

The Marketplace for PRNs Q1 2024

Market Status Report By Tom Rickerby, Head of Trading



As the final quarter of the 2023 PRN compliance year closes, the unprecedented, undersupplied bull market of 2022 seems like a distant memory. 2023 markets opened on the highest risk footing with PRNs trading at record levels but closed with a soft landing after recycling markets navigated turbulent trading conditions to deliver record in-year PRN generation with recycling targets hit comfortably across all materials.

A total of 492,534 tonnes traded on t2e during Q4, up 34% on the previous quarter and 6% on the same period last year. 292,276 tonnes were traded in the 2023 Spot Market, 63,001 tonnes in the 2024 Spot Market. 5,100 tonnes were traded in the 28 Day Rolling Market. 60,100 tonnes were traded in the 2023 Forward markets and 72,057 tonnes in the 2024 Forward markets.

A total of 1,633,566 tonnes traded on t2e in 2023.

Paper

Paper cemented its record PRN supply year with another strong quarter, topping a million tonnes for only the 5th time in its history. PRN prices closed the previous quarter on a downward trajectory and looked to be heading for the traditional Q4 price capitulation. However, in a show of collective resilience, Paper sellers defied strong supply signals and downward price pressure to reverse the trend and restore some value and stability to market for the final 3 months. Prices more than doubled in November, finding stable support above £5.00 per tonne in early December, where they remained for much of the final trading period of the year. Strong Trading in the January Transitional Forward market (up 48% on the last the year) set the tone for 2024 prices with values opening at £4.95 and rising 41% to close at £7.00. Whilst the Spot and April Forward saw the highest price of the year so far, closing the period at £7.50.

Plastic

Plastic was another material to hit record PRN generation in 2023. Despite comfortably hitting target for the first time in 3 years, plastic PRN prices remain volatile and unpredictable. Q4 saw more choppy price action. It opened with a continuation of the price rally established in late Q3. Prices climbed to £180.00 but had retraced to a year low price of £115.00 per tonne by early December on weakening buying support. Trading in the run up to Christmas saw prices recover again as late 2023 buying was forced to compete with strong demand for transitional tonnes in the 2024 Spot and January forward market between £150.00 and £165.00. 2023 prices surged again in late January, hitting £200.00 per tonne as the remaining few opportunistic sellers profited from distressed, last-minute buying. 2024 prices also destabilised as a result, hitting £190.00. Zoom out and the picture is improving for buyers, Plastic's quarterly average price has now fallen for 4 consecutive quarters and is at its lowest level since Q1 2022. Whilst 2024 Spot pricing is already 36% below the 2023 average creating strong early demand.

Wood

Wood markets benefited from Paper sellers' resilience to downward price pressure in the final quarter. Despite a record supply year and an 84% oversupply, Wood prices had tracked Paper's recovery north of £5.00 per tonne by early December, pushing on to quarter highs of £7.50 by the middle of the quarter. Trading performance in Q4 was also the best of the year, up 87% on the previous quarter and 83% on the same period last year. A significant increase in the wood target for 2024 saw price rebound to £10.00 across the 2024 forward markets. **[Continued on page 4]**

