

The Marketplace for PRNs

Market Status Report By Tom Rickerby, Head of Trading



After a year of soaring PRN prices and increased debate and scrutiny of the PRN system, Q4 has brought some relief to the market. As compliance fears have eased, values have softened across all materials in the 2019 markets but buoyant opening prices in 2020 reflect an uncertain outlook in secondary commodity markets.

2019 was a record year on t2e with 1,759,185 tonnes (t) trading across all markets. Q4 was also strong with 501,155t traded in quarter, down 10% on Q3 but up 30% on the same period last year. 252,474t were traded in the 2019 Spot market and 74,324t in the 2020 Spot market, 52,657t in the 2019 Forward markets and 121,700t in the 2020 Forward markets.

Paper

Paper prices collapsed in the first half of the quarter as surplus PRNs were offloaded into an established buyer's market. Spot prices fell to a 36-month low of £0.50 in mid-December. Early fears of a significant contraction in PRN supply failed to materialise in 2019 with generation up 5% on the previous year. However, concerns over the long-term health of Recovered Paper markets persist and Q4 supply data hints at a potential slowdown - 2019 recorded the lowest Paper PRN generation in Q4 since 2014. 2020 markets found good support between £6.00 and £8.50 with prices firming toward the end of the quarter. The 2019 average Paper price is up 66% on the previous year and is at its highest level since 2005.

Plastic

The quarter on quarter average Plastic price fell nearly 24% as prices stabilised following a record Q3 supply and an equally strong Q4. Spot prices rose 13% to £355.00 per tonne in the first 2 weeks of trading, which proved to be the high point of the quarter and the year's final significant price spike. A retrace to £287.00 was followed by a prolonged period of relative market stability with prices fluctuating between £275.00 and £310.00 per tonne, underpinned by strong trading in the January Transitional Forward market at an average of £321.18. However, by January, improved supply and diminishing demand was beginning to weigh heavily on the price. Spot 2019 prices fell to a 25-week low of £220.00 and with 2019 compliance looking increasingly comfortable, 2020 prices followed.

Glass

Downward price pressure following record Q3 supply saw Glass prices bottomed out in the first week of January. Re-melt fell 34% on early trading to a year low of £9.50 but recovered strongly to close the year at £19.00 per tonne. Aggregate prices fell further, hitting £7.25 but also bounced to finish the year up 60% at £11.75. The late upswing in Glass prices can be attributed to a combined 14% drop in generation during the quarter as export markets slowed and lower PRNs values hit Aggregate production. The largely unexpected recovery in Glass prices may have contributed to the slow start in the 2020 markets where early indications of price were confined to trades of transitional PRNs in the 2020 Spot and January forward markets.

Aluminium

Q4 saw the highest volume of Aluminium traded on t2e, the highest price ever paid for a PRN on t2e and a record quarterly supply return. Spot prices continued to rise, increasing 13% to a record £520.00 per tonne by early December. This would prove to be the decisive price movement, triggering significant volume to be released into the market and allowing remaining buyers to close out their final positions for the year. The result was a market that saw buying support disappear almost overnight and with new selling still emerging and limited price support for transitional PRNs in the 2020 Spot market, a big correction looked inevitable. The year ended with Spot prices in free fall, closing down 78% at £110.00.

The 2019 price correction, initiated opportunities in the forward markets as motivated sellers rushed to lock in value for 2020 and buyers sought secure supply in a market that has suffered poor liquidity in recent years. However, the collapse in the 2019 market sent nervous reverberations through 2020 markets where prices dropped as low as £75.00 in the Spot and £100.00 per tonne across the Forward markets.

