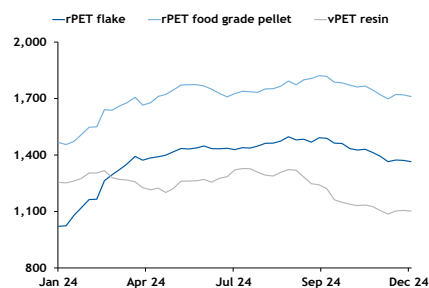


EDITORIAL: A combination of headwinds and regional factors have weighed on recyclers' operations this year

Argus Recycled Polymers 2024 round-up

Some bright spots excluded, 2024 was a challenging year for many recyclers. Depending upon their location and material, recyclers have felt pressure from subdued downstream demand, high feedstock costs, low virgin polymer prices, high freight rates and delays to legislation. Below is our round-up of the year just gone compiled by our global reporting team.

rPET, vPET spot del NWE



rPET

Europe

Prices across the European PET value chain peaked at the beginning of the year, supported by higher-than-usual Asia-Europe freight rates in anticipation that end-user consumption would increase in the second half of the year, supported by major sporting events in the summer and a run-up to 2025's recycled content mandates in the autumn. But, in the end, flake and food-grade prices slumped after the summer, under pressure from lower-cost virgin PET (vPET) resin prices and competitive import offers, which squeezed margins in combination with stable bale prices.

The impending 25pc recycled content requirement for PET bottles – outlined in the EU Single Use Plastic Directive – did not support demand as anticipated. The average recycled content percentage across the region is already estimated to be around 23pc, and uncertainties around how targets and penalties will be implemented in different countries have weakened some market participants' confidence in how immediately the regulation will have an effect.

Outside of bottle/packaging applications, some buyers have switched to virgin PET rather than rPET for cost reasons in the second half of the year. vPET was €285/t (\$295/t) cheaper than rPET flake at the delta's widest point in September. And rPET pellet remains nearly €600/t more expensive than vPET at the time of writing, which will discourage brands from starting new projects including recycled content if they also have an eye on cost. Imports have also continued to trouble European recyclers this year, with offers from overseas consistently heard €100-200/t below the European domestic ranges for flake and food-grade material.

By Chloe Kinner

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US

For US PET recyclers, 2024 was characterised by high feedstock costs and fierce competition from overseas suppliers, while buyers enjoyed price stability and strong availability of rPET from new local producers and importers.

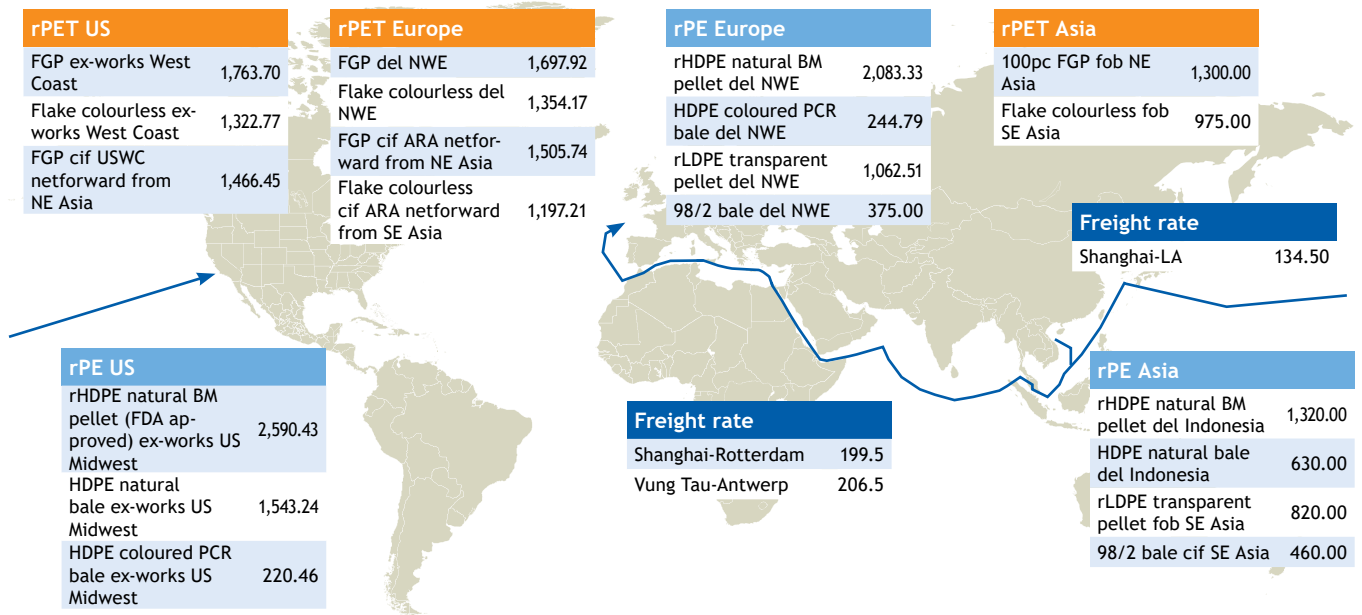
rPET was subject to a number of temporary week- or month-long surges in demand, which excited market participants but ultimately failed to reverse a trend of low activity. One such jump occurred in October-November, which was attributed in part to market participants preparing for incoming recycled content mandates for beverage bottles in California in 2025. But, overall, margins were eroded for many reclaimers in 2024, as they battled with a twin-headed problem of high feedstock costs and lowered demand.

Mexican demand for PET bales skyrocketed this year, led by capacity increases, which lifted recycling feedstock prices in the west coast market in particular.

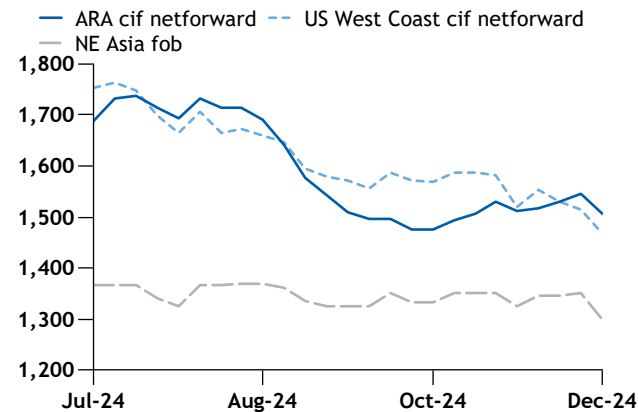
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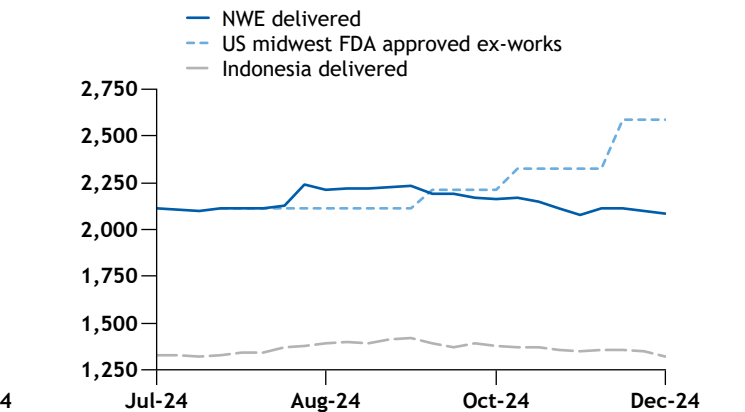
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Global rPET FGP netforwards (basis NE Asia)



Global rHDPE natural prices



COMMENTARY HEADLINES

- rPET Europe: market steady
- rPET US: Market uncertain heading into 2025
- rPET Asia: Falling vPET keeps pressure on NE Asia
- rPE/rPP Europe: Activity slows for Christmas
- rPE/rPP US: Slow demand still pressuring recyclers
- rPE Asia: Indonesian waste uncertainties persist
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MARKETS UPDATE – rPET – EUROPE

rPET Europe: market steady

The European rPET market is steady as the year draws to a close, but uncertainty over the forthcoming year prevails and there is a nervousness present in market participants following this challenging year.