Q4 Nov 23 - Jan 24	High	Low	Traded this quarter	Quarterly Average Price	YTD Average Price	Total Volume
Paper						
Spot 2023	£8.50	£2.50	152,801	£4.41	£9.31	365,668
Spot 2024	£7.50	£7.00	22,359	£7.24	£7.24	22,359
DEC Forward 2023	£4.00	£2.65	10,000	£3.10	£7.72	17,500
Transitional JAN Forward 2024	£7.00	£4.95	30,407	£5.91	£5.91	30,407
APR Forward 2024	£7.50	£7.00	6,500	£7.23	£7.14	10,500
JUL Forward 2024	£7.00	£7.00	100	£7.00	£7.00	2,100
Plastic						
Spot 2023	£200.00	£115.00	32,899	£157.99	£270.39	235,074
Spot 2024	£190.00	£147.00	18,693	£172.13	£172.13	18,693
28 Day Rolling 2024	£190.00	£165.00	4,600	£182.02	£182.02	4,600
DEC Forward 2023	£180.00	£130.00	7,635	£163.09	£239.13	14,025
Transitional JAN Forward 2024	£160.00	£150.00	3,287	£153.33	£213.04	7,887
APR Forward 2024	£185.00	£150.00	6,360	£171.60	£171.60	6,360
JUL Forward 2024	£185.00	£165.00	4,350	£181.26	£181.26	4,350
OCT Forward 2024	£185.00	£165.00	3,750	£180.67	£180.67	3,750
DEC Forward 2024	£185.00	£165.00	3,850	£180.78	£180.78	3,850
Glass Other						
Spot 2023	£120.00	£105.00	16,804	£110.91	£108.29	88,427
Spot 2024	£103.00	£103.00	1,500	£103.00	£103.00	1,500
28 Day Rolling 2024	£103.00	£103.00	500	£103.00	£103.00	500
APR Forward 2024	£100.00	£100.00	1,500	£100.00	£100.00	1,500
JUL Forward 2024	£100.00	£100.00	1,000	£100.00	£100.00	1,000
OCT Forward 2024	£100.00	£100.00	1,500	£100.00	£100.00	1,500
DEC Forward 2024	£100.00	£100.00	1,547	£100.00	£100.00	1,547
Glass Remelt						
Spot 2023	£125.00	£105.00	27,833	£113.91	£122.36	129,327
Transitional JAN Forward 2024	£112.50	£112.50	1,000	£112.50	£118.57	7,000
APR Forward 2024	£105.00	£105.00	6,000	£105.00	£105.00	6,000
JUL Forward 2024	£105.00	£105.00	6,000	£105.00	£105.00	6,000
OCT Forward 2024	£105.00	£105.00	6,000	£105.00	£105.00	6,000
DEC Forward 2024	£105.00	£105.00	5,000	£105.00	£105.00	5,000
Steel						
Spot 2023	£19.00	£4.95	22,671	£7.32	£19.16	52,188
Spot 2024	£25.00	£15.00	4,993	£22.72	£22.72	4,993
Transitional JAN Forward 2024	£17.50	£15.00	5,100	£15.54	£15.54	5,100
APR Forward 2024	£19.70	£19.70	5,000	£19.70	£19.70	5,000
JUL Forward 2024	£20.00	£20.00	2,000	£20.00	£20.00	2,000
DEC Forward 2024	£25.00	£25.00	1,000	£25.00	£25.00	1,000
Wood						
Spot 2023	£10.00	£2.00	35,310	£4.03	£11.49	133,935
Spot 2024	£10.00	£7.00	14,151	£7.65	£7.65	14,151
Transitional JAN Forward 2024	£8.00	£8.00	1,371	£8.00	£8.00	1,371
APR Forward 2024	£10.00	£10.00	2,500	£10.00	£10.00	2,500
JUL Forward 2024	£10.00	£10.00	2,500	£10.00	£10.00	2,500
OCT Forward 2024	£10.00	£10.00	2,500	£10.00	£10.00	2,500
DEC Forward 2024	£10.00	£10.00	2,500	£10.00	£10.00	2,500
Aluminium						
Spot 2023	£45.00	£4.45	3,958	£14.11	£127.35	15,484
Spot 2024	£40.00	£31.50	1,305	£34.30	£34.30	1,305
DEC Forward 2023	£35.00	£30.00	275	£33.18	£170.41	2,125
Transitional JAN Forward 2024	£75.00	£35.00	1,025	£55.73	£68.64	1,925
APR Forward 2024	£35.00	£31.00	600	£33.00	£33.00	600

The Marketplace for PRNs

Managing Director's Comments May 2024



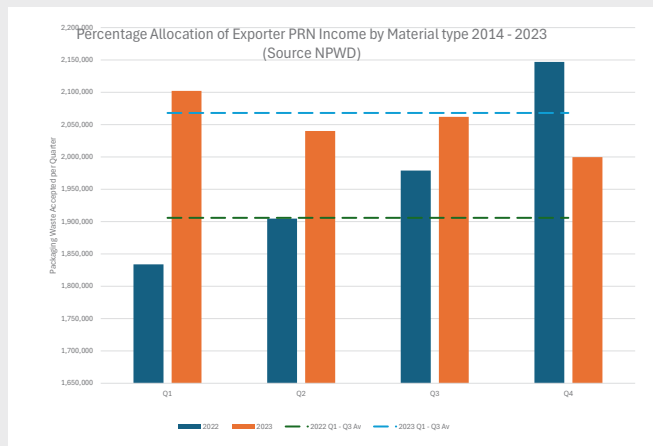
A busy finish to an unusual year. Data shows just how unusual it has been. Progress has also been made towards the next stage of Packaging Regulations both within the UK and Europe. There are still many unknowns but some light is arriving at the end of the tunnel. Meanwhile trading has continued to be busy.

