

## The Marketplace for PRNs

### Market Status Report *By Tom Rickerby, Head of Business Development*



Another volatile and unpredictable Quarter saw PRN prices hit year highs across all materials. Prices softened towards the latter stages of the period but strong demand for a weakened supply of transitional PRNs saw higher values quickly established in the 2019 markets. A total of 384,412 tonnes traded in the quarter; up 39% on the previous quarter and 7% on the same period last year. 263,390 tonnes traded in the 2018 Spot, 39,665 tonnes traded in the 2019 Spot, 41,730 tonnes traded in 2018 forward markets and 39,627 tonnes traded in 2019 forward markets.

#### Paper

Paper prices peaked early in the quarter, hitting a year high of £28.00 per tonne in early November. However, prices had retraced to £19.00 by the end of the month and by mid-December; an influx of newly accredited export PERNs had accelerated the sell-off, wiping another £10.00 off the value and pushing Paper prices into single figures for the first time since June. More attractive prices brought refreshed buying interest as late comers to the market were forced to compete with Schemes reshuffling their General Recycling deck. The resulting rebound saw a highly volatile final trading period with prices yo-yoing between a high of £18.00 per tonne and the eventual closing price of £7.50. 2019 prices fell in line with the 2018 price. High values, reduced availability and greater uncertainty led to significantly reduced trading in the 2019 forward markets. Forward trading was down 94% on the same period last year.

#### Plastic

The Plastic PRN has traded above £100 on 3 previous occasions. In 1998, 2004 and in 2008 the market briefly flirted with a 3 figure PRN value. On each occasion the volumes traded were small and prices quickly returned to lower levels. The 2018 market entered triple digit territory in mid-December and continued north to a record £140.00 per tonne at the turn of the year. Prices briefly retraced to £100.00 but rebounded to finish the year strongly at £130.00 per tonne in one of the tightest finishes to a compliance year on record (plastic looks to have missed its target in-year by around 47,000 tonnes). The outlook for 2019 looks challenging as the UK struggles to establish new market solutions for mixed and low-grade recovered Plastic. Whilst this happens, £100+ appears to have become the new baseline price for the Plastic PRN.

#### Glass

Following the destabilisation of the Glass markets in Q3, Remelt prices rose over 50% in the first month of Q4 on the back of renewed supply concerns. Remelt and Aggregate prices hit a year high of £46.00 per tonne in the December Forward Market. However, the Glass market failed to hold onto the price gains in the second half of the quarter. Spot prices tumbled 59% to close the year trading at £18.00. Reasons for the price correction are evident in the supply data; where higher PRN values have caused a resurgence in Aggregate production. Q4 Aggregate generation was up 77% on the 2018 average and is at its highest level since Q3 2015. A strong correlation between a higher PRN value and a boost in supply plus a significant growth in carry-in tonnage will alleviate concerns around a potential tightening in the 2019 market. 2019 prices fell accordingly, dropping to £27.00 in the Spot, down 23% from the £35.00 high traded in the April forward market earlier in the quarter. The quarterly average Remelt price was the highest it has been since Q2 2014.

#### Steel

Steel Q4 price movements mirrored that of the Paper market as General Recycling prices fluctuated over the quarter. Like Paper; an early and brief rise to the year high price of £27.50 was followed by a 4 week sell off that bottomed out at £10.00 per tonne in mid-December. The final 6 weeks of the year saw a rebound in the price and another volatile period of trading as the few remaining sellers speculated on the risk vs reward of holding out for higher prices in the closing weeks. Steel traded up to £17.50 in the April and July 2019 Forward Markets.

#### Aluminium

Aluminium trading in Q4 hit record volumes on t2e (up 500% on Q3 and double the same period last year) amid ongoing concerns around price manipulation. Buyers were left with little option but to buy their way out of a market that had become a perceived compliance risk despite supply data suggesting the contrary. Prices responded by rising 71% to a 10 year high of £150.00 but fell back in the latter stages of the quarter as demand dropped, closing the year at £100 per tonne. 2019 markets opened strongly trading between £120.00 and £75.00 per tonne.

