

bvse market report: plastics, June 2023

1 General economy and reference to the plastics industry

On 15 June 2023, Plastics and Rubber Machinery Construction in the VDMA published its annual assessment under the heading "Transformation in a Difficult Environment – Incoming Orders Collapse by 30 Percent in the First Quarter, see <https://www.vdma.org/viewer/-/v2article/render/80949646>.

German plastics and rubber machinery builders ended 2022 with a price-adjusted increase in revenue of 10 percent. In nominal terms, the growth was 18 %. "This growth has come about from the many orders that were acquired in the last few years and shows that supply chains have eased slightly," explained Ulrich Reifenhäuser, Chairman of the VDMA Specialist Association of Plastics and Rubber Machinery. Currently, order books are still healthily full, which indicates a comparatively year in terms of revenue for 2023.

Muted expectations for 2024: expectations for revenue development from 2024 are subdued. "Last year, we lost new orders to a price-adjusted degree of 13 % and, in the first quarter of 2023, this was even more pronounced at minus 33 %," said Thorsten Kühmann, Managing Director of the Specialist Association for Plastics and Rubber Machinery. "For 2024, this probably means fewer stock orders on the books that are to be processed and can be reflected in revenue."

The world economy - low growth, high inflation and high interest rates: there is not a great deal of hope that demand will pick up again in the short term. The worldwide economic climate with low growth, high inflation and correspondingly high interest rates is unsettling investors. Although the plastics and rubber machinery manufacturers will benefit from the American IRA economic package - Inflation Reduction Act- it remains to be seen whether this is enough to stimulate the world economy. The areas of e-mobility and packagings hold out the greatest likelihood of growth opportunities. In China, in particular, the transformation towards electrifying vehicles is proceeding at pace and, thanks to rising worldwide population development, the need for packaged foodstuffs is also rising. In both cases, plastics can play on its advantages.

2 Primary markets - standard plastics

Demand for standard plastics remains low in nearly all areas of plastic processing. The processors have a good supply of plastics: Virgin grade is available cheaply on the markets. At times, demand spots form, which are served quickly by the plastics processors.

In May 2023 the EUWID average price of 1,520 €/t was therefore 21 €/t lower than in the previous month (1,541 €/t). The price fall for standard plastics continued in April and May, see. Tab. 1. It will be interesting to see when new, stable pricing is reached. This raises the question whether the plastic quotes will return to the calculated, long-term mean value of 01/2012 to 12/2020 of 1,290 €/t or whether a new mean value will develop, which, according to estimates, could be around 1,450 €/t?

In a year-on-year comparison, it can be seen that the average quotes of May 2023 (1,520 €/t) were 668 €/t below those of the previous year (2,188 €/t). The quotes for plastics fell on average by 45 €/t for LDPE, 45 €/t for LLDPE, 15 €/t for HDPE, 15 €/t for PP and 65 €/t for PVC. PS was quoted an average 75 €/t higher! The situation for standard plastics and technical plastics is shown well in EUWID, see www.euwid-recycling.de, and PIE – Plastic Information Europe, see <https://pieweb.plasteurope.com/>.

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Table 1: Standard plastics prices according to EUWID over the past five months, listed in €/t.

Prices in €/t	May 2023	April 2023	March 2023	Feb. 2023	Jan. 2023
LDPE film grade	1370- 1470	1410- 1520	1460- 1570	1450- 1570	1440- 1540
LLDPE film grade	1300- 1430	1340- 1480	1370- 1520	1350- 1520	1300- 1520
HDPE injection moulding	1290- 1390	1300- 1410	1320- 1450	1320- 1450	1320- 1420
HDPE blow moulding	1270- 1400	1280- 1420	1300- 1460	1300- 1460	1280- 1430
PS crystal clear	1770- 1870	1720- 1850	1720- 1850	1800- 1900	1850- 1900
PS high impact	1900- 1970	1850- 1950	1850- 1950	1900- 2000	1900- 2000
PP homopolymer	1460- 1620	1470- 1640	1510- 1680	1500- 1680	1500- 1600
PP copolymer	1510- 1670	1520- 1690	1560- 1730	1550- 1730	1550- 1650
PVC tube grade	1310- 1410	1380- 1480	1410- 1510	1410- 1510	1460- 1510
PVC film/cables	1440- 1540	1500- 1600	1530- 1630	1530- 1630	1580- 1630
Average Price	1520 ± 213	1541 ± 190	1569 ± 180	1578 ± 200	1569 ± 205

PET: in Germany, demand for packaging PET still didn't improve in May. Demand is low and supply of bottle PET is good. Processors have recourse to replete warehouses. Temperatures in June have been much higher than in May. Experts are therefore expecting the PET markets to pick up in June.