Data

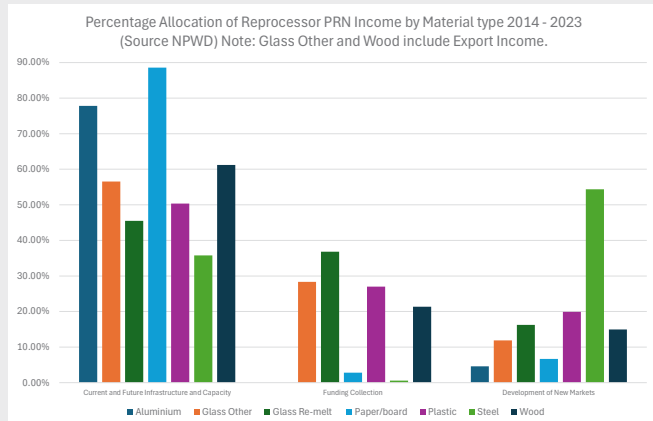
Against a background of PRN demand over 314,000 tonnes(t) lower than anticipated and supply reaching record in-year levels, some were surprised that prices in the General Recycling materials held up as well as they did. A combination of:

- concerns about recycling performance in the final quarter, some 3.3% below the average of the previous three quarters reducing the availability of carry forward. A greater drop than ever seen before, possibly reflecting the lack of Christmas spending identified by retailers.
- the increase in the General Recycling target with a potential additional 300,000t in the obligation.

caused prices to stay high.



Despite Revenue for recycling PRNs at almost £600 million reaching record levels, accredited reprocessors and exporters continue to report how challenging it is to find material even though secondary raw material prices remain high and recycling levels rise. Different materials have responded in different ways to meet these challenges over the last decade with Aluminium and Paper Reprocessors focusing on building new infrastructure while Glass and Plastic ones have funded collection and Steel developed new markets. Once again it shows how flexible the PRN is in providing solutions in a fast changing world. It has delivered on targets with funds trickling down through higher prices for secondary raw materials to the right level to support



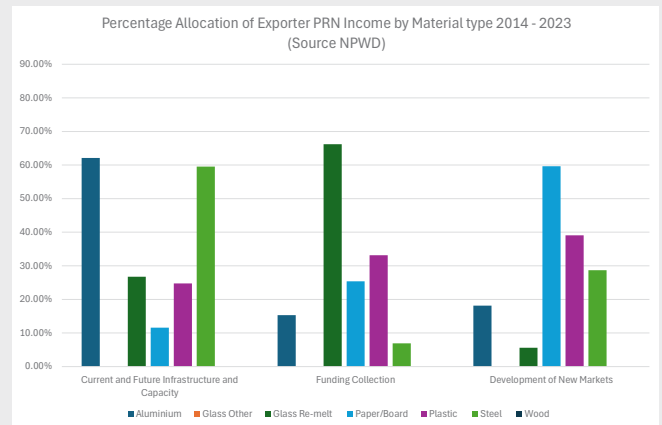
collectors. Nevertheless more funds are wished by local authorities to drive up their recycling rates and funds collected under Extended Producer Responsibility (EPR) are anticipated to deliver precisely that.

Scheme Administrator

The Extended Producer Responsibility (EPR) Scheme Administrator is beginning to come into action, a process that will increase in momentum over 2024. EPR introduces a greater focus on the recyclability of specific packaging types. The Food and Drink Federation wish to take an expanded role within its operation. They have an ambition to set up a duplicate packaging waste collection system, effectively a wider deposit scheme. It is extraordinary how the wheel turns around, 30 years ago when Producer Responsibility was first introduced for packaging, a great deal of thought was put into creating a system that did not follow the expensive route of the Dual System in Germany. Subsequently great pride has been taken in how effectively growth in the recycling industry has been stimulated at a relatively low cost to industry by the PRN. Caution must be exercised not to destroy what has been created and achieved over the last 25 years.