	High	Low	Traded this Quarter	Quarterly Average Price	YTD Average Price	Total Volume
Paper						
Spot 2019	£3.50	£0.50	117,585	£1.21	£11.41	468,785
Spot 2020	£8.00	£7.25	21,044	£7.65	£7.65	21,044
DEC Forward 2019	£2.00	£2.00	5,000	£2.00	£9.89	59,607
Transitional JAN Forward 2020	£8.00	£5.95	26,059	£6.22	£7.45	50,559
APR Forward 2020	£8.50	£6.00	72,800	£6.95	£8.27	99,800
JUL Forward 2020	£8.00	£7.50	11,000	£7.64	£10.77	31,000
Plastic						
Spot 2019	£355.00	£220.00	56,491	£301.20	£274.39	317,857
Spot 2020	£320.00	£224.50	23,898	£273.47	£273.47	23,898
DEC Forward 2019	£330.00	£305.00	800	£317.50	£346.50	6,397
Transitional JAN Forward 2020	£350.00	£295.00	5,435	£321.18	£324.47	6,135
APR Forward 2020	£350.00	£227.35	4,300	£270.29	£268.42	4,900
JUL Forward 2020	£320.00	£247.00	2,700	£257.59	£256.56	4,500
Glass Other						
Spot 2019	£11.75	£7.25	18,246	£9.37	£16.07	58,166
Spot 2020	£14.00	£14.00	1,876	£14.00	£14.00	1,876
Glass Remelt						
Spot 2019	£19.00	£9.50	23,423	£11.28	£18.46	69,698
Spot 2020	£16.50	£15.50	5,040	£16.49	£16.49	5,040
DEC Forward 2019	£9.60	£9.60	5,213	£9.60	£17.98	12,713
Transitional JAN Forward 2020	£14.00	£13.70	750	£13.90	£16.38	16,650
Steel						
Spot 2019	£20.00	£1.50	18,271	£14.36	£24.47	70,301
Spot 2020	£22.50	£18.50	16,655	£19.64	£19.64	16,655
DEC Forward 2019	£20.00	£14.00	2,500	£16.40	£27.46	6,682
Transitional JAN Forward 2020	£20.00	£18.65	3,250	£19.48	£19.48	3,250
Wood						
Spot 2019	£6.00	£0.95	13,861	£2.97	£18.41	67,288
Spot 2020	£8.50	£7.50	1,751	£8.24	£8.24	1,751
DEC Forward 2019	£4.00	£4.00	1,000	£4.00	£9.33	24,000
Transitional JAN Forward 2020	£9.50	£8.00	2,400	£9.00	£11.73	4,400
APR Forward 2020	£9.50	£9.00	7,500	£9.20	£9.20	7,500
JUL Forward 2020	£9.50	£9.00	8,500	£9.32	£9.32	8,500
OCT Forward 2020	£9.50	£9.00	8,500	£9.32	£9.32	8,500
DEC Forward 2020	£9.00	£9.00	1,500	£9.00	£9.00	1,500
Aluminium						
Spot 2019	£520.00	£110.00	3,446	£460.09	£318.88	12,551
Spot 2020	£250.00	£75.00	3,209	£170.14	£170.14	3,209
Transitional JAN Forward 2020	£248.00	£248.00	250	£248.00	£248.00	250
APR Forward 2020	£312.50	£100.00	2,000	£226.75	£266.46	3,250
JUL Forward 2020	£312.50	£100.00	1,200	£256.25	£297.12	2,600
OCT Forward 2020	£312.50	£100.00	1,450	£260.34	£270.51	1,950
DEC Forward 2020	£100.00	£100.00	250	£100.00	£100.00	250
Recovery						
Spot 2019	£0.65	£0.50	1,151	£0.58	£0.65	28,365
Spot 2020	£0.60	£0.60	851	£0.60	£0.60	851

Managing Director's Comments February 2020

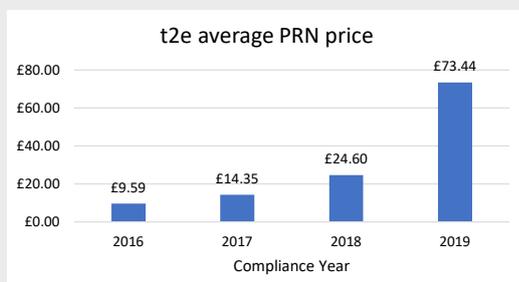


The last quarter has been one of landmarks. The UK has left the European Union, the Environment Bill has been passed in Parliament and compliance in 2019 has been achieved. Concurrently over half a million tonnes of PRNs have been traded through The Environment Exchange, one of the best quarters to date.