Bale prices are stable across the region this week. Some recyclers suggest that availability of good quality material for use in food grade applications is becoming slightly tighter, and there is some anticipation prices may tick up as the market returns in the new year.

Italian bale prices were heard higher, reaching close to €690/t for clear material and around €650/t for light blue bottles. Polish bale offers continued to be heard high above the actual market range, up to high €800s, indicating sellers are attempting to push prices higher where possible. However actual deals completed fall between 620-730/t delivered.

Bale prices in the UK are currently holding firm at £160-230/t delivered. Some sellers suggest achieving above £200/t is becoming more difficult as demand is low and there is plenty of material, however rising Packaging Recovery Note (PRN) prices are likely to support prices into the new year, with some anticipating that PRN may reach over £100/t in January. Export opportunities into Europe are relatively limited unless the material is higher than average quality.

Flake prices are stable this week and demand is seasonally low. Some offers below the price range, down to €1,225/t delivered were heard, although volumes were limited and for destocking purposes at the end of the year to manage inventory levels and generate cash flow. Recyclers report the need to push prices higher in the new year to regain some margin, particularly if feedstock bale prices rise. But there is some concern and uncertainty demand may not support prices increases. There has been a focus on food grade pellet production in the market this year. Availability of clear flake is slightly curtailed but in line with current low demand.

Food grade pellet prices are also stable at the end of the year. Some food grade pellet producers accepted deals at lower levels at the end of November and into December in order to move material. These prices down to €1,480/t delivered are expected to disappear in the new year and the market returns. However, due to the focus on food grade pellet production, there are some sellers with apprehension that the market might not be as strong as hoped for in the first quarter of the new year.

Recyclers say there has been additional pressure on flake and food grade prices in December as a result of lower cost of virgin PET (vPET) resin prices in Europe. Spot European PET resin prices are stable at €1,030-1,070/t delivered. The delta

Recycled PET Europe market prices						€/t
	Timing	Low	High	Midpoint	Δ	
Bale prices						
PET bottle colourless, del W Europe	20-Dec	480.00	580.00	530.00	nc	
PET bottle colourless, del N Europe	20-Dec	480.00	580.00	530.00	nc	
PET bottle colourless, del UK £/t	20-Dec	160.00	230.00	195.00	nc	
PET bottle colourless, del CEE	20-Dec	530.00	730.00	630.00	-10.00	
PET bottle colourless, yellow container, del Spain	1Q25	187.00	370.00	278.50	nc	
PET bottle colourless, municipal collection, del Spain	3Q24	331.00	333.00	332.00	nc	
Flake prices						
Bottle flake colourless, del NWE	20-Dec	1,250.00	1,350.00	1,300.00	nc	
Bottle flake colourless, del S Europe	20-Dec	1,250.00	1,350.00	1,300.00	nc	
Bottle flake colourless, del CEE	20-Dec	1,250.00	1,350.00	1,300.00	nc	
Bottle flake colourless, del UK £/t	20-Dec	920.00	960.00	940.00	-2.50	
Food grade pellet						
del NWE	20-Dec	1,580.00	1,680.00	1,630.00	nc	
del S Europe	20-Dec	1,580.00	1,680.00	1,630.00	nc	
del CEE	20-Dec	1,480.00	1,650.00	1,565.00	nc	

between food grade pellet prices and vPET remains at on average €585/t, the highest across the whole of 2024. Flake prices are at a €255/t premium on average. At these levels there continues to be substitution back to vPET for cost saving purposes, particularly for the non-bottle markets.

Higher freight rates are supporting the domestic European market, and going into the new year, import offers and volumes from Asia-Pacific are expected to be limited.

Uncertainty going into the new year remains, despite the implementation of the Single Use Plastics Directive in January which is anticipated to support the market, the challenging conditions experienced by recyclers and subdued demand for recycled material this year continue to cast a hesitant shadow over the outlook for the year ahead.

Announcement

All data change announcements can be viewed online at www.argusmedia.com/announcements. Alternatively, to be added to the email distribution list for all announcements, please email: datahelp@argusmedia.com.

MARKETS UPDATE – rPET – AMERICAS

Market uncertain heading into 2025

After experiencing turbulent lows and some unexpected highs in 2024, PET recyclers are still largely uncertain about the year ahead.

For most market participants, demand has cooled compared with October and November, but a few said that they are still seeing increased order entry and pricing for rPET flake and pellet.

Participants reported that thermoformers have stepped up their usage of rPET for usage in berry and food containers, following a weak spring-summer period owing to a smaller-than-expected berry crop in 2024. And importers, in particular, say that they have been pleasantly surprised with the January order entry.

But many domestic reclaimers reported a depressed market, largely as a result of a seasonal downturn in bottle sales. Coca-Cola's high-profile pullback on rPET usage goals has led to concern about future demand. And recyclers remain concerned about cheap and readily-available virgin PET crimping brand owners' motivation to increase their rPET usage. Some participants have also expressed concern that oversupply of vPET, particularly from Asia, will continue to grow.

In general, brokers and recyclers have fairly tempered expectations for 2025, with the understanding that the economic situation for consumer packaging is still favouring cost-cutting.

West coast PET bales rose this week to 27¢/lb, while east coast dropped slightly to 19.5¢/lb. West coast bales are currently in lower supply, and Mexican reclaimers are still

Recycled PET US weekly market prices						ex-works
	Timing	Currency	Low	High	Midpoint	Δ
Weekly						
PET bottle bale						
A grade US west coast	20-Dec	¢/lb	26.00	28.00	27.00	+2.50
		\$/t	573.20	617.29	595.25	+55.12
PET bottle bale						
B grade US west coast	20-Dec	¢/lb	14.50	16.00	15.25	nc
		\$/t	319.67	352.74	336.21	nc
PET bottle bale						
US east coast	20-Dec	¢/lb	18.00	21.00	19.50	-0.50
		\$/t	396.83	462.97	429.90	-11.03

Recycled PET US monthly market prices						ex-works
	Timing	Currency	Low	High	Midpoint	Δ
Monthly						
rPET flake						
colourless US west coast	Dec 24	¢/lb	58.00	62.00	60.00	nc
		\$/t	1,278.68	1,366.86	1,322.77	nc
rPET pellet US						
west coast	Dec 24	¢/lb	79.00	81.00	80.00	-1.00
		\$/t	1,741.65	1,785.74	1,763.70	-22.05

purchasing large amounts to fulfil larger recycling capacities. East coast bales have stabilised in price since an increase in demand in September caused them to rise to 24¢/lb.

MARKETS UPDATE – rPET – ASIA-PACIFIC

Falling vPET keeps pressure on NE Asia

Lower virgin PET prices continued to weigh on the north-east Asian rPET market, while prices in southeast Asia held steady, as activity slowed in both markets towards the end of the year.

Mainland Chinese producers lowered offers for 100pc rPET pellet to \$1,200-1,300/t fob, but no deals were concluded during the week. Manufacturers said that demand was weak in the winter season, and softer virgin PET resin prices forced them to lower recycle prices subsequently. Notional discussion levels were at \$1,200-1,250/t fob.

Taiwanese producers also said that negotiations were limited. Selling indications were adjusted lower, and notional discussion levels were heard at \$1,300-1,400/t fob.

25pc rPET pellet prices also inched down to \$880-920/t fob, in line with softer virgin PET resin prices.