Europe

Looking to Europe, the European Parliament and Council reached a provisional agreement on the proposed Packaging and Packaging Waste Regulation (PPWR) which will impact on all packaging placed on the European market. One of its purposes is to see a more consistent application of the Regulations throughout Europe. There is a greater and greater emphasis put on reducing and reusing packaging with the setting of a maximum empty space ratio of 50% in grouped, transport and e-commerce packaging and the introduction of binding Reuse targets for all materials, with the notable exclusion of cardboard, as well as increased recycling targets. It is anticipated to be operational by mid-2026.



The EU's revision of the transfrontier shipment of waste regulations is expected to come into force in May. It puts a ban on exports of all plastic waste to non-OECD countries by 2027. Although exports of plastic into the EU will continue as previously, plastics that currently transit the EU in either a vehicle or ship passing through an EU port will be impacted.

It has been a busy quarter and there is plenty more to come as more information flows from DEFRA. Not least the initial obligation data. Thank you for your support. We look forward to continuing to be of service to you as the year unfolds.

Angus Macpherson
Managing Director

The Marketplace for PRNs

Q4, 2023 Supply Analysis By Andrew Letham, Operations Manager



Q4 saw the lowest quarterly recycling return of the year, falling below 2 million tonnes (t) for the first time in 2023, reaching 1,999,697t. All materials, with the exception of Paper and Plastic, also

individually posted the lowest recycling returns of the year in Q4. Despite this, the overall performance for the year remained robust, with all markets closing out the year in surplus and no materials reliant on Carry-in from 2022 to meet compliance.

A total of 8,203,853t were recycled in 2023, augmented by a carry-in from 2022 of 141,012t, resulting in 8,344,865t of PRNs available against an obligation of 7,939,063t, creating an oversupply of 405,802t. 376,850t of this oversupply will be carried into the 2024 Compliance Year, marking a significant increase of 167% from 2023.

The number of registered producers increased to 6,968 by the end of the compliance year, indicating a rise of 51 from 2022. Despite this increase, obligations experienced a substantial decline, decreasing by 314,162t Year on Year (YoY), attributed to static targets for 2023 and economic downturn in 2022 leading to a decrease in packaging handled.

Non-compliance was evident in both Glass (3,341t) and Plastic (158t), with a total shortfall of 6,935t at the end of the year.

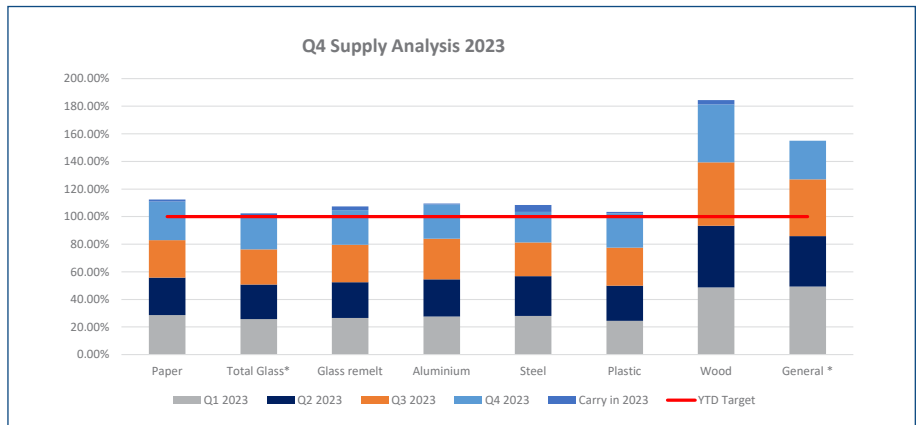
Plastic recycling experienced a slowdown in Q4, declining 9.5% (30,309t) Quarter on Quarter (QoQ) and 2.8% on the yearly average (296,613t). Exports dropped 11.6% from the bumper Q3 return as PRN prices began to reflect the solid supply position. Reprocessing was also down 6.9% QoQ; however, the combined 288,189t reported as recycled in Q4 was enough for Plastic to easily meet the target for the year. A total of 1,186,454t were recycled in the year against an obligation of 1,158,859t, and when including carry-in of 12,198t, 33,940t will be carried into 2024, with a surprising 6,000t either written off or not accepted.