#### Wood

Wood's 12-month winning streak ended abruptly in November as the volume buying that has underpinned Wood's meteoric price rise dried up in the final quarter. Compounded by a significantly improved supply picture, Spot prices began to slide in November and by late January 80% of the PRNs value had been wiped out. Wood finished the year competing with Paper and Steel for the remaining General Recycling demand. Transitional Wood prices fell too with the 2019 Spot Market closing at £27.50, down 58% on opening forward prices.

#### Recovery

Average Recovery spot prices rose for the 5th quarter in a row, up 18% on the previous quarter to £0.65. Whilst this statistic won't trouble many buyers, it reflects a noticeable shift in sellers' price expectations as a result of the growing number of smaller Recovery trades following the divergence in the Recovery and Paper price. Total Recovery transactions doubled in 2018 on the previous year; volume traded was also up 65%.

	High	Low	Traded this Quarter	Quarterly Average Price	YTD Average Price	Total Volume
<b>Paper</b>						
Spot 2018	£28.00	£7.50	93,949	£17.76	£13.21	292,026
Spot 2019	£14.50	£12.00	17,315	£13.81	£13.81	17,315
DEC Fwd 2018	£25.00	£13.70	4,521	£16.11	£11.40	12,621
Transitional JAN Fwd 2019	£21.00	£10.00	16,259	£15.28	£15.28	16,259
APR Fwd 2019	£15.00	£15.00	5,000	£15.00	£16.67	7,500
<b>Plastic</b>						
Spot 2018	£140.00	£75.00	74,501	£97.73	£72.39	292,866
Spot 2019	£111.00	£95.00	10,843	£105.70	£105.70	10,843
Transitional JAN Fwd 2019	£100.00	£85.00	1,380	£90.25	£87.91	1,630
APR Fwd 2019	£100.00	£100.00	350	£100.00	£87.37	950
<b>Glass Other</b>						
Spot 2018	£30.00	£18.00	4,290	£21.16	£17.72	10,989
Spot 2019	£30.00	£27.00	2,386	£28.48	£28.48	2,386
DEC Fwd 2018	£46.00	£46.00	5,000	£46.00	£44.10	5,351
APR Fwd 2019	£33.00	£33.00	10,000	£33.00	£33.00	10,000
<b>Glass Remelt</b>						
Spot 2018	£44.00	£18.00	24,684	£30.09	£22.84	47,849
Spot 2019	£30.00	£27.00	4,349	£28.23	£28.23	4,349
DEC Fwd 2018	£46.00	£46.00	5,000	£46.00	£21.12	24,713
APR Fwd 2019	£35.00	£29.50	18,000	£33.53	£31.74	21,000
<b>Steel</b>						
Spot 2018	£27.50	£10.00	20,550	£17.98	£12.64	74,938
Spot 2019	£17.50	£15.00	477	£16.34	£16.34	477
DEC Fwd 2018	£24.00	£24.00	3,000	£24.00	£12.97	13,877
Transitional JAN Fwd 2019	£24.00	£15.00	5,250	£20.33	£18.45	7,250
APR Fwd 2019	£17.50	£15.00	3,377	£16.48	£16.48	3,377
JUL Fwd 2019	£17.50	£17.50	2,000	£17.50	£17.50	2,000
<b>Wood</b>						
Spot 2018	£71.00	£12.50	18,623	£32.41	£46.98	72,181
Spot 2019	£65.00	£27.50	2,035	£28.71	£28.71	2,035
DEC Fwd 2018	£64.50	£64.50	1,000	£64.50	£32.11	5,500
APR Fwd 2019	£65.00	£65.00	400	£65.00	£65.00	10,900
<b>Aluminium</b>						
Spot 2018	£150.00	£75.00	6,221	£126.37	£84.43	11,159
Spot 2019	£120.00	£80.00	730	£85.13	£85.13	730
Transitional JAN Fwd 2019	£137.50	£120.00	320	£127.27	£127.27	320
APR Fwd 2019	£75.00	£75.00	500	£75.00	£75.00	500
<b>Recovery</b>						
Spot 2018	£1.25	£0.50	20,572	£0.65	£0.49	61,389
Spot 2019	£0.95	£0.35	1,530	£0.62	£0.62	1,530