One rPET producer did signal some potential upside for demand in 2025, saying that they are in the process of negotiating a supply contract with a global beverage company that could see them delivering over 10,000t of rPET pellet next year to the company's bottling partners in southeast Asia.

rPET flake prices also softened in the Chinese domestic market due to limited demand from both packaging and fiber applications. Major producers maintained selling indications for premium grade rPET flake at 6,600-6,700/t, but a few recyclers with high product stocks lowered selling indications to Yn6,400/t and concluded some deals at this price.

MARKETS UPDATE – rPET – ASIA-PACIFIC

High-end prices were unchanged at Yn6,600/t, supported by persistently-solid bale prices.

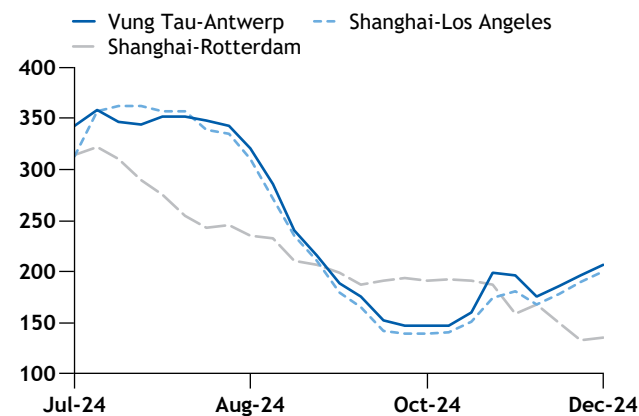
In southeast Asia, market participants expect concerns over feedstock availability in Indonesia to continue, and they are closely monitoring developments surrounding waste import viability next year following statements by the country’s authorities. The full extent of the policy change is currently unclear as the details of the policy have yet to be released, but some recyclers are expecting bale supplies to tighten as some firms’ import licenses may not be valid after the end of this year.

Post-consumer PET waste supplies are also further limited by the ongoing rainy season, which typically results in lower beverage consumption and collection rates, although slow downstream buying has prevented significant price increases. Mixed colour bale prices in Indonesia rose slightly to between 8,000-9,200 IDR/kg.

Colourless rPET flakes and mixed colour flakes continued to hold steady at \$900-1,050/t fob southeast Asia and \$850-930/t fob southeast Asia respectively, with brand owner demand for flakes discussed to be firm. rPET pellets prices were also unchanged at \$1,250-1,400/t fob southeast Asia.

Market participants expect European demand for rPET pellet export to increase in the first quarter, when minimum recycled content requirements for PET beverages bottled on the EU market will begin. But some noted that regulations, and the need for product certification for sales to Europe has tightened, leading them to shift focus more towards exports to the US. As regulatory standards increase, rPET prices are expected to continue to hold a high premium over its virgin counterpart in 2025, participants said.

Container freight rates



Recycled PET Asia-Pacific market prices						
	Timing	Currency	Low	High	Midpoint	Δ
North East Asia rPET						
rPET food grade pellets 25pc fob NE Asia	20-Dec	\$/t	880.00	920.00	900.00	-20.00
rPET food grade pellets 100pc fob NE Asia	20-Dec	\$/t	1,200.00	1,400.00	1,300.00	-50.00
rPET flakes domestic China	20-Dec	Yuan/t	6,400.00	6,600.00	6,500.00	-50.00
South East Asia rPET						
PET bottle bale colourless domestic Indonesia	20-Dec	IDR/kg	9,300.00	9,500.00	9,400.00	nc
		\$/t	570.00	580.00	575.00	-15.00
PET bottle bale mixed colour domestic Indonesia	20-Dec	IDR/kg	8,000.00	9,200.00	8,600.00	+100.00
		\$/t	490.00	560.00	525.00	-10.00
rPET food grade flakes colourless fob southeast Asia	20-Dec	\$/t	900.00	1,050.00	975.00	nc
rPET food grade flakes mixed colour fob southeast Asia	20-Dec	\$/t	850.00	930.00	890.00	nc
rPET pellets fob southeast Asia	20-Dec	\$/t	1,250.00	1,400.00	1,325.00	nc

Calculated rPET netforwards					
	Timing	Low	High	Midpoint	Δ
rPET food grade pellet cif USWC - netforward from NE Asia \$/t (20t/FEU)	20-Dec	1,338.60	1,594.29	1,466.45	-47.52
rPET food grade pellet cif ARA - netforward from NE Asia \$/t (24t/FEU)	20-Dec	1,383.56	1,627.91	1,505.74	-39.17
€/t	20-Dec	1,332.64	1,568.00	1,450.32	-22.59
rPET flake cif ARA - netforward from SE Asia \$/t (23t/FEU)	20-Dec	1,105.53	1,288.89	1,197.21	+10.76
€/t	20-Dec	1,064.85	1,241.46	1,153.16	+22.00

Container freight rates				
Route	Low	High	Midpoint	Source
Shanghai-Los Angeles	112.00	157.00	134.50	Freightos
Shanghai-Rotterdam	178	221	199.5	Freightos
Vung Tau-Antwerp	191	222	206.5	Freightos

*Freight rates used in net forward calculations are adjusted for the specified shipment size per FEU



Argus freight rates are as of the day of publication. Rates derived from Freightos data are of the previous day. Selected polymer spot freight rates are calculated by Argus methodology, based on underlying data from the online freight marketplace, Freightos. Visit www.freightos.com for complete lists of \$/FEU rates in the wider spot container market.

MARKETS UPDATE – RPE/RPP – EUROPE

Activity slows for Christmas

There were a few downward moves in European recycled polyolefin prices as activity in the market slowed ahead of the Christmas break.

The price of 98/2 flexible PE bales declined slightly in northwest Europe, owing largely to an ongoing lack of demand for exports to Indonesia. There recyclers are still awaiting the renewal of their import licences for 2025 after the local government announced its intention to stop plastic waste imports in the coming year. The range of spot prices fell to €330-390/t delivered – down by €10/t at the lower end and €20/t at the higher.

The slight decline will be welcomed by recyclers, which have noted higher production costs and pressure on their sales prices during negotiations for January deliveries, attributed to subdued demand and a recent decline in the virgin LDPE and LLDPE markets. Conversely, UK delivered 98/2 bale prices were assessed £10/t higher (\$12.60) at £310-360/t delivered (\$390.60-\$453.60), although this was due to a rise in PRN prices in the past two weeks rather than higher demand. But shrink hood bale prices – a cost for recyclers manufacturing low-MFI rLDPE/LLDPE pellets – remained stubbornly high, reflecting very limited availability. A transition towards stretch hood, in place of shrink hood, on newer packaging lines may be a reason for the recent lack of thicker film bales.

In the rHDPE market, most recyclers continue to report strong demand for natural and white blow-moulding grades from the packaging industry. But the rHDPE pipe pellet market remains oversupplied amid weak demand from the construction industry. We moved down the upper end of our rHDPE pipe assessment by €45/t, moving the range to €720-850/t, taking into account feedback from the market. HDPE bale prices remained steady in northwest Europe, while we moved the upper end of our UK HDPE natural bale price up by £10/t. A seller reported demand for exports to the US, where HDPE natural bale prices have risen by \$430/t since the start of the fourth quarter.

The rPP market was little changed, with a glut of supply in commodity grades persisting. Reports of demand from the important plant pot market are mixed, ranging from normal to below expectations for the season. Market prices have been stable in December for rPP black and rPP flower pot grades, but there have been reports of one-off special deals at lower levels – well below breakeven point for recyclers – consistent with companies having additional stock to sell prior to year-end. Prices for PP regrind were assessed €10/t lower at €480-540/t, amid weak demand.