Strong **Paper** recycling continued in Q4 with 1,003,664t recycled, slightly surpassing the yearly average of 995,053t, which was also marginally up YoY. As supply remained stable in 2023, the obligation reduced by 116,632t (3%) from 2022, with General Recycling also down 17,483t (3.5%). Total recycling in the year came in at 3,980,215t before a carry-in of 56,652t is considered, representing an oversupply of 446,603t, with 194,654t held against General Recycling and 244,510t committed to 2024.

Glass experienced its worst quarter of 2023, with a combined total of 433,516t, down 21,010t (4.6%) on the yearly average. A total of 1,818,103t were reported as recycled in the year, down 53,580t YoY; however, a drop of 106,295t in obligation means compliance was narrowly met, and a slightly reduced 45,163t will be carried into next year. A shortfall in Aggregate meant that 58,938t of Remelt

Material	Carry In	Q1	Q2	Q3	Q4	2023 Obligation	YTD Supply + Carry In	Balance
Paper	56,652	1,028,028	973,889	974,634	1,003,663	3,590,070	4,036,866	446,796
Total Glass*	41,219	465,173	456,322	463,092	433,516	1,815,080	1,859,322	44,242
Glass remelt	34,605	346,266	337,313	354,555	328,997	1,305,170	1,401,736	96,566
Aluminium	914	41,110	40,053	44,038	37,156	149,057	163,271	14,214
Steel	18,587	105,233	108,670	92,152	83,045	376,350	407,687	31,337
Plastic	12,198	283,151	296,616	318,498	288,189	1,158,859	1,198,652	39,793
Wood	11,442	179,368	164,596	169,535	154,128	368,345	679,069	310,724
General *	0	237,623	175,706	197,509	135,257	481,302		
Total	141,012	2,102,063	2,040,146	2,061,949	1,999,697	7,939,063	8,344,867	887,106

**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.*



were acquired to meet Aggregate obligations, with an average price difference of £15.85 (7.7%) between the two grades. This may become more prominent in 2024 with a 3% increase in the portion of Glass covered by Remelt.

With compliance all but confirmed in Q3, **Steel** recycling dropped 14.6% from the yearly average of 97,275 to 83,045t in Q4, the worst return of the year. A total of 389,100t were recycled in the year, up 23,490t YoY (15.5%), against an obligation which fell 4.2% to 368,345t, meaning that despite the supply contraction in the second half of the year, a very healthy carryout of 33,940t will be taken into 2024, up 80% from last year.

Aluminium recycling saw a notable increase YoY, up 13% (18,541t) to 162,357t, as accreditations jumped up 15% to 67 in 2023. With obligations remaining largely unchanged YoY at 149,057t, the Q4 return of 37,156t, which fell 8% below the yearly average (40,589t), was enough to comfortably meet compliance, with 6,733t traded into 2024.

Wood, having met its material-specific obligation by the midway part of the year, saw a slight decline in recycling, with 154,128t reported as recycled in Q4, down 12,779t (7.6%) on the quarterly average (166,906t). 284,475t were contributed towards General Recycling, making Wood the largest contributing material despite the average yearly price being slightly higher than Paper. 27,647t have been carried into the 2024 compliance year, where a 7% rise in Wood target and a 3% General recycling increase will contribute approximately 300,000t of additional obligation if packaging handled were to remain the same as 2023.

What next? – A legislative update from the DEFRA website

What data should be submitted, when?