Producer Responsibility – Extended?

Producer Responsibility derives from a European Directive, as does the concept of Extended Producer Responsibility. The UK has committed to either matching or improving on current or future European legislation. Producer Responsibility as a concept is here to stay regardless of our departure from the EU. The current system is unique to the UK and not reliant on the EU for its implementation. Moreover, unlike other UK Producer responsibility regimes, it has successfully achieved all targets to date.

To date the PRN system has been effective at delivering low cost compliance because of its market based, disaggregated decision-making process reflecting the underlying market. Now that costs have risen the system is being challenged. Critics focus on three areas of concern. Firstly, the impact of the increase in PRN cost: on average some three times more than 2018, which in turn was almost twice as expensive as 2017. Secondly the perceived financial burden on local authorities and thirdly plastic in all its forms but particularly packaging has been identified as a major global pollutant.



Why is the current system successful?

The current system quantifies the problem by imposing an obligation on companies to keep a record of the packaging that they use. It places a cost on using that packaging, which is modulated according to how simply the material used can achieve its recycling target. If the packaging is reduced or reused, it reduces the cost. This system

directly funds the industry that is carrying out the recovery process. Producers play a key role in generating demand for secondary raw materials: the more recycled content they request, the greater the reward for those that recycle and the lower the cost of compliance. The system is simple and self-balancing; it rewards those that do what is needed and penalises those that do not – a win-win situation!

Why has it become more costly and what are the impacts?

Simply put, it has become more difficult to reach the targets. The increased costs have increased the packaging recycled and delivered compliance, proof that the system is working. Producers are now revisiting their packaging strategies, deciding whether they wish to continue paying higher costs and, if not, what options are available.

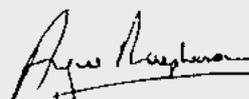
Solutions to in-year price volatility and short-termism created by the end of the compliance year could be carry-back or compliance dates spread throughout the year. The number of variables impacting on the system (e.g. raw material prices, oil, shipping, exchange rates, to name a few) means that volatility will never be eliminated. Forward Contracts offer a solution to those wishing price certainty.

Improvements

Like everything there is room for improvement. Communication with the general public remains poor. Confusion remains on what is recyclable and what is not. Producers continue to use packaging that is effectively unrecyclable. A year of increased cost has bought with it renewed demands for greater transparency on PRN revenue. This would offer clarity to producers and local authorities on where funds are being spent.

There is nothing to suggest Producer Responsibility cannot deliver both future targets and the wider aims of Governments, environmentalists and producers. The system need not lose the merits of simplicity and, in the longer run, lower cost. Rather the following is required: a clear message, regularly reinforced, targets for polymer types and composites, greater financial transparency by those accredited, a realisation of what can be achieved locally and nationally and effective regulation.

Thank you to Phil for his reflections and to all for their support during this challenging year. We look forward to continuing to be of service to you throughout what looks as though will be a testing 2020.



Angus Macpherson
Managing Director

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Steel

2019 saw the highest average Steel PRN price in a decade. Values were bolstered by a strong General/Paper price in first half of the year and latterly, concerns of poor performance in UK and international scrap markets. Q4 saw a recovery in supply, helping meet 2019 compliance relatively easily and leading to a general softening of the PRN price during the period. Despite the oversupply, sellers showed a reluctance to drop prices in-line with Paper and Wood, maintaining double figures until the final weeks of the compliance year and helping to maintain strong opening 2020 prices.