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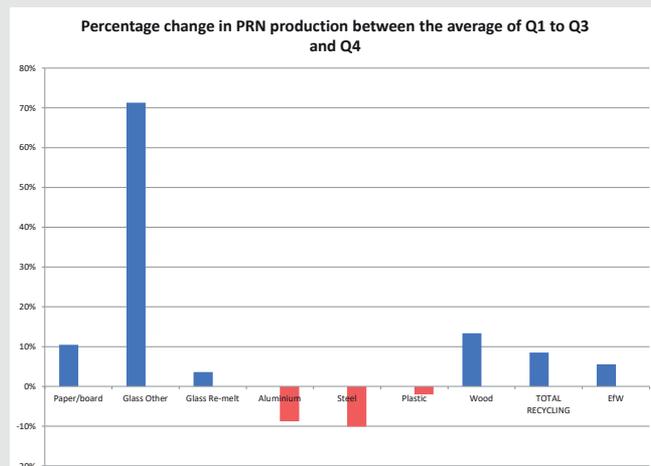
# Managing Director's Comments – February 2019



A busy quarter, record tonnage traded through t2e, the end of the 2018 compliance year and the start of the 2019 one, the publication of initial year end data which gives insight for the next but, as 2018 showed, accuracy in PRN predictions is difficult. Meanwhile the much anticipated Resources and Waste Strategy has been published which has no less than four linked consultations, which close on 13 May 2019.

### Review of Q4 2018

2018 produced many challenges for all. A significantly increased Wood obligation, combined with raised quality standards for exports to China not only put pressure on the Wood material specific target but also caused a shortage in the General Recycling pool. In the end Wood exceeded its target by more than anticipated and Paper exporters found destinations other than China, substantially India, Taiwan and Vietnam. Combined with a significant surplus in Steel, these destinations ensured that there were sufficient PRNs in the recycling pool to meet the target but only by making substantial inroads into the carry forward tonnage with much December tonnage being used to achieve 2018 compliance.



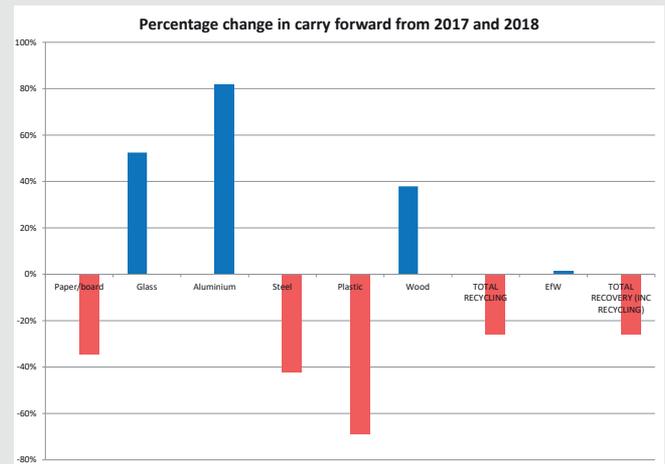
Similar challenges were faced in Glass and Plastic. In the former higher PRN prices resulted in increased viability for Aggregate tonnage, where an increase of 77% in Q4 production over the average of the previous 3 quarters, saw Glass over the line with something to spare. Meanwhile Plastic already beset by challenges exporting to China found other global destinations increasingly resistant. Rapidly escalating PRN prices helped to cover increased costs of sorting and ensured that markets could be found, although insufficient to ensure that the business target was achieved within the calendar year. Discrepancies between PERN and HMRC data continue to give rise to concerns.

### Looking forward to 2019

Judging carry forward is difficult. 2019 is no exception although some issues can be identified with some confidence. Total Recycling tonnage will be reduced as will Paper and Plastic carry forward. Whereas Wood and Glass, principally Aggregate, carry forward will increase. Less certain are the metals. Both Aluminium and Steel saw PRN production fall in the final quarter. If it is systematic, rather than seasonal, Aluminium could face challenges meeting its 2019 material specific target. Possibly slightly surprisingly at this stage, it looks as though the General Recycling target

will come under less pressure than it did in 2018, although the PRN price at which exporting is no longer viable remains to be found.