Packaging PET was quoted at an average price of 1,240 €/t in May 2023, thus 60 €/t lower than in the previous index, also see PIE – Plastic Information Europe <https://piweb.plasteurope.com/>. EUWID states a price range from 1,120 €/t to 1,190 €/t in May 2023 for European film and bottle grade, see www.euwid-recycling.de.

3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see <http://plasticker.de>, publishes quotes on an hourly basis. The present market report indicates the final monthly prices. It is only possible to represent the preliminary prices for June 2023; they will not become definitive until early July 2023. The two quotes stated for June 2023 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

3.1 plasticker: Standard plastics

The standard plastics were quoted at an average 701 €/t in May 2023 and were thus 24 €/t higher than the average quote for April 2023 (677 €/t), see Tab. 2. The average price for May 2023 (701 €/t) was 105 €/t below that of the previous year (806 €/t).

The average May quotes were distorted by the price rises for LDPE regrind and PS regrind, which are based on very little supply. And, for this reason, the May quotes can at best be assessed as an unstable interim high with respect to the June quotes. Further price falls are probable in June.

There were significant price changes of greater than ±40 €/t only for: HDPE regranulates +70 €/t, LDPE bale goods +110 €/t and PP bale goods – 60 €/t. Considerations of price changes with supply figures that are too low are not included here. The price index for May is characterised by low demand for plastic.

The probable average price in June 2023 (631 €/t) is thus as much as 70 €/t lower than in the previous month (701 €/t), see Tab. 2. The price index of 13.06.2023, shows weakening demand for plastic.

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Table 2: Standard plastics price according to plasticker; listed in €/t.

	June ⁶ 23	May 23	April 23	March 23	Feb. 23	May 22
HDPE regrind ¹	700	640	660	730	750	740
HDPE regranulates ⁵	890	1060	990	1020	1030	1190
LDPE bale goods ²	270*	300	190*	200*	400*	330*
LDPE regrind ¹	320*	730*	410*	390*	470*	640*
LDPE regranulates ⁵	810	910	870	900	890	1030
PP bale goods ³	200*	220	280	320*	400*	250*
PP regrind ¹	740	740	750	740	760	670
PP regranulates ⁵	980	1030	1000	1050	1170	1480
PS regrind ⁴	700*	910*	810*	780*	810*	720*
PS regranulates ⁵	1250*	1210	1250*	1220	1170	1750
PVC_P regrind ¹	570*	680*	760*	800*	830*	900*
PVC_U regrind ¹	570*	500*	730*	740*	640*	730*
PET bale goods	300*	310*	230*	220*	340*	250
PET regrind mixed colours	540	570	550	550	700	600
Average Price	(631)	701	677	690	740	806

*: Supply figure too low to attain statistical significance; ¹: equivalent to the grade "post-industrial mixed colours"; ²: equivalent to K49; ³: equivalent to K59; ⁴: equivalent to "standard, mixed colours"; ⁵: equivalent to the grade "regranulates, black"; ⁶: preview (may be amended by additional quotes)

3.2 plasticker: Technical plastics

Small but fine: since February 2023, the quotes have been falling continuously in small steps. For May 2023, there was an average price of 1,848 €/t, which was only 35 €/t lower than that of the previous month (1,883 €/t), see Table 3. The quotes from May and June indicate the trend towards further falling prices. The average price for May 2023 (1,848 €/t) was 175 €/t below that of the previous year (2,023 €/t).

There were significant price changes of greater than ±70 €/t for: ABS regranulates -110 €/t, PC regranulates -140 €/t, PA 6.6 regranulates -100 €/t and POM regranulates +200 €/t. The price index for May 2023 is characterised by low demand for plastic.

The probable average price in June 2023 (1,805 €/t) is thus 43 €/t lower than in the previous month (1,848 €/t). The price index of 13.06.2023 shows very subdued demand for plastic.

Table 3: Technical plastics price according to plasticker; listed in €/t.

	June ⁶ 23	May 23	April 23	March 23	Feb. 23	May 22
ABS regrind	890	910	930	1040	1100	1370
ABS regranulates ⁵	1560	1530	1640	1780	1990	2660
PC regrind	1250	1340	1410	1320	1410	900*
PC regranulates ⁵	2190	2480	2620	2980	3320	2890
PBT regrind	740*	750	760	860*	1000*	620*
PBT regranulates	2420	2580	2620	3290	3400	2520
PA 6 regrind	1060*	1100*	1080*	960	1010	1060
PA 6 regranulates ⁵	2750	2890	2860	2930	3140	2710
PA 6.6 regrind	1380	1310	1310	1350	1380	1010*
PA 6.6 regranulates ⁵	3610	3520	3620	3780	3890	3870

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lates ⁵						
POM regrind	820*	850*	1020*	970*	990*	1110*
POM regranu- lates ⁵	2990	2920	2720	2930	3270	3560
Average Price	(1806)	1848	1883	2016	2158	2023

*: Supply figure too low to attain statistical significance; ⁵: equivalent to the grade "regranulates, black";
⁶: preview (may be amended by additional quotes)

4 Secondary plastics markets

Plastic recycling is in difficulties. This is the case for all plastics equally. The markets for waste plastics and recyclates are in a deep crisis. Demand is low, production is limited or shut down and warehouse stocks are growing constantly. The plastics recyclers' warehouses are full of input materials and they cannot find any takers for their products at the output side of the business.