Wood

Wood prices fell for the 4th consecutive quarter, hitting a 35-month low of £0.95 per tonne in December. However, the depreciation of the Wood

PRN price continues to have little effect on the supply. The 5% downturn in PRN generation in Q4 against the year to date average could be attributed to seasonal factors as much as the collapse in the PRN value and it will do little to detract from the fact Wood has been one of 2019's most consistent overachievers. With over 150,000t of surplus Wood PRNs generated this year, Wood looks likely to be pegged to the General Recycling price for now.

Recovery

Despite continuing to trade below a pound, the latest data suggests Recovery has missed its compliance target for the 3rd quarter in a row and will finish the year missing its in-year target by nearly 2%. Whilst Recovery can rely on surplus from any material to offset any shortfall, thereby restricting its potential value, it seems paradoxical that after a year of such unprecedented volatility and high prices, the worst performing PRN material in 2019 is also its cheapest and most stable.

The Marketplace for PRNs

Q4 Supply Analysis By Andrew Letham, Operations Manager



Following Q3's much improved recycling performance, Q4 was again strong and in some materials exceptional. Although not yet verified, total 2019 material specific recycling looks to be up 476,997 tonnes (t) from 2018 whilst the material specific obligation has also increased by 224,623t. However, the growth in obligation has not been proportionate to the annual target increases as all materials except for Glass and Aluminium saw packaging handled decrease year on year (YOY) with Overall Packaging handled growing by a mere 2,166t. Final Producer numbers have also fallen YOY with 63 less producers registered (7,378) than at close of play 2018 (7,441). 60 of these drop offs fall into the allocation category suggesting they may have fallen below the minimum obligation criteria.

Plastic's recovery was confirmed in Q4 as prices remained high (average Spot £301.20) and another record quarter was posted. 307,868t were recycled, an increase of 4,563t from Q3 (the previous record) confirming compliance for 2019 with a carry-out of 51,959t into 2020. The Plastic obligation grew to 1,106,071t with an increase of 23,884t on 2018 however this was less than expected as total Plastic packaging placed on the market fell by 25,416t to 2,005,998t. If this trend continues, we could see less than the anticipated growth in obligation (40,000t) for 2020 which alongside a very healthy carry-in means we start the year in a better position than 2018. However, the downturn in obligation will be relatively muted in the short term with more stringent polymer type reporting, a container shortage and the threat to global trade from coronavirus likely to impact the market more significantly in the immediate future.

After a strong first three quarters of the year Glass recycling fell significantly in Q4, down 65,970t (14%) On Q3 and 41,239t (9%) on the yearly average. The total Glass obligation (1,743,040t) was met by a mere 9,000t in year as it grew by almost 70,000t from 2018 off the back of a 1% target increase and a 60,000t YOY increase in packaging placed on the market. A further 1% target increase will be added in 2020 which may be tempered by a downturn in packaging handled if we see the impact of a milder summer without a world cup and a slightly improved carry out will also be available for 2020 at 70,895t.

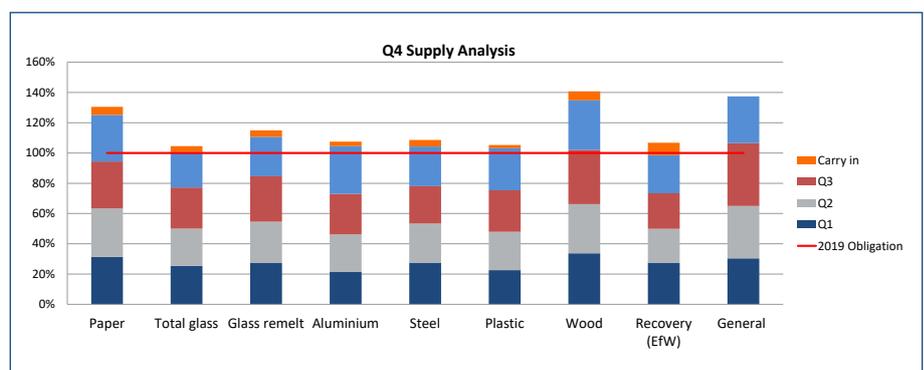
Wood supply, having already met target at the end of Q3 was expected to dramatically soften with the PRN subsidy back to its lowest level since 2017. What transpired was a mere 3% decrease on the year to date average, contributing 148,362t to the 184,718t total oversupply. Looking ahead we will see a further 5% target increase in 2020 meaning the obligation will grow close to 500,000t with the 125,000t needed each quarter to meet target looking very achievable. Carry-out (33,330t) is however less than anticipated with 128,065t held against General recycling and 23,323t were written off in 2019. The substantially reduced PRN subsidy may see greater competition for the material by way of biomass but the level of PRN support needed to mitigate this remains unclear as supply held firm at the back end of 2019 despite tumbling prices.