Plastic will be the biggest challenge in 2019. With an increased target, reduced carry forward, reducing availability of export destinations and a growth in obligation of at least 6%, there are significant hurdles to climb. While there are indications of potential growth in UK reprocessor capacity, until markets for their products are firmly established they will remain reliant on high PRN prices to sustain viability.



### Consultations

The much anticipated consultations spawned from the Resources and Waste Strategy have now arrived. In fact like buses when you hope for one, four arrive! The Government is looking to those that make and use packaging to pick up the full costs of collecting and utilising or disposing of all packaging placed on the market that ends in the local authority waste stream, called household or household-like packaging. This is regardless of whether it is recycled, landfilled or becomes litter, netted off against any income that the local authority might receive from secondary raw materials. It sees this happening by a combination of a continuation of the current PRN system in some guise to deal with commercial and industrial packaging and an additional system that raises and then distributes funds direct to the local authorities dependent on the tonnage of packaging they collect. Funds raised may be modulated according to the recyclability of the packaging placed on the market.

To assist in achieving targets a deposit scheme for beverage containers is being consulted on for England, Wales and Northern Ireland – there has already been a consultation in Scotland – as is a recycled content tax for plastic, which could be expanded to other materials. Finally quality, or at least consistency, standards are being requested from local authorities in the fourth consultation. Much clarification is needed between now and 2023, when any changes will be introduced, but currently it looks like expensive times ahead for the all.

Many thanks to everyone for their support in this record breaking year. Thank you to Rick Hindley for his contribution. It is hoped the high Aluminium PRN price will stimulate sufficient PRNs to enable targets to be met between now and 2023. We look forward to continuing to be of service to you in future years.

**Angus Macpherson**  
Managing Director

## The Marketplace for PRNs

### Q4 Supply Analysis *By Andrew Letham, Sales and Marketing Manager*



Although not yet verified, the Q4 data brings to a close what has been a remarkable year in the PRN market. Challenging trading conditions led to unstable pricing across all markets with record high prices seen in Plastic (£140.00) and Wood (£71.00). Material specific recycling increased year on year however the 7,372,458 tonnes (t) reported as recycled were not enough to meet General Recycling demand in year which grew 153,090t from 2017. Producer numbers were also up year on year with the 7,033 registered producers an increase of 31 from 2017.

With an exceptional recycling return needed in Q4 to ensure Glass targets were met, all expectations were exceeded. An increase in total Glass recycling of 63,726t (15.6%) was achieved on the year to date quarterly average of 408,344t, 12,096t of which were Remelt and a huge 51,630t aggregate. Recyclers suggest the increase in Aggregate was due to the higher PRN price allowing them to process stockpiled tonnage that was not previously financially viable and it is unlikely to be repeated in the short term. Overall Glass was 23,670t (1.5%) oversupplied in year and 77,949t (4.6%) when carry-in is considered. A 1% target increase will see a minimum of 20,000t of additional demand added across both materials in 2019, a large portion of which will be offset by a 15,104t increase in carry-out which sits at 69,383t.

As expected, Wood prices began to soften in the final quarter with the interim Q4 data confirming that the recycling target was met in year (excluding carry-in). 454,180t were recycled in 2018, a 10.4% (43,514t) increase on 2017 leaving a surplus of 43,084t or 62,143t with carry-in. The 5% target increase confirmed for 2019 will mean a near 13.5% hike on 2018's obligation resulting in all of the 27,025t carry-out being swallowed up by increased demand. However, the high prices seen in 2018 will likely attract new sellers to the market and encourage producers to revisit their packaging data.

