spot 2021	£6.50	£3.50	45,961	£4.96	£5.70	88,242
28 Day Rolling 2021	£5.75	£5.50	13,500	£5.69	£5.69	13,500
APR Forward 2021	£5.75	£4.95	41,000	£5.49	£6.48	105,500
JUL Forward 2021	£4.95	£4.95	10,000	£4.95	£6.44	24,000
DEC Forward 2021	£5.50	£5.50	3,000	£5.50	£5.50	3,000
Plastic						
Spot 2021	£155.00	£55.00	47,838	£117.43	£114.43	57,971
28 Day Rolling 2021	£155.00	£59.00	8,162	£115.16	£115.16	8,162
APR Forward 2021	£155.00	£135.00	1,100	£148.18	£92.72	4,600
JUL Forward 2021	£155.00	£80.00	3,300	£114.09	£113.13	4,000
OCT Forward 2021	£155.00	£60.00	4,250	£100.00	£100.00	4,250
DEC Forward 2021	£150.00	£60.00	3,500	£90.71	£90.71	3,500
Glass Other						
Spot 2021	£12.00	£8.50	9,638	£10.90	£10.43	16,685
JUL Forward 2021	£12.50	£9.50	2,900	£10.43	£12.77	12,900
OCT Forward 2021	£12.50	£8.00	4,900	£9.44	£12.04	11,900
DEC Forward 2021	£12.50	£8.00	7,900	£9.02	£9.02	7,900
Glass Remelt						
Spot 2021	£36.00	£18.00	18,826	£24.75	£23.89	21,185
28 Day Rolling 2021	£33.50	£25.00	6,500	£29.50	£29.50	6,500
JUL Forward 2021	£32.50	£32.50	4,000	£32.50	£22.36	14,500
OCT Forward 2021	£32.50	£32.50	4,000	£32.50	£26.50	7,000
DEC Forward 2021	£32.50	£32.50	4,000	£32.50	£32.50	4,000
Steel						
Spot 2021	£18.00	£15.00	12,292	£16.55	£16.10	14,203
Wood						
Spot 2021	£6.00	£3.00	17,357	£4.32	£4.52	30,391
28 Day Rolling 2021	£4.95	£3.50	4,487	£4.50	£4.50	4,487
JUL Forward 2021	£4.00	£4.00	250	£4.00	£7.59	4,700
OCT Forward 2021	£4.00	£4.00	250	£4.00	£7.42	7,750
DEC Forward 2021	£4.00	£4.00	250	£4.00	£4.00	250
Aluminium						
Spot 2021	£31.00	£25.00	5,195	£28.22	£28.18	7,421
28 Day Rolling 2021	£30.00	£30.00	550	£30.00	£30.00	550
APR Forward 2021	£30.00	£29.00	880	£29.80	£36.62	1,880
JUL Forward 2021	£30.00	£25.00	950	£27.37	£27.37	950
OCT Forward 2021	£30.00	£25.00	950	£27.37	£27.37	950
DEC Forward 2021	£30.00	£30.00	450	£30.00	£30.00	450

Managing Director's Comments May 2021

A quiet quarter from a trading perspective but a busy one for Government with the publication of three consultations and impact assessments: Deposit Return Scheme (DRS), Extended Producer Responsibility (EPR) and Consistent Collection. The introduction of a £200.00 tax on plastic packaging with less than 30% recycled content from 1 April 2022 onwards has also been approved. Not to be outdone the Environment Agency has indicated that they may cancel PRNs validly issued through the National Packaging Waste Database (NPWD), which are subsequently found to be fraudulent. To top it all Turkey, currently the largest overseas market, has now effectively imposed a ban on imports of plastic packaging.

Consultations

DRS aims to boost recycling levels and reduce litter. However there is concern that this expensive endeavour will fail to achieve these objectives and render household collection unviable. If DRS is introduced, consistency throughout the UK would be preferable.