Q4 was again healthy for Paper as 938,361t were reported as recycled

Material	Carry In	Q1	Q2	Q3	Q4	2019 Obligation	YTD Supply + Carry In	Balance	Carry-Out
Paper	163,912	957,404	981,757	950,082	939,786	3,059,106	3,992,941	933,835	284,433
Total Glass*	69,383	444,221	427,732	473,073	407,103	1,743,040	1,821,512	78,472	5,360
Glass remelt	48,993	320,829	316,732	350,946	304,414	1,167,837	1,341,914	174,077	65,535
Aluminium	3,280	24,124	27,389	29,884	35,272	111,542	119,949	8,407	7,746
Steel	16,561	105,077	98,436	94,471	100,668	381,447	415,213	33,766	26,991
Plastic	23,009	249,415	281,060	303,305	307,868	1,106,071	1,164,657	58,586	51,959
Wood	27,025	152,985	147,695	162,509	145,270	453,649	635,484	181,835	33,330
EFW	50,919	171,123	139,663	145,877	154,010	622,378	661,592	39,214	23,730
General *	0	219,512	250,355	299,610	222,253	722,706			
Total	354,089	2,104,349	2,103,732	2,159,201		8,199,939	8,811,348	1,508,192	499,084

*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.



and although 2.5% (24,720t) short of the yearly average of 963,081t still contributed to a record year for Paper recycling. In total 3,827,604t were recycled in 2019 as we closed out the year 171,754t (4.6%) ahead of 2018 (3,655,850t) and produced an oversupply of 768,498t before carry-in. This means that both the entire Paper specific and General Recycling obligation were covered with in-year supply. A 2% target increase will add approximately 80,000t of obligation for 2020 which should be entirely offset by a substantial up lift in carry-out as low end of year prices encouraged larger buyers to swap out transitional tonnes into 2020. Despite this positive news uncertainty surrounds the market as a downturn in Chinese activity due to coronavirus has made containers increasingly difficult to secure but after the dramatic price drops in 2019 buyers will want any price hikes firmly supported by data.

Steel recorded the second highest return of 2019 in Q4 (99,980t) which although in line with recycling rates for 2019 (avg. 99,683t) is 2.7% behind 2018's quarterly average of 102,767t and closes the year out 3% (13,103t) down YOY. Obligation grew 1.56% (5,844) off the back of a 3% target increase as Packaging handled fell 2%, down 9,480t. Looking ahead we will take an improved carry-out (26,991t) into 2020 which is less than the 33,000t over supply as demand slumped at the back end of Q4 and 5,589t were written off.

A dramatically increased obligation (up 14% from 2018) and Poor quarterly recycling returns for the 1st three quarters of 2019 triggered wild price increases in Aluminium. Only those holding the tonnage would have predicted the turnaround in Q4 as a record 35,273t were reported as recycled, up 30% (8,140t) on the year to date average. A further 3% target increase this year will likely be offset by carry-over but perhaps more significant is the 40% increase in Aluminium accreditations for 2020 which certainly augurs well for an increase in reported recycling.

The Marketplace for PRNs

Q and A with Phil Conran Director at 360 Environmental



Phil Conran has been involved with the packaging waste regulations since their development in the mid-90s. He set up the Biffpack compliance scheme and served on the Advisory Committee on Packaging (ACP) between 2001 and 2008 whilst at Biffa. Since 2009, he has been at 360 Environmental which provides legislative support to businesses across many areas including packaging and at the end of 2014, he was appointed Chairman of the ACP.