Europe recycled polyolefins						
	Timing	Low	High	Midpoint	Δ	
Bales del NWE (€/t)						
HDPE rigid bale (D329 or equivalent)	20-Dec	170.00	300.00	235.00	nc	
PP rigid bale PCR (D324 or equivalent)	20-Dec	40.00	120.00	80.00	nc	
Mixed polyolefin bale, PCR	20-Dec	50.00	70.00	60.00	nc	
Shrink hood flexible PE bale	20-Dec	720.00	780.00	750.00	nc	
98/2 flexible PE bale post-commercial	20-Dec	330.00	390.00	360.00	-15.00	
80/20 flexible PE bale post-commercial	20-Dec	160.00	200.00	180.00	-10.00	
Mixed colour flexible PE bale post-commercial	20-Dec	110.00	140.00	125.00	nc	
Mixed plastic waste (D350 fraction) del German incinerator*	6-Dec	-170.00	-150.00	-160.00	nc	
Bales del UK (£/t)						
HDPE natural PCR bale	20-Dec	440.00	520.00	480.00	+5.00	
HDPE coloured PCR bale	20-Dec	200.00	240.00	220.00	nc	
PP PCR bale	20-Dec	200.00	240.00	220.00	nc	
98/2 flexible PE bale post-commercial	20-Dec	310.00	360.00	335.00	+10.00	
Regrind del NWE (€/t)						
HDPE regrind mixed colour household packaging	20-Dec	560.00	620.00	590.00	nc	
PP regrind mixed colour household packaging	20-Dec	480.00	540.00	510.00	-10.00	
Regranulate prices del NWE (€/t)						
rHDPE BM white, from PCR, deodorised	20-Dec	1,650.00	1,950.00	1,800.00	nc	
rHDPE BM natural from PCR deodorised del NWE	20-Dec	1,850.00	2,150.00	2,000.00	nc	
rHDPE IM black	20-Dec	670.00	800.00	735.00	-22.50	
rHDPE pipe dark/black	20-Dec	720.00	850.00	785.00	-22.50	
rPP light, packaging, deodorised	20-Dec	1,550.00	1,800.00	1,675.00	nc	
rPP grey, high MFI, plant pot and bucket	20-Dec	700.00	850.00	775.00	nc	
rPP IM black	20-Dec	650.00	800.00	725.00	nc	
rLDPE/LLDPE IM dark/black	20-Dec	400.00	600.00	500.00	nc	
rLDPE/LLDPE shrink film transparent	20-Dec	1,200.00	1,340.00	1,270.00	nc	
rLDPE/LLDPE stretch film transparent	20-Dec	1,080.00	1,200.00	1,140.00	nc	
rLDPE/LLDPE standard film transparent	20-Dec	975.00	1,065.00	1,020.00	nc	
rLDPE/LLDPE standard film dark/black	20-Dec	630.00	725.00	677.50	nc	

*Prices are negative when payment is made to the incinerator to take the material

Netherlands-based recycler Stiphout was declared bankrupt at the end of last week, adding to several high-profile recycling plant closures in the UK and Europe in the second half of the year. Recyclers and associations such as Plastic Recyclers Europe have been vocal in stating that current recycling margins are insufficient to promote investment in the industry, and the body says it may lead to a risk of further capacity loss.

MARKETS UPDATE – RPE/RPP – AMERICAS

Slow demand still pressuring recyclers

Recycled polyolefins markets have slowed in December, in line with seasonal expectations and a generally poor demand situation that has persisted throughout the year.

Unlike other recycled plastic grades, HDPE natural has had stronger demand led by brands seeking PCR content. Natural HDPE bales have remained steady at 70¢/lb so far in December, but participants said the price may increase further in January because demand remains higher than expected.

But rumours of companies pulling back on 2025 recycled goals have proliferated, indicating lots of uncertainty about how lasting this higher demand environment for packaging-grade resins will be.

Coloured HDPE bales remained flat this week at 10¢/lb. Coloured HDPE bales fell in price in August and September, after major pipe and drainage manufacturing companies reduced production, and have remained flat since.

November housing data showed a year-on-year decline in privately-owned housing starts of 14.6pc, falling to 1.289mn starts.

Companies involved in the housing market are likely to continue operating at lowered production rates, and most participants expect that production will not increase until interest rates drop even further. The US Federal Reserve indicated this week that more than two interest rate cuts are unlikely in 2025, which could further hamper recovery of the housing market in 2025.

PP bales were also steady this month at 12¢/lb. PP bales have increased in price since October due to decreased supply, rather than improved demand for finished pellet, participants said.

Recycled polyolefins US Midwest weekly market prices						
	Timing	Currency	Low	High	Midpoint	Δ
Weekly						
HDPE natural PCR bottle bale	20-Dec	¢/lb	68.00	72.00	70.00	nc
		\$/t	1,499.14	1,587.33	1,543.24	nc
HDPE coloured PCR bottle bale	20-Dec	¢/lb	8.00	12.00	10.00	nc
		\$/t	176.37	264.55	220.46	nc
PP PCR bale	20-Dec	¢/lb	12.00	14.00	13.00	nc
		\$/t	264.55	308.65	286.60	nc

Recycled polyolefins US Midwest monthly market prices						
	Timing	Currency	Low	High	Midpoint	Δ
Monthly						
rHDPE BM natural, FDA approved	Dec 24	¢/lb	115.00	120.00	117.50	+12.00
		\$/t	2,535.31	2,645.54	2,590.43	+264.55
rHDPE BM light grey, non-FDA approved	Dec 24	¢/lb	44.00	49.00	46.50	-1.00
		\$/t	970.03	1,080.26	1,025.15	-22.05
rHDPE dark/black general purpose	Dec 24	¢/lb	33.00	38.00	35.50	nc
		\$/t	727.52	837.76	782.64	nc
rPP light grey, FDA approved	Dec 24	¢/lb	72.00	75.00	73.50	+0.50
		\$/t	1,587.33	1,653.47	1,620.40	+11.02
rPP light grey, non-FDA approved	Dec 24	¢/lb	50.00	55.00	52.50	-5.00
		\$/t	1,102.31	1,212.54	1,157.43	-110.23
rPP dark/black, general purpose IM	Dec 24	¢/lb	39.00	44.00	41.50	-1.00
		\$/t	859.80	970.03	914.92	-22.05

MARKETS UPDATE – RPE/RPP – ASIA-PACIFIC

Indonesian waste uncertainties persist

Weak demand in the run-up to the festive season kept rPE prices stable in southeast Asia. But market participants expect waste availability will tighten in Indonesia in the new year as uncertainty about import licences for plastic waste persists, potentially raising recyclers' costs.

Cif southeast Asia 98/2 bale import prices were assessed stable on the week at \$450-470/t. HDPE bale prices were also unchanged at 10,000-10,600 rupiah/kg.

The Indonesian government has announced an intention to stop plastic waste imports in 2025, and many Indonesian recyclers are still waiting to have import licences renewed for the coming year. Indonesia particularly imports LDPE

waste from regions such as Europe, Turkey and the US. And, while domestic supplies are also an important feedstock source, market players are expecting that the curtailing of imports could result in a supply squeeze.

Feedstock collection and sorting costs are also expected to rise in southeast Asia, with Indonesia, Malaysia and Thailand all set for minimum wage increases next year. Indonesian market sources also noted that the forthcoming 1% increase in value-added tax (VAT), which is expected to kick in on 1 January 2025, will also raise both labour costs and stymie plastic products consumption.

On the demand front, some recyclers are expecting upticks in rPE prices as supplies owing to reduced virgin PE

MARKETS UPDATE – RPE/RPP – ASIA-PACIFIC

supply in the first quarter. Several southeast Asian crackers, including Malaysia's Lotte Titan, the Philippines' JG Summit and Vietnam's Long Son Petrochemical, have announced shutdowns to their crackers in the first quarter 2025 amid margin pressures. This could result in a short-term bump to rPE prices as buyers look to meet procurement volumes, said some sources.