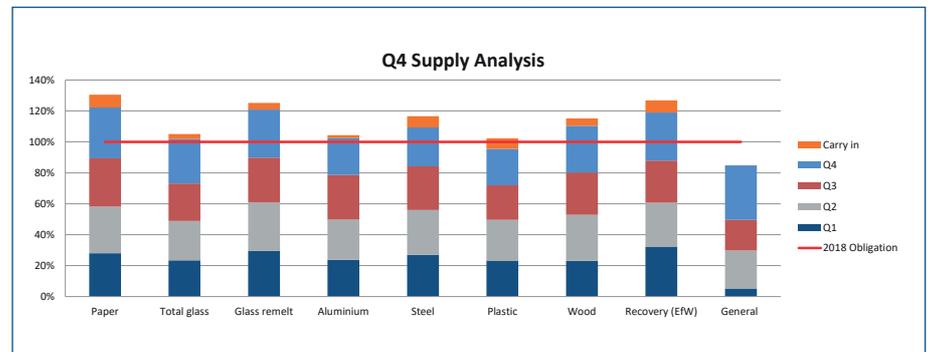
What had been an unusually stable year in Plastic changed dramatically late in the final quarter, when it became clear that we were going to struggle to meet demand in year. What transpired was a 49,672t shortfall in year with Plastic recycling down year on year for the first time since 2004. 1,033,470t were recycled in year, 10,843t short of 2017 and leaving a carry-out into 2019 of only 23,009t. With a 2% target increase, difficult export markets and more stringent monitoring from the agency, the estimated 275,000t needed each quarter to meet target in 2019 looks to be a real test for a market that produced an average of 258,368t in 2018.

The Q4 return of 983,795t was 10.5% higher than the 2018 average of 890,685t but still not enough to stop overall Paper recycling falling for the 2nd year in a row. A total of 3,655,813t were recycled in year

Material	Carry In	Q1	Q2	Q3	Q4	2018 Obligation	YTD Supply + Carry In	Carry-Out into 2019
Paper	249,995	837,279	902,246	932,530	983,795	2,990,512	3,905,845	163,912
Total Glass*	54,279	393,260	425,329	406,444	478,763	1,673,343	1,758,075	69,383
Glass remelt	48,856	332,339	349,329	326,108	348,021	1,121,140	1,404,653	48,993
Aluminium	1,802	23,105	25,388	28,104	23,271	97,492	101,670	3,280
Steel	27,111	101,306	109,130	105,853	94,778	375,603	438,178	16,561
Plastic	73,350	252,127	285,089	241,809	254,445	1,082,187	1,106,820	23,009
Wood	19,062	95,183	121,875	112,559	124,563	411,096	473,242	27,025
EfW	48,713	199,796	176,289	168,331	191,511	618,744	784,640	50,919
General *	0	44,702	211,499	169,741	302,057	858,028		
Total	474,312	1,902,056	2,045,346.00	1,995,630	2,151,126	8,107,005	8,568,470	403,082

\*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.



down 76,278t (2%) on 2017 (3,732,091t) whilst the material specific obligation grew by 99,321t. A diminished 163,912t carry-out into 2019 will put further strain on the market which traded at its highest level since 2002 (£28), as will the 2% target increase which will likely add close to 100,000t of additional demand.

Growth of 8,918t in the Steel obligation from 2017 was below the recycling target increase of 3% which suggests movement away from the material by some producers. Recycling was also down in year with 411,067t reported as recycled, 19,751 short of the 2017 total (430,818t). Despite this the market remains in good health with a 35,683t oversupply in year. The 16,561t of carry-out into 2019 point to a significant amount of Steel being utilised as General Recycling in 2018 with Steel prices likely to track slightly above Paper in 2019 to keep material for the material specific obligation.

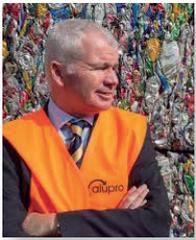
With much debate surrounding the Aluminium market, the target was met in year by a mere 2.75% with 99,868t recycled. A healthier 3,280t will be carried into 2019 as the target increases 3% on 2018. Suggestions from industry that the obligation could grow substantially in 2019 gives slight cause for concern but this won't become apparent until late April.

Overall a very testing year for UK Recycling. Prices are already reflecting buyers' nervousness in several markets with Plastic in particular looking to be challenging. Advice as always is to spread buying throughout the year to obtain an average price rather than chasing the bottom of the market.