The proposed EPR adds an extra dimension to an already complex system whilst sweeping aside the administrative infrastructure and knowledge that has been built up over the last 25 years. It introduces a packaging levy that can be modulated depending on the material and several other criteria. The exact level of modulation will be set by a Scheme Administrator, who is responsible for ensuring that the targets are met and that local authorities will be paid to cover their full net costs of collecting used packaging, less those beverage containers covered by the DRS.

Evidence

A separate evidence based scheme is proposed for non-household packaging. The evidence will be issued by treatment facilities rather than reprocessors and exporters. There is a suggestion that collection from businesses should be at a minimum 'free of charge' with a reduction in obligation if they backhaul their packaging. This echoes the system used for Waste Electrical and Electronic Equipment, which has regularly missed its targets. Unlike the PRN, there are no incentives to create a demand pull for secondary raw material nor to encourage the retention or establishment of reprocessing in the UK, albeit exporting may become more difficult if 'end of waste' criteria need to be met.

Who Pays?

Category	Producer Type	Costs						
		Waste Management	Communication	Litter	Reporting	Label	Takeback	Modulation
A	Brand owner/packer filler/ converter(?)	X	X	X	X	X		X
B	Importers	X	X	X	X	X		X
C	Distributors	X	X	X	X	X		X
D	Online Marketplaces/fulfillment houses	X	X	X	X			X
E	Sellers				X		X	
F	Service Providers	X		X	X			X

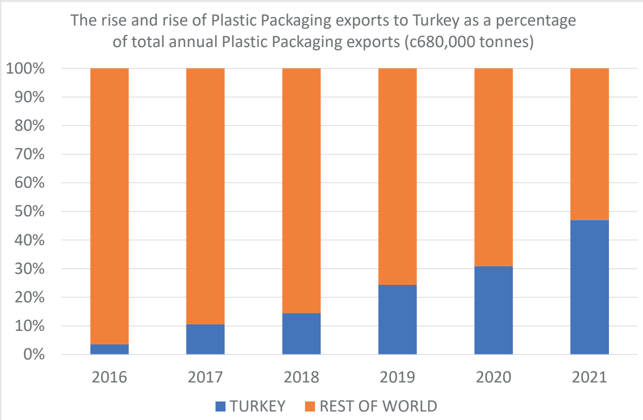
Notes
1. All to pay regulator, scheme administrator and compliance scheme fees as appropriate
2. Scheme administrator fees to start in 2023

Consistent collection covers a wider range of recyclables than packaging: food waste, garden waste, etc. It aims to reduce confusion, improve the quality of the collected secondary raw material, and simplify the messages for communications campaigns. The intention is that the higher the quality of the secondary raw material, if it includes packaging, the higher the payment received from producers via the Scheme Administrator.

The points of payment have been shifted towards brand owners but the demands for data have become far more widely spread but the de minimis level may be lowered so just as many, if not more companies, will feel the impact of EPR. The annual cost of the proposals is estimated at an eye-watering £2.7 billion: £1.2 billion to local authorities and £1.5 billion for business to business waste. It appears the UK strives to move from achieving Producer Responsibility at the lowest cost in Europe to the highest!

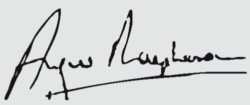
Regulatory Activity

The Environmental Agencies, who will have to regulate this new system, have started to tighten their regulation of the current system. While the ambition to deter fraud is laudable, imposing an obligation on those involved to check the agency's accreditation work not only sows the seeds for chaos but also undermines their own evidence system by encouraging rivals. It is imperative that all involved support the system by raising concerns of abuse with the regulator, if possible with evidence, on which the regulator must act. Early suspension should be used more frequently as a management tool.



Turkey is a case in point. Plastic exports to it have been rising rapidly due to an expanding recycling industry, surpassing the capacity of its waste management system. This has placed a reliance on imports of secondary raw material whilst overstretching the disposal system for the impurities in those secondary raw materials. Removal of these impurities is less costly in Turkey than the UK so demand for high impurity/low quality secondary raw material remains high. The Turkish Government is now increasing the bar for minimum levels of impurities, but this could have been achieved much earlier by adjusting the protocols of exports to reflect impurity levels more accurately.