1 April 2024	Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024 (New/Extended Producer Responsibility (EPR) Regulations) come into force in England, Scotland and Wales.
1 April 2024	Packaging <i>supplied</i> under the Packaging Waste (Data Reporting) Regulations 2023 onto the Report Packaging Data (RPD) for H2 2023 (July to December) for Large Producers. <i>(This deadline is no longer relevant – see below)</i>
7 April 2024	Packaging <i>handled</i> data as required under the Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2007 (Old Regulations) onto the National Packaging Waste Database (NPWD) for individually registered companies.
15 April 2024	Packaging <i>handled</i> data as required under the Old Regulations onto the NPWD for those companies that are registered through a compliance scheme.
1 May 2024	New Regulations due to come into force in Northern Ireland.
15 May 2024	NPWD publishes aggregated Packaging <i>handled</i> under the Old Regulations.
31 May 2024	Large Producers must submit all of 2023 Packaging <i>supplied</i> to RPD under the New Regulations.
1 October 2024	Large Producers must submit to RPD Packaging <i>supplied</i> in H1 of 2024 (January to June) under the New Regulations
1 December 2024	Large Producers report Nation data for 2023 to the RPD under the New Regulations
1 January 2025	Scheme Administrator starts to operate.

What is the Scheme Administrator?

The Scheme Administrator is the organisation within DEFRA that has been delegated to operate the New Regulations. Margaret Bates has been appointed to run it. Margaret is a distinguished academic, former President of CIWM, who has been closely involved with packaging, including over the last 4 years Managing Director of OPRL, the on-packaging label organisation, which assesses the recyclability of packaging.

The Scheme Administrator's tasks include advising Government on policy, implementing DEFRA's Packaging Policy and coordinates operations, communications and receiving value chain guidance. Within DEFRA there is a Scheme Administrator Establishment Team headed by Harshal Gore. There is also a Scheme Administrator Interim Steering Group made up by: Government officials from the four nations; Local Authority representation from the four nations; four trade associations; 6(very) large producers; 1 compliance scheme; 1 waste management company; 2 NGOs and a Chairman, Sebastien Munden, who is Chairman of WRAP

and describes the role of the Steering Group as "We are here to create bits of design which we then check against all the various stakeholders".

The Steering Group has a different remit to the ACP, although some of their members overlap, who will remain focused on the 'PRN system'. They will work in parallel until the end of 2024.

The Food and Drink Federation would like to establish a not for profit Producer Responsibility Organisation (PRO), currently an advisory organisation but which aspires to deliver functions on behalf of the Scheme Administrator. They view that the PRO could play a key role in efficiency and effectiveness of the EPR Scheme; the Recycling Assessment Methodology (RAM); monitoring of scheme performance; communications campaigns, advice and guidance for producers; and advice for fees and payment calculators.

[Continued from page 1]

Steel

Steel saw a rebound in Q4 following its collapse to General recycling levels in Q3. Initially tracking improvements in the Paper and Wood price, Steel continued to rally toward to end of the compliance year as late buying met diminished supply and strong demand for transitional PRNs in the 2024 market. 2023 prices hit a 21 week high price of £19.00 in late January. Tata Steel's announcement that it would begin its transition to electric arc furnaces in 2024 is likely to bring some disruption to markets. This news, in conjunction with a significant downturn in PRN generation in the 2nd half of 2023 and fragile global economic conditions has considerably raised the risk outlook for 2024. Early 2024 PRN prices are already on the rise, closing the period at £25.00 in Spot and December Forward, 30% above the 2023 average.

Glass

There was little to split the 2 glass markets in the final quarter with

the Remelt average spot price commanding a £3.00 premium over the Aggregate average. Both materials suffered their weakest supply performance of the compliance year in Q4 creating a tighter closing market than anticipated. Remelt prices recovered all the losses from Q3, rising 14% to £125.00. Whilst Aggregate tracked the move to a quarter high of £120.00. Opening prices in the 2024 Forward Markets fell below the 2023 average for both Remelt (£105.00) and Aggregate (£100.00), reflecting a lack of competitive buying interest.

Aluminium

The Aluminium market entered the final quarter carrying a 13% (~14,000 tonne) oversupply following record Q3 data. 4th Quarter compliance conditions don't get much more comfortable for buyers and Spot prices duly capitulated. Prices fell 89% from £40.00 to a 2 year low price of £4.45 but rebounded to £10.00 by the year close, albeit in light volume. Lower closing values saw little early engagement in the 2024 forward markets. However, light trading in the April Forward market saw prices open at an average of £33.00 per tonne, 75% below the same period last year.