There was no impact on price this week, with prices for transparent rLD/LLDPE pellets assessed unchanged week-on-week at \$790-850/t, while rHDPE pellets prices in Indonesia were assessed unchanged, albeit at a wider range of between 21,000-22,000 IDR/kg.

Meanwhile, in northeast Asia, trading volumes for rHDPE were low, but discussion levels rose marginally because sellers adjusted offers higher to transfer higher raw material cost to buyers.

Selling indications for rHDPE BM grade food contact were adjusted higher to \$1,350-1,380/t fob as a result of reduced supply of waste HDPE bottle bales. Notional discussion levels inched up to \$1,320-1,350/t fob with limited deals.

Recyclers also raised offers of rHDPE in the Chinese domestic market. Selling indications rose by 200-500 yuan/t to Yn11,000-11,500/t and deals were concluded at Yn10,800-11,200/t. Recyclers said that demand was weak, but they have to raise prices due to higher raw material cost.

Recycled polyolefins Asia Pacific market prices						
	Timing	Currency	Low	High	Midpoint	Δ
South East Asia rPE						
HDPE rigid bale PCR domestic Indonesia	20-Dec	IDR/kg	10,000.00	10,600.00	10,300.00	nc
		\$/t	610.00	650.00	630.00	-20.00
98/2 flexible PE bale, post commercial cif SE Asia	20-Dec	\$/t	450.00	470.00	460.00	nc
rHDPE natural, from PCR, domestic Indonesia	20-Dec	IDR/kg	21,000.00	22,000.00	21,500.00	nc
		\$/t	1,290.00	1,350.00	1,320.00	-30.00
rLDPE/LLDPE standard film, transparent, fob southeast Asia	20-Dec	\$/t	790.00	850.00	820.00	nc
North East Asia rPE						
rHDPE BM natural colour from PCR, food contact, fob China	20-Dec	\$/t	1,320	1,350	1,335.0	+10.0

SUSTAINABLE FEEDSTOCKS

High end of cracker grade PPO rises

Plastic-derived pyrolysis oil (PPO) availability in Europe remains limited at the end of the year, with participants looking to several new plants that are in the commissioning or ramp up phase to increase production levels in 2025.

The range of price ideas in the market remained wide. Some PPO producers are reportedly aiming to increase their sales prices, citing higher-than-expected costs linked – in some cases – to plants running less efficiently than originally planned. But polymer producers reported the achievable premiums for chemically-recycled PE and PP are coming under pressure as buyers re-evaluate their expectations for the amount of chemically-recycled content they will include in their products in the coming years.

Some buyers reported discussing offers at up to €1,800/t on a delivered basis for term supply of cracker-grade PPO in 2025 and a seller indicated that they had done transactions at €1,600-1,700/t on an fca basis. But there were also reports of spot agreements and discussions at lower levels, and at

Advanced Recycling/Bio-feedstocks						
	Timing	Currency	Low	High	Midpoint	Δ
Europe						
Pyrolysis oil plastic-derived refinery grade fca Europe	20-Dec	€/t	1,050.00	1,300.00	1,175.00	nc
Pyrolysis oil plastic-derived cracker grade fca Europe	20-Dec	€/t	1,350.00	1,600.00	1,475.00	+50.00
Bionaphtha fob ARA	Dec 24	\$/t	1,555.00	1,565.00	1,560.00	+70.00
Asia-Pacific						
Bionaphtha cfr Northeast Asia	Dec 24	\$/t	1,595.00	1,615.00	1,605.00	+25.00

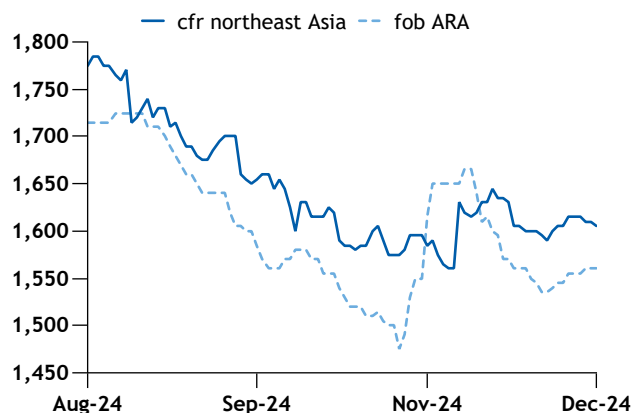
SUSTAINABLE FEEDSTOCKS

least one buyer suggested they would not purchase material for more than €1,500/t on a delivered basis. We lifted the high end of our cracker grade PPO assessment by €100/t to €1,600/t, while maintaining the low end at €1,350/t, taking this range of price ideas into account. The price range for refinery-grade PPO was unchanged at €1,050-1,300/t.

In the bio-feedstocks market, price indications for fob ARA range used cooking oil (UCO)-based bionaphtha were largely in the mid-\$900s/t premium to fossil range, with values for crop-based product heard at a slight discount to those for waste-based material. The premium for UCO-based biopropane fca ARA range over its fossil counterpart was also hovering around the \$950/t mark, having fallen from around \$1,000/t earlier in the month.

Bionaphtha

\$/t



PETROCHEMICAL MARKETS

Europe

The European PE and PP markets were subdued as expected in December, although low stocks in the supply chain after months of hand-to-mouth buying are leading some sellers to consider the possibility of raising prices in January.

HDPE, LLDPE and PP contract prices have fallen by €10/t so far this month, while LDPE has rolled over. Spot prices were assessed stable this week on all grades, amid market sentiment that the recent decreases have reached a bottom. European PET resin spot prices rolled over this week as the market slowed for the holiday period. Most producers and market participants are taking at least two weeks away from the market over Christmas, market activity will stall.

Americas

US PE December contract discussions are expected to continue into January. Producers are pressing hard for price increases in January, arguing that they need to regain some margin, particularly after an aggressive annual contract re-negotiation period. Currently, packaging warehouses are overflowing, with several of them not accepting new shipments until prior shipments have been packaged and shipped out. Spot prices are largely stable. Demand in December has remained weak on seasonal factors.

December contracts in the US PP market appear to be moving down, tracking the decline in December polymer grade propylene (PGP) contracts. Prices in January are expected to rebound. The lower PP prices in December have not spurred much additional buying, as converters are not wanting to build too much inventory before the end of the

Olefin monthly contracts & Polymer spot			
	Timing	Midpoint	Δ
Ethylene contract			
del NWE €/t	Dec 24	1,205.00	-7.50
cfr Taiwan \$/t	Sep 24	931.00	-12.00
Pipeline USGC €/lb	Nov 24	31.50	+0.25
Polymer grade propylene (PGP) contract			
del Europe €/t	Dec 24	1,075.00	-10.00
del Taiwan \$/t	Sep 24	876.00	-23.00
fob US €/lb	Dec 24	39.00	-2.50
HDPE IM spot			
del NWE \$/t	20-Dec	1,081.00	-8.00
cfr China \$/t*	20-Dec	870.00	nc
fas Houston bagged \$/t	20-Dec	827.00	nc
Polypropylene spot			
homopolymer del NWE \$/t	20-Dec	1,120.0	-8.5
raffia cfr China \$/t	20-Dec	890.00	nc
LLDPE butene-1 spot			
del NWE \$/t	20-Dec	1,078.5	-8.0
fas Houston \$/t	20-Dec	871.0	nc
cfr China \$/t	20-Dec	947.5	+2.5

*Main origin

Argus Chemicals coverage

Please see Argus' global olefins, polymers and aromatics reports for more prices, commentary, news and analysis from the petrochemicals markets.

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PETROCHEMICAL MARKETS

year. Demand in December is weak across most segments.