The causes of this desolate situation are: first of all, the collapse in the price of virgin grade has to be mentioned. A fierce price war is being waged between virgin grade and plastic recyclates. At the moment, the cheap virgin grade is suppressing recyclates at all levels. Sales of regrinds, regranulates and compounds are sluggish.

Moreover, high costs have to be borne for energy and transport. And high pay settlements also have to be shouldered. And the prices of all the ancillary costs, for example insurance policies, maintenance, spare parts, machinery and plant are also constantly rising.

And finally, inflation means consumption is being cut. There is a tremendous collapse in demand from private and commercial consumers. Consumers can hardly afford the price rises that have been caused. Rising interest rates are having a negative impact on the construction sector.

No improvement to this fatal situation is in sight. Permanent economic operation of the recycling plants is barely possible any longer. And this dangerous situation is jeopardising recycling as a whole. The high manufacturing costs are mainly incurred in Europe; imports from the Middle and Far East are not affected by the sanctions caused by the war.

4.1 Standard plastics and technical plastics

Standard plastics: There is hardly any demand for plastic wastes from recyclers these days. Generally binding set prices can barely be stated any more. In May, EUWID continues to report falling prices for waste plastics. The quotes for PE production wastes have fallen by 28 €/t on average, PP production waste by 29 €/t, PS production waste by 23 €/t and PVC production waste together with PVC window grades by a total of 16 €/t. Only low demand for standard plastics can be seen in plasticker, too.

Technical plastics: In plasticker, the quotes have been falling continuously and in small steps since February 2023 (2,158 €/t). An average price of 1,848 €/t is calculated for May 2023. And the provisional average price for June is only 1,806 €/t. In PIE – Plastic Information Europe, the regranulate prices have fallen by between 25 €/t and 160 €/t. Although PIE – Plastic Information Europe can see a certain consolidation for technical plastics, the situation remains difficult. Demand is described as subdued, both by piweb and plasticker.

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4.2 PET Recycling

The difficulties with PET recycling continue. The recyclate prices, in this case flakes and regranulates, are coming under strong price pressure from cheap virgin grade. And what's more, there is a good supply of virgin grade.

Due to the low demand from PET recyclers for processing material, there is still good availability of beverage bottles in May. The processors' warehouses are replete with used beverage bottles. In May, the prices for used PET single-use bottles have fallen further. The relative price changes in comparison to the previous month are: PET transparent -60 €/t, PET mixed -60 €/t and PET coloured -30 €/t.

From June, more beverage bottles will come onto the markets. Processing input will therefore come down in price further. But none of this is any use if the sales of recyclates are not secured. Detailed monthly reports on the PET prices for virgin grade and used beverage bottles can be found in EUWID and PIE - Plastics Information Europe.

5 Explanation on the price quotes

A detailed discussion with information of price indices for virgin grades and waste plastics as well as precursor products can be found in EUWID Recycling and Disposal see www.euwid.de, or in EUWID Plastics www.euwid-recycling.de. EUWID: No guarantee for any of the prices.; prices ex station. As a rule, the prices quoted refer to quantities in excess of 20 tons.

The quotes for secondary prices, which are updated on an hourly basis, can be calculated using the price lists that are derived from the quotations published in the raw material exchange plasticker, see www.plasticker.de. The prices listed in this index are quoted without reservation - as the majority of the quotes submitted are not necessarily equivalent to the sales prices. Plasticker offers the quality grades regrind and regranulates both as virgin materials and as secondary goods. The term 'bale goods' refers to waste plastics only. Furthermore, plasticker does not distinguish between the following grades: transparent, mixed colours or colour-separated. Therefore, the information provided by plasticker may indicate different market behaviour than the prices quoted by EUWID

A detailed discussion with information of price indices for virgin grades and waste plastics as well as precursor products can be found in PIE - Plastics Information Europe. For virgin grades, the indices for standard plastics (Plastixx ST) and technical plastics (Plastixx TT) provide a good overview of the price trends. Piweb quotes the monthly regranulates prices for standard plastics and technical plastics in the secondary markets. For secondary plastics, there are also details on PET, in this case flakes (flakes transparent, flakes mixed colours) as well as transparent regranulates.

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