These are challenging times. The desires of Government are beginning to emerge. Currently it looks something of a Pandora's box and there is much to be done and a rocky road for all to travel. Many wonder if the Government are trying to change too much at one time. The only certainty is that Producer Responsibility in 2024 will not look or cost the same as now. Thank you to all those that continue to support t2e we look forward to being of service to you. There is long way until 2021 is complete!



Angus Macpherson
Managing Director

Q1 Supply Analysis

By Andrew Letham, Operations Manager

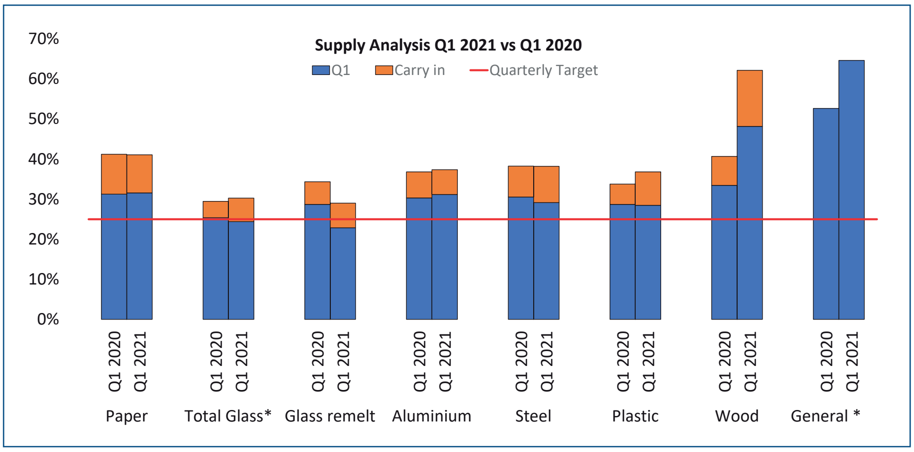
Accurately forecasting obligations has proved a real challenge in 2021 as uncertainty has continued to plague the PRN market with the impact Covid-19 had on businesses last year difficult to quantify. The initial data set gives us the first look at how packaging consumption has changed during the pandemic and how secondary raw material markets have been affected by the change in flow of material.

Despite there being 87 fewer producers registered than at this time last year packaging handled has increased in all materials except Wood which has also seen a 13% reduction in recycling target this year. All other materials are likely to see growth in obligation however, there remains a possibility that obligated producer numbers do not reach the same levels as last year owing to business closures. At present there are 723 fewer producers registered than at the end of the 2020 compliance year (7,255).

Material	Carry In	Q1	2021 Obligation	YTD Supply + Carry In	Balance
Paper	299,118	990,452	3,138,163	1,289,570	-1,848,593
Total Glass*	107,086	446,147	1,827,977	553,233	-1,274,744
Glass remelt	80,657	301,192	1,316,144	381,849	-934,295
Aluminium	8,326	41,847	134,257	50,173	-84,084
Steel	33,644	108,272	371,443	141,916	-229,527
Plastic	90,553	308,682	1,084,272	399,235	-685,037
Wood	46,634	160,642	333,265	207,276	-125,989
General *	0	333,697	516,184		
Total	*585,361*	*2,056,042*	*6,889,378*	*2,641,403*	-5,182,270

**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.*



The total **Glass** obligation is currently 45,855 tonnes (t) higher than at close of play 2020 (1,782,122t). With the Remelt specific target increasing from 67% to 72% this year, 5% more of the obligation will need to be filled by way of Remelt. This has already led to a significant divergence in the price paid for the two grades of Glass, and for good reason. The 301,192t of Remelt reported as recycled is the worst return since Q2 2017 and means that even with the addition of a very healthy carry-in (80,657t) it remains behind on its current quarterly target of 329,036t. Conversely Aggregate posted a 144,945t return putting it well on the way to meeting its obligation (511,834t) with 28% having already been met in year before a 26,429t carry-in is factored in. The poor Remelt return has largely been attributed to the closure of the hospitality sector with the Glass collected from homes being of an inferior quality and more difficult to extract from co-mingled sources. As easing of restrictions continues and hospitality reopens it is likely that more Glass will find its way to Remelt.