PET resin prices remained stable in the US, as bottle demand remained soft late into the fourth quarter, in line with the seasonality of the market. Steady PET imports continue to hamper upstream PTA and PX production unit rates in the US.

Asia Pacific

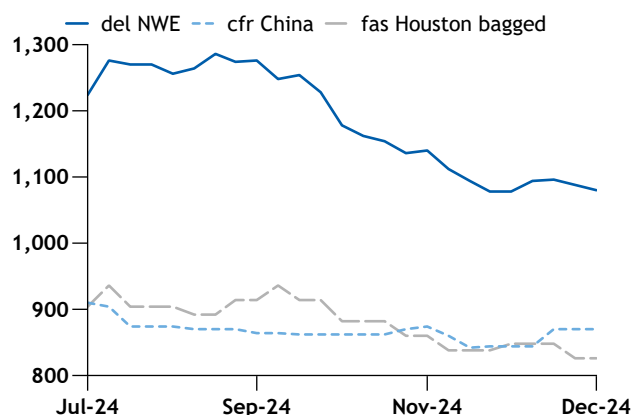
China’s LLDPE futures fluctuated in a narrow range as of 19 December. Spot physical prices remained relatively firm, despite weak futures throughout the week. Spot PE supply remained tight in physical market. Recent offers of sea cargoes are expected to arrive only in late January or February. Average operating rates at Chinese PE plants remained flat with last week. Southeast Asian PE prices kept stable except for HDPE film grade. Regional producers reduced spot HDPE film offers slightly because of excessive supplies and persistently weak downstream consumption.

China’s PP prices were stable amid seasonally low downstream demand in domestic market and limited discussions on import trades. PP futures were generally on a downward trend this week, following lower feedstock futures. Bearish outlook towards the lunar new year also exerted downwards pressures on PP futures. Spot trading activities remained tepid as downstream converters slowed down their procurement of feedstocks.

Orders in preparation for a potential increase in beverage consumption for the 2025 lunar new year arrived at PET resin plants, raising prices. Beverage manufacturers have shifted their expectations to demand for the lunar new year, with Christmas demand down. Despite high expectations from beverage manufacturers, limited demand throughout the year has led their production expansion plans to be conservative. The limited increase in demand has not allowed PET resin prices to fully recover to previous levels.

HDPE spot

\$/t



Argus Global Polyethylene and Polypropylene



Argus Global Polyethylene and Polypropylene is a weekly pricing service with global resin prices and detailed commentary on key polymer grades.

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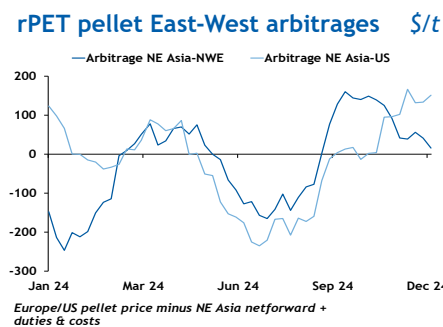
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NEWS AND ANALYSIS



continued from p1



The seriousness of the situation was laid bare by recycling plant closures in the second half of the year

Participants expect demand from America’s largest trading partner to continue into 2025. And importers were a regular presence in the market, taking advantage of an arbitrage of lower-cost bales in Asia and Africa in order to offer material at a lower price to US customers, albeit with some periods in which the arbitrage between the region was challenged by unusually high front-haul container freight rates.

By Zach Kluver

Asia-Pacific

Asian rPET was a story of constrained demand and competition with virgin materials in 2024. Massive expansions of the virgin PET capacities in northeast Asia weighed on prices throughout the year, in combination with demand that lagged behind market participants’ expectation owing to slower economic growth in the region, particularly in China.

Domestically, rPET demand into fibre applications supported demand in the first half of the year, but this slowed from late in the third quarter owing to higher fibre stocks and increasing competition from virgin material, leading recyclers to reduce production or lower prices.

In the pellet market, China’s ongoing lack of regulatory support for rPET in food-contact packaging reduced local demand. And exports to western markets were also limited in the first quarter and during the summer by surges in front-haul container freight rates.

By Jacky Wang

rPE/rPP

Europe

Demand for white and natural-grade rHDPE BM grades has been a bright spot in the European recycled polyolefin sector in 2024, with many – although not all – recyclers saying that they are fully or even oversubscribed with enquiries for 2025. But elsewhere in the market, 2024 was very challenging. The seriousness of the situation was laid bare by recycling plant closures in the second half of the year.

The eurozone manufacturing and construction PMI indexes spent the entire year deep in contraction territory, leading to oversupply of lower-grade recyclates, particularly in the rPP market. PE film recyclers also had to contend with reduced supply of thick film waste, and competition from southeast Asia for standard 98/2 bales, which squeezed their margins in the second half of the year. And, while high front-haul container rates supported virgin PE and PP prices through much of the first three quarters, these declined in the autumn, bringing downward pressure on recyclate prices towards the end of the year.

On the legislation side, polyolefin recyclers will be buoyed by ministers confirming the EU Packaging and Packaging Waste Regulation (PPWR) in December, meaning that contact-sensitive packaging will eventually need to have 10pc recycled content, and other packaging 35pc, on the EU market. But the requirements do not kick in until 2030, and recyclers made the point at November’s Sustainable Packaging Summit that they need support from the packaging industry in the interim to drive the investment needed to ensure there is sufficient supply available by the end of the decade.

By Will Collins



NEWS AND ANALYSIS

And very early on in the year it became clear that the same macroeconomic headwinds that led to a post-Covid drop in demand were continuing

Calls for increased legislation on recycle usage are stronger than ever, to allow rPE recyclers to create their own self-sustaining market

US

Subdued demand and slow-moving legislation that has struggled to create sustainable demand dogged the US polyolefin recycling market in 2024.

Recyclers had hoped that the implementation of mandatory recycled content requirements for plastic containers in New Jersey early in the year would signal the start of a stronger period for demand. But it was beset by issues, including understaffing of key administration roles to deal with the rollout, and a controversial exemption process that some felt undermined the law. And very early on in the year it became clear that the same macroeconomic headwinds that led to a post-Covid drop in demand were continuing. Inflationary pressure across the US drove up the prices of fast-moving consumer goods (FMCGs), and thus drove down consumer spending, while high interest rates stifled the construction industry.

The rHDPE natural market had another back-and-forth year. Despite a broadly cautious economic environment for the FMCG sector, there were periods of solid demand for natural grades which are particularly popular for packaging use cases. Supply, on the other hand, remained limited, leading to severe price swings for finished pellet and bales at times of high demand. This was a contrast to the rPP market, which saw stable supply, but consistently poor demand throughout the year.

By Zach Kluger

Asia-Pacific

Southeast Asian rPE prices were largely rangebound in 2024, with recyclers continuing to face stiff competition from prices for virgin material. The bulk of purchases made within the region were made on a preferential basis or when recyclates were cheaper than virgin material.

But, in recent months, there was a higher number of orders from the Asia-Pacific region for southeast Asian rPE. This demand is largely from India, China and Taiwan, and for lower and mixed-colour grades of rPE for industrial packaging applications. Despite this positive development, calls for increased legislation on recycle usage are stronger than ever, to allow rPE recyclers to create their own self-sustaining market and reduce their exposure to fluctuations in the price of virgin material.

There were significant fluctuations in the price of 98/2 bale imports from Europe during the year. Prices were inflated, reaching as high as \$550/t cif in the middle of the year amid strong demand, and supported by higher global container freight rates that resulted from congestion at major transshipment ports and disruption to shipping routes because of attacks on ships in the Red Sea. Indonesian recyclers are still awaiting the renewal of their licences to import plastic waste in 2025, after the government announced an intention to stop plastic waste imports, which could keep feedstock availability and prices a top-line issue heading into the new year.