## The Marketplace for PRNs

# A look at the Aluminium market in 2018

## The Year the PRN System Fell into “Disrepute”? *Rick Hindley, Executive Director at Alupro*



At £1,000.00 per tonne, regardless of its infinite recyclability, significant energy and carbon savings, Aluminium is the perfect material for the truly “circular economy”. This value means that Aluminium is not as reliant on the income from the PRN system as other materials to drive recycling performance. Indeed as Aluminium makes a net positive contribution to the costs

of collecting it, some suggest it subsidises the collection of lower value materials!

For this reason, the aluminium packaging sector argues that the only benefit of the PRN system is to “officially” count the volumes collected for recycling. But as reprocessors and exporters are not obligated to be part of the system, significant volumes of qualifying used Aluminium packaging are not part of the PRN system. This has led to an understated recycling rate and obliged producers possibly paying higher PRN prices, because the PRN market appears tighter than it should be.

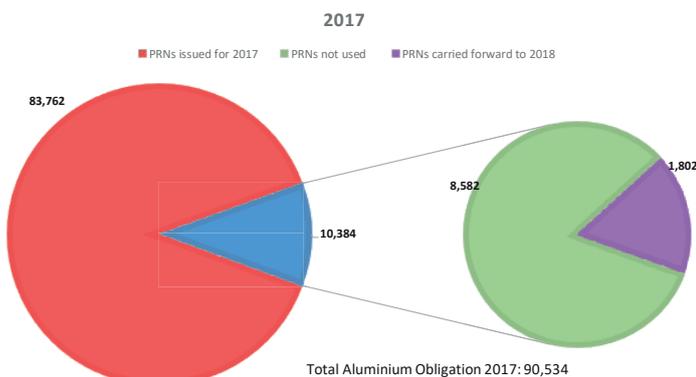
In 2018, the credibility of the PRN system for aluminium was bought into question with the market apparently held to ransom. It could have led to those using Aluminium packaging to reconsider using aluminium

in the future thereby causing collateral damage to the Aluminium packaging industry.

If a company can create an artificial price of which many other sellers happily took advantage, questions should be asked. Whilst not illegal, illogical price movement, forcing users of Aluminium packaging to pay PRN prices above what is required for a material with more than enough capacity already in the UK to meet the recycling targets, requires explanation. As aluminium does not need additional value created through the PRN system to increase recycling rates or to create markets, where is that money being used?

Accredited reprocessors are required to set out how they will use PRN revenue in a business plan, which should be audited by the regulator at the end of each year. Will increased collection levels be reported in 2019, as appropriate given the increased prices, or will it solely be that tonnage not reported to date is now recorded as more seek accreditation in response to the high PRN price?

This raises the question about whether the PRN has become a “financial incentive” to improve Aluminium recycling data or is it a tool for increasing recycling, which is its overall objective?



## 2019 – The Golden Opportunity:

Alupro’s members fully support the position taken by the Advisory Committee on Packaging (ACP) to review the PRN system and the call for greater transparency.

We are hugely excited by the unique opportunity all stakeholders in the packaging recycling sector now have to reshape our collection and recycling systems to drive a massive improvement in our nations recycling performance.

The recently published Consultations outline the Government’s bold ambitions which are supported by some pretty radical proposals – many of which we support.

On behalf of our members, we will be seeking to work with both national and devolved Governments and other key stakeholders, to ensure the resulting systems support our drive to make the UK the highest Aluminium packaging recycling rate in Europe – there is

absolutely no reason why we cannot aspire to achieve a recycling rate of close to 100% - something totally unachievable for most materials.

Our key asks:

- The intrinsic high value and infinite recyclability of Aluminium packaging is properly credited through properly modulated fees.
- 100% transparency of investment of producer fees.
- If Aluminium drinks cans are included in a deposit return system (DRS), the collection of Aluminium foil and aerosols at kerbside is continued and collection levels increased.
- All reprocessors and exporters are obliged to report the volume of qualifying Aluminium packaging they handle to ensure that accurate recycling levels are reported.
- Any new systems are UK/GB wide.