Contrary to the well documented difficulties at the beginning of Q1, **Plastic** posted its third highest recycling return. The 308,682t reported as recycled means that 28% of the current obligation (1,084,272t) has been met in year despite the obligation being 4.5% (47,933t) higher than this time last year. True to form the positive news did not last long with the announcement from Turkey on the 18th May that they were to ban the import of all material under waste code 3915. Coupled with the existing restrictions on EWC code 191204 this equates to a complete ban on plastic waste entering Turkey. The impact of this is yet to be seen in the data but with Turkey accounting for between 45-50% of all Plastic export PRNs generated in Q1 (approx. 75,000t) it could prove very significant.

Paper demand (3,138,163t) is already above the final obligation figure for last year (3,115,689t) owing to a 4% increase in the recycling target. This increase could conservatively add 150,000t of obligation come the end of the year however Q1 supply is also up 33,551t on last year's average (956,901t) at 990,452t. Unprecedented demand for OCC and high material prices have led to a 10.8% increase in PRN generation YoY. At current levels of supply there would be enough Paper PRNs generated to cover both the Paper specific and General Recycling obligation before the large 299,118t carry-in is considered.

Wood will also be a significant contributor to General Recycling this year as the recycling target was revised down from 45% in 2020 to 32% this year. With the 160,642t reported in Q1 accounting for 59% of the current 271,068t obligation it is hard to predict anything but a soft year in the Wood market, especially given the 17% (46,634t) carry-in available.

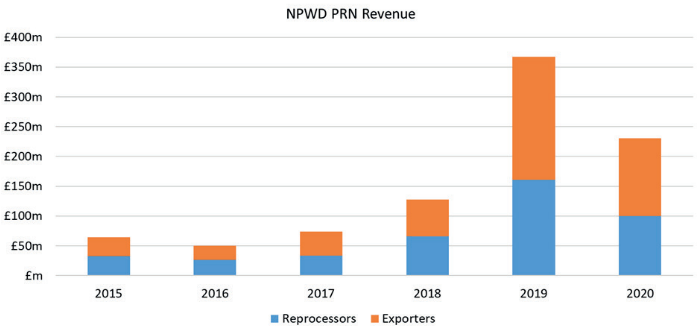
Steel supply remained steady in Q1 with the 108,272t reported as recycled just shy of last year's average of 110,382t. Purchasing of tinned goods during the pandemic will likely mean that the Steel obligation increases for the first time in two years despite consecutive target increases, with the current obligation of 371,443t only marginally short (7,863t) of last year's end of year total (379,306t). Noise surrounding the financing of Liberty steel continues but to date there is no evidence of this impacting on recycling rates.

The **Aluminium** obligation has seen the largest increase YoY rising 9.7% to 134,257t. Much of this will be down to increased drinking at home during the pandemic however there has also been steady movement from away from Steel packaging to Aluminium over the past few years. Despite the increased obligation the Aluminium market currently looks in good shape with both the largest carry-in ever available (8,326t) and the largest ever quarterly return of 41,847t which accounts for 31% of the current obligation.

How do Reprocessors and Exporters use PRN revenue?