By Akash Ravinran

Chemical recycling

Once again, progress in the European pyrolysis industry was slower than proponents of the industry would have hoped.

Output of plastic-derived pyrolysis oil (PPO) was still limited, with some new plants experiencing difficulties during early production. And – while the confirmation of PPWR will help to give investors confidence – the ongoing lack

NEWS AND ANALYSIS

of confirmation on how mass balance accounting will be allowed for counting chemically recycled content within regulations remained an elephant in the room. In the second half of the year, imports of refinery-produced circular naphtha, based on PPO, seemed to be more readily available on a prompt basis to European buyers than locally produced PPO.

Two new upgrading facilities came on line in 2024, and several new commercial-scale pyrolysis plants are expected to ramp up or come on line early in 2025, which industry supporters will hope can drive development in the industry in a positive direction.

In the PET depolymerisation industry, uncertainty about demand and/or rising costs led to the suspension or cancellation of projects in Asia and Europe. But there were also success stories, including US chemical firm Eastman reporting that its 110,000 t/yr methanolysis depolymerisation unit in Kingsport, Texas, has reached “~80-85pc of full design rate” since coming on line in March, and Axens’ demonstration of its belief in its process and the future of the industry when announcing in October that it would begin licensing its technology commercially.

By Will Collins and Jacky Wang

NEWS AND ANALYSIS

The industry has called for measures such as mandatory recycled content for textiles and a ban on exports of unsorted textiles from Europe, writes Chloe Kinner

Textile recycling can learn from packaging market

The PET textile recycling industry can learn from the PET packaging recycling industry as it looks to scale up, with legislation and investment in collection and processing infrastructure key to increasing recycling rates, delegates at last week’s Petcore Advancing Polyester Textile Circularity webinar heard.

Supportive EU legislation is imperative to increasing collection and recycling rates for PET textiles, which currently stand at 20pc and 7pc, respectively, delegates heard. Presenters called for mandatory recycled content as requirements for textiles to stimulate demand and suggested that a ban on exports of unsorted textiles from Europe would create a more stable market and keep the feedstock within Europe. And it was suggested that this should be combined with harmonised extended producer responsibility (EPR) systems to provide sufficient financial support to expand collection infrastructure.

And participants called for product design to better support the recycling industry. Transitioning to non-material fabrics rather than multilayer materials, and adopting digital marking for easy identification, could help streamline recycling processes, they said. Clear labelling regulations are also needed to ensure that materials can be easily sorted.

Effective processing

There is also need for development of systems to reprocess PET textile waste when collected, delegates heard.

Recycling textiles is more complex than recycling packaging owing to the variety of materials, surface treatments, dyes, coatings, and prints used in garments as well the potential presence of hazardous chemicals. Mechanical recycling is effective for simpler materials, but it is limited by the complexity of many textile feedstocks, which makes chemical recycling a necessary complementary process.

But depolymerisation-based chemical recycling – which is seen by proponents as a solution for tackling textile waste – is still in its early stages. The industry faces significant barriers to scaling up, including competition from low-cost



NEWS AND ANALYSIS

imports, price sensitivity of consumers and brands, insufficient infrastructure, and high energy costs, particularly in Europe. Securing investment for industrial-scale depolymerisation projects remains a challenge. One large project has been shelved in Europe this year, while depolymerisation technology company Ioniq [filed for bankruptcy protection](#) in October, citing low-cost virgin plastic alternatives, slow development of the plastic recycling supply chain and a lack of regulatory support, before announcing a comeback earlier this month.

Bruno Langlois from Carbios, which aims to commercialise an enzyme-based chemical recycling process for PET textile waste, noted that downstream buyers will need to be willing to pay a premium for recycled material to support the development of the industry. He estimated that the total cost of a PET depolymerisation process, from collection and sorting through to repolymerisation and spinning of the material, could be as much as €2,600/t (\$2,714/t), even at industrial scale, although he added that these costs could decrease as supporting infrastructure improves. These costs would likely only add around €1 to the price of each garment, he said, although experience from the packaging industry suggests that such high premiums to virgin PET on a per-tonne basis are still likely to be difficult for some buyers to countenance.

Closing the loop

PET fibre accounts for 57pc of worldwide textile production, which is projected to grow from over 120mn t in 2023 to 160mn t by 2030, according to the Textile Exchange association. Currently, around 12pc of PET fibre contains recycled material, the highest recycled content seen in textiles. But most recycled polyester is derived from bottles and therefore downcycled, resulting in less than 1pc of polyester coming from textile recycling.

But, as regulatory mandates to use more recycled content in PET packaging increase, this risks limiting the amount of rPET available to fibre producers, delegates heard. This makes it essential that the industry can establish a closed-loop recycling system that decouples it from exposure to the PET packaging recycling market.

The textile recycling industry has substantial growth potential, presenters said. By implementing targeted policies, improving infrastructure, and creating financial incentives, the shift toward circular textiles may become a reality. But overcoming technological, economic, and logistical hurdles will require co-ordinated efforts across industries, governments, and consumers to create a sustainable and circular textile economy.

As regulatory mandates to use more recycled content in PET packaging increase, this risks limiting the amount of rPET available to fibre producers

NEWS AND ANALYSIS

Market news

EU plastics industry urges local production support

European recycling industry association Euric and 17 other plastics industry stakeholders have urged the EU to protect the competitiveness of the bloc's plastics industry at a time of increasing imports of non-EU recycled and virgin plastics.

The European plastic value chain is in recession, with the continent's share of global plastics production falling to 14pc in 2022 from 28pc in 2002, according to a joint statement from the industry bodies published today. The growth of recycling capacity has also slowed in recent years, falling to 6pc in 2023 from 16pc in 2021. The downturn is caused by a combination of factors, including uncontrolled imports of non-EU recycled and virgin plastics, reduced investment in domestic raw material production and recycling, along with weak demand for EU-origin virgin and recycled plastics.

The industry stakeholders urged the EU to "establish a level playing field among EU and non-EU actors" by enforcing the bloc's environmental, health and safety regulations on all products and materials placed on the EU market. The bodies also called for the establishment of an EU-level incentive scheme to boost investment, and for clear legislative measures to encourage circular solutions, which they hope will provide the plastic value chain with the financial stability to drive innovations for the industry and continue contributing to climate change mitigation.

By Liana Minihan

Legislation/associations

EU ministers adopt revised plastics regulations

EU ministers have formally adopted the bloc's regulation on packaging and packaging waste (PPWR).

The 325-page regulation will require EU member states to reduce the packaging waste generated per capita by 5pc by 2030, compared with 2018 levels, by 10pc by 2035 and by 15pc by 2040. The PPWR also sets targets for minimum recycled content in plastic packaging.

The new rules require EU states to achieve recycling of a minimum 65pc by weight of all packaging waste generated by the end of next year. Minimum recycling percentages by weight were also set in regards to specific materials contained in packaging waste generated for wood (25pc), ferrous metals (70pc), aluminium (50pc), glass (70pc), and paper and cardboard (75pc).

From 1 January 2030, the PPWR bans single-use plastic packaging for unprocessed fresh fruit and vegetables, and for foods and beverages filled and consumed in cafes and

restaurants. The regulation also sets binding re-use targets for 2030 as well as "indicative" targets for 2040, depending on the type of packaging used by operators. The European Council points to binding targets of 40pc for transport and sales packaging and 10pc for grouped packaging.

Targets for minimum recycled content in plastic packaging are set for 2030 at 30pc for contact-sensitive PET packaging, 10pc for non-PET contact-sensitive packaging, 30pc for single-use plastic beverage bottles and 35pc for other plastic packaging. For 2040, the targets rise to a respective 50pc and 25pc for PET and non-PET contact-sensitive packaging and to 65pc for single-use plastic beverage bottles and other plastic packaging.