Q: During your time as Chair of the ACP, what changes and improvements have you seen made by the packaging industry and to the Producer Responsibility system?

The ACP has developed a stronger working relationship with the EA. This has seen improvements in streamlining the accreditation process, substantially increasing the Mixed Paper protocol and agreement on protocols for Paper, Aluminium and Steel. We have also encouraged the EA to restructure and instigate more centrally controlled area officers to ensure that their monitoring activities are more consistent and effective.

The ACP put forward several short-term regulatory changes needed to maintain the current system and we have been lobbying for measures to reduce the risk of PRN prices over-inflating including requests for the Competition and Markets Authority to investigate the PRN system for anti-competitive behaviour. We have worked in collaboration with DEFRA and the Agencies on tighter export controls and in the UK's involvement in the Basel Convention changes.

Q: What are your reflections on the 2019 compliance year and your expectations for 2020?

In 2019 an over-riding issue was the high cost of PRNs and the impact of this increased cost. For some obligated producers, the increase in costs has had a huge impact on profits and investment as well as contributing to overall uncertainty. Increased PRN value has also led to concerns regarding market manipulation and the regulation of rapidly changing export markets.

Looking forward to 2020, I expect another challenging year. This year has already started at significantly higher price levels for Aluminium and Plastic. The Coronavirus is already having an impact on the Chinese demand for plastic pellets and going forward, this could contribute to end market difficulties for recycled products. The EA has tightened up on regulations, with more port inspections and increased quality control, which could also impact on exports which we still depend on for 60% of our Plastic packaging recycling.

Q: How well do you think the Packaging Regulations are meeting Extended Producer Responsibility goals:

a) Currently?

I do not believe that the current regulations have contributed significantly to the UK's recycling performance or to packaging minimisation. A key complaint in 2019 was the lack of transparency on how the PRN revenue was being used. To me, the major weaknesses of the PRN system are its very short-term nature and PRN price volatility which give little incentive to invest in UK recycling capacity and actively encourages exports. High PRN prices tend to encourage creative thinking and I feel we are heading for a difficult future if places like Turkey suddenly decide we have been dumping poor quality material on them. Having said all that, the current system is relatively simple and over the last 20 years, has given producers much lower cost compliance than in other EU countries.

b) In terms of the future?

I hope that the future system will create a level playing field by giving people a better ability to budget, greater transparency on where producer fees go and lead to more market certainty and UK capacity investment. With the move from a marginal cost to a full net cost recovery system, producers are in for a big leap in their compliance costs under the new regulations. Data collection will be more complex given the need for granular material reporting as well as the need to identify what packaging is going to which parts of the UK. Producers already struggle with the current system so anything more complex is going to need plenty of lead in time, good communication and effective enforcement to deliver a successful transition.

Q: DEFRA plans to consult on the packaging producer responsibility system during 2020 what would you like to see in that consultation?

I would like to see more centralised and strategic control over the way that payments are made and distributed into the system, which would allow planning for the years ahead rather than simply the year we are in. I would also like to see household-like commercial waste excluded from the requirement for producers to pay the full net cost recovery. Ideally the future system should be as simple as possible whilst still recognizing the need to satisfy the EU requirements for full net cost recovery for packaging and for meeting future targets which Ministers are said to be keen to be more ambitious than those set by the EU.

Q: Finally, looking forward, what do you think are the biggest challenges facing the packaging compliance industry?

The biggest challenge facing the current system is meeting current and future recycling targets in the face of current market problems and our continued dependence on exports. Enforcement has always – and will continue – to be a problem with inconsistency between different Agencies and within the EA in particular, given the scale of their coverage. Beyond that, implementing the new system in a cohesive fashion alongside DRS and the recycled content tax with the greater complexity of data gathering and higher targets is something that I shall watch with great interest.