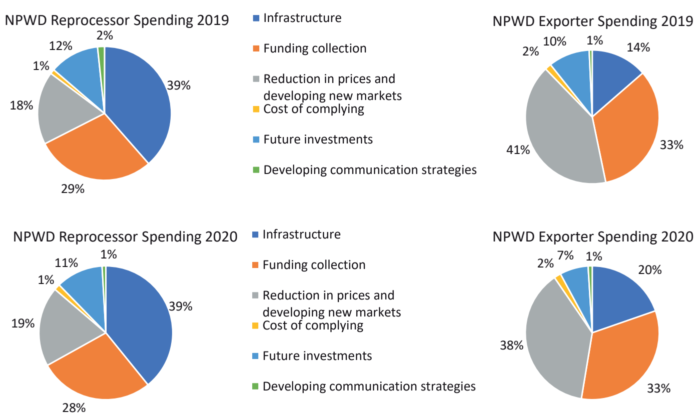
By Katharine Sealy, Account Manager

2020 saw one of the most unexpected challenges to the PRN system in the form of a pandemic. As a result of global lockdowns and market uncertainty, the latter half of the year saw prices soften significantly across all materials. Despite these challenges the PRN system prevailed, and recycling targets were met comfortably. According to the National Packaging Waste Database (NPWD) PRN Revenue Report, the average PRN value in 2020 was £27.56, a decrease of 37% from the 2019 average of £43.90. The total PRN revenue in 2020 remains significantly higher than preceding years as shown in the year on year comparison below.



The NPWD PRN Revenue Report

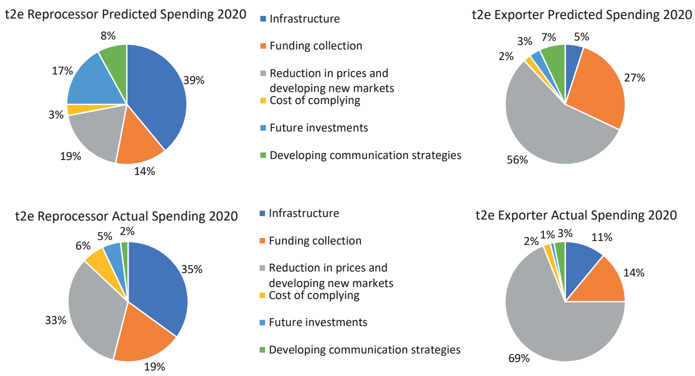
The NPWD PRN Revenue report asks reprocessors and exporters how they distributed their PRN revenue across six categories: Infrastructure, Funding collection, Reduction in prices and developing new markets, Cost of complying, Future investments and Developing communication strategies. Due to the 37% decrease in PRN value in 2020, overall £136,849,418.88 less has been fed into the PRN system this year compared to 2019. The split between reprocessors and exporters remained the same as last year with 43% (£99,921,582.52) going to reprocessors and 57% (£130,182,990.36) towards exporters. Between 2019 and 2020 there were marginal shifts in revenue distribution for reprocessors



and for exporters there was a shift away from future investments and reduction in prices and market development towards investment in infrastructure where allocation was increased by 4%.

t2e Accredited Reprocessor and Exporter Survey

To give participants an idea of how PRN revenue is utilised, t2e distributes an annual survey to member reprocessors and exporters asking how they plan to allocate PRN revenue in the upcoming compliance year according to the six categories provided by the NPWD. In 2021 t2e received a record number of responses.



2020 was an unusual year for sellers and the comparison between how they anticipated they would distribute PRN revenue compared to how they actually distributed PRN revenue attests to that. Reprocessors saw a shift away from infrastructure (-4%) and investment (-12%) perhaps due to the decrease in funds available, and increased allocation towards funding collection (5%) which may reflect the impact of lockdown on material supply. Conversely exporters increased allocation to infrastructure by 6% and decreased funding collection by 13%. Both t2e reprocessors and exporters increased the proportion of funds allocated towards reduction in prices and developing new markets, reprocessors by 14% and exporters by 13%. This shift may reflect the lower prices seen in 2020 with sellers needing to assign more towards price support than anticipated based off values seen in 2019. It may also reflect the reduction in funds available from 2020 with sellers needing to allocate a greater proportion of total revenue towards these categories to achieve the same results.

Comparing actual spend in 2020 to anticipated spend in 2021, t2e reprocessors anticipate that they will assign 3% less on infrastructure, 1% less on reduction in prices and developing new markets, 1% less on cost of complying and 4% more on future investments. On the other hand t2e exporters estimate they will decrease the proportion of funds allocated to infrastructure by 1% and increase spend on reduction in prices and developing new markets by 1%. As in previous years, t2e exporters plan to spend the majority of funds on price support (71%) in comparison to t2e reprocessors who plan to spend 32%.