The formal adoption by EU ministers allows for the regulation to enter into force early in 2025. The PPWR will be applied 18 months after entry into force. A [provisional deal](#) between the European Parliament and EU states was reached in March on the final legal text. Revisions and corrections made no substantive change.

By Dafydd ab Iago

Recycled plastic toxicity study corrected

A study that originally indicated there were unsafe levels of brominated flame retardants (BFRs) in many recycled black plastic kitchen utensils has been corrected to say the safe level is much higher.

The study, led by environmental group Toxic-Free Future and Vrije University Amsterdam, miscalculated the US Environmental Protection Agency's (EPA) reference dose – or the amount of exposure to a toxin that is considered safe. The study originally said the unsafe EPA dose was 42,000 nanograms per day (ng/d) instead of the actual 420,000ng/d dose.

When the study was originally released in October it was widely reported in media outlets and by environmental groups such as Beyond Plastics and Toxic-Free Future, with some suggesting that black recycled plastic kitchen utensils should be thrown out due to unsafe toxicity.

BFRs were still detected in household items, including decabromodiphenyl ether (decaBDE), but exposure levels were well below the EPA's reference dose, according to the study.

The authors of the study said that recycled black plastic from e-waste may be contaminating the feedstocks of plastic kitchen utensils, causing the presence of BFRs in food-contact applications.

Last week, the Alaskan Yurok tribe sued the EPA, accusing the agency of not adequately addressing decaBDE exposure.

The peer reviewed study was published in the journal *Chemosphere*.

By Zach Kløver

NEWS AND ANALYSIS

Mergers and acquisitions

Cedo acquires Lithuanian recycler Plasta Group

UK-based recycler and films manufacturer Cedo has acquired Lithuanian-based competitor Plasta Group.

Plasta's annual mechanical PE films recycling capacity of 45,000 t/yr will boost Cedo's capacity, including factories in the UK, Poland, the Netherlands and Vietnam, to more than 200,000 t/yr. Both firms have integrated facilities to produce downstream film products including refuse sacks and food bags, many of which incorporate recycled content.

"This partnership strengthens our ability to lead the circular economy in our sector, delivering innovative solutions to our customers and driving a more sustainable future," said Cedo chief executive Thierry Navarre.

By Will Collins

Revolution acquires Michigan film recycler

Arkansas-based film recycler Revolution Sustainable Solutions has acquired Michigan-based film recycler Island Plastics, expanding its total input capacity to more than 300mn lbs/yr.

Island Plastics recycles post-consumer low-density and linear low-density polyethylene (rLDPE/LLDPE), with an input capacity of over 25mn lb/yr.

Revolution said the acquisition would help the company expand its customer offerings of post-consumer food grade clear rLDPE.

Revolution declined to disclose financial terms of the

deal.

Last year, Revolution acquired a letter of no objection from the US Food and Drug Administration for its recycled linear low-density polyethylene (LLDPE), allowing its product to be used for food contact purposes.

In January this year, Revolution acquired Canadian agricultural film recycler PolyAg.

By Zach Kluver

Vitol takes controlling stake in pyrolysis recycler WPU

Trading company Vitol has acquired 66.84pc of pyrolysis chemical recycler Waste Plastic Upcycling (WPU), taking its total holding in the company to approximately 90.36pc.

Vitol already has an offtake agreement in place for products from WPU's existing pyrolysis site in Faarevelje, Denmark, and future sites, which it bolstered in July 2023 when upping its stake in the company to 24.7pc.

WPU started up its Faarevejlje facility in mid-2023 and reported at the end of November that the facility had recycled 1,970t of plastic waste through the first three quarters of 2024, suggesting average operating rates of 6.25pc during this period against its stated nameplate input capacity of 42,000t/yr. It said that it had focussed on optimising its process in the third quarter, resulting in an increase in production in October.

The total value of the transaction, subject to certain conditions precedent being fulfilled or waived, is NOK 528,419,910 (\$47.1mn).

By Will Collins

Chemical recycling project tracker

Keep a track of the global chemical recycling project pipeline, including a view on capacities and pyrolysis oil offtake agreements, with our chemical recycling project tracker, available on Argus Direct at <https://direct.argus-media.com/dataanddownloads>.

Search Data and Downloads from your dashboard to find out more.

ANNOUNCEMENTS

Changes to Argus Recycled Polymers methodology

Following consultation, Argus announces changes to its recycled polymers coverage beginning on 3 January. Please note the additional definition change to rPP grey, high MFI, plant pot and bucket, after a supplementary consultation announced in prior reports.

Pyrolysis oil plastic-derived cracker grade fca Europe

Argus will redefine its cracker-grade pyrolysis assessment as the price of light fraction pyrolysis oil and will no longer consider for inclusion in the assessment information about trade in hydrotreated product because the market values hydrotreated and fractionated product differently. The market to date has been for light fraction, rather than hydrotreated product, so the change is not anticipated to materially affect published prices.

Argus will consider adding an assessment for hydrotreated pyrolysis oil when this market is more developed.

Definition changes

Argus will make the following specification changes to align assessments more closely with the traded market.

- Add “hot-washed” to the definition of all rPET flake assessments
- Northwest Europe HDPE and polypropylene rigid bale PCR prices will be defined only by the D329 or D324 (D324 including post-consumer bales with higher flexible content, sometimes called “D324 minus 1”) standards, respectively. At present Argus restates part of those specifications separately
- rPP grey, high MFI, plant pot and bucket delivered northwest Europe: change the specification to MFI 40-50 from MFI 25-40 and adjust the end-use definition to “suitable for less-demanding consumer facing applications e.g. plant pots, and can in some cases be used as part of a blend for bucket applications” from “suitable for less-demanding consumer facing applications e.g. plant pot, buckets”
- rPP IM, black delivered northwest Europe: change the colour range to “black or resultant colour from non-colour-sorted waste”, from “black”. The name of the assessment will change to “dark/black”, accordingly
- rHDPE BM grey, non-FDA approved, ex-works US Midwest: change the colour to “grey” from “light grey”
- rHDPE general purpose black/dark USC/lb month 1: remove “pipe” as an end-user market and change the colour range to “black or resultant colour from non-colour-sorted waste”, from “black or dark-coloured”
- rPP IM black/dark USC/lb: change the colour range to “black or resultant colour from non-colour-sorted waste”, from “black or dark-coloured”

Price discontinuations

Argus will discontinue the following assessments owing to limited market size or subscriber interest:

- rHDPE IM black delivered northwest Europe
- rLDPE/LLDPE IM black delivered northwest Europe
- Bottle bale colourless, from municipal collection, delivered Spain

NEWS IN BRIEF

NextChem and Rohm will partner to chemically recycle polymethyl methacrylate at NextChem's plant in Montorio Al Vomano, Italy.

Dow and Innventure have partnered to commercialize new waste recycling technologies, and the new project will aim to make petrochemical feedstocks from mixed plastic waste.

Loop Industries, a developer of PET depolymerisation technology, announced that it has sold its first technology licence to Reed Societe Generale Group, an investment firm majority-owned by French bank Societe Generale. The licence, to build one PET depolymerisation plant using Loop technology in Europe, is being granted to a European part-

nership 90pc owned by Reed Societe Generale and 10pc by Loop. Loop received €10mn through a convertible preferred security financing with Reed Societe Generale in the same transaction.

Finnish refiner Neste announced that it has added a mass balance attributed biobased petrochemical feedstock to its Neste RE portfolio. The feedstock will be produced by co-processing co-processing renewable raw materials such as used cooking oil (UCO) together with fossil crude oil in its Porvoo refinery. It said that the feedstock will "reduced carbon footprint compared to conventional fossil feedstock used in the chemicals industry".



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