

# bvse market report: plastics, December 2022

## 1 General economy and reference to the plastics industry

The HDE consumption barometer in December: the consumer mood continued to recover in the Christmas trade. After the consumption barometer of the German Retail Association (Handelsverband Deutschland - HDE) had shown a slight recovery of the consumer mood in the previous month, the mood further improved in December. The index is continuing to improve, but is still at a low level when compared across several years. In the Christmas trade, the upswing ensured a boost to private consumption, see <https://einzelhandel.de/konsumbarometer>.

Plastics Europe Deutschland has published the Q3 2022 Report of the plastics industry in Germany, see <https://plasticseurope.org/de/wp-content/uploads/sites/3/2022/12/Quartalsbericht-Q322-Plastics-Europe.pdf>. The general economic conditions in Germany remain difficult in Q3. The continuing coronavirus pandemic, energy crisis, disrupted supply chains, high inflation rates and geopolitical tensions shaped everyday life.

The plastics manufacturing industry in Germany had to further reduce production in Q3 greatly. After production had already fallen in Q1 and Q2, it fell by 11.2 % in Q3 in comparison to the previous quarter. And the previous year's level was also clearly missed by 15.6 %. High prices for energy and raw materials, continuing problems in supply chains and weakening demand for plastics affected production. The falling demand for plastics also resulted in a greatly reduced price rise. Producer prices for plastics in the primary form rose only by 0.7 % in comparison to the previous quarter. However, the previous year's level was still greatly exceeded. Prices for gas also continued to rise significantly in Q3. On average, they were around twice as high as in the previous quarter and four times higher than in the previous year. By contrast, the prices for naphtha has fallen sharply after the peak values in Q2 and were 686 €/t on average.

In spite of the easing, the prices were still more than 22 % higher than those of the previous year. Due to the low dynamism in producer prices, the companies yields came under increasing pressure. It was more difficult for the companies to pass the increased production costs on to customers. Low dynamism in the producer prices and a clear reduction in production resulted in a revenue fall of 3.9 % in the sector when compared to the previous quarter. In Q3 revenue was 9.2 billion euros.

## 2 Primary markets - standard plastics

Plastic markets are currently determined by demand. A high supply of standard plastics is countered by extremely subdued demand from producers. The warehouses of the producers and those of processors are replete with stocks. The flow of plastics from virgin grade manufacture is stagnating.

In November, crude oil prices are also falling sharply and, as a consequence, precursors are becoming cheaper. In November 2022 the EUWID average price of 1,679 €/t was only 15 €/t lower than in the previous month (1,694 €/t), see Table 1. This indicates price stability. In a year-on-year comparison, it can be seen that the average quotes from November 2022 (1,679 €/t) were as much as 287 €/t lower than those of the previous year (1,966 €/t), see EUWID, [www.euwid-recycling.de](http://www.euwid-recycling.de). The quotes for LDPE fell by an average 10 €/t, PP by 10 €/t, PS by 25 €/t and PVC by 25 €/t. LLDPE and HDPE were quoted at unchanged prices.

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

Prices in €/t	November 2022	Oct. 2022	Sept. 2022	Aug. 2022	July 2022
LDPE film grade	1570- 1670	1550- 1650	1600- 1700	1650- 1800	1750- 1900
LLDPE film grade	1450- 1650	1450- 1650	1550- 1700	1600- 1750	1700- 1850
HDPE injection moulding	1450- 1550	1450- 1550	1400- 1550	1450- 1650	1550- 1700
HDPE blow moulding	1400- 1550	1400- 1550	1350- 1500	1400- 1600	1500- 1700
PS crystal clear	1850- 1900	1850- 1950	1850- 1950	2050- 2150	2450- 2550
PS high impact	1900- 2000	1900- 2050	1900- 2000	2100- 2200	2500- 2600
PP homopolymer	1630- 1760	1630- 1780	1680- 1830	1880- 2030	2030- 2180
PP copolymer	1680- 1810	1680- 1830	1730- 1880	1930- 2080	2080- 2230
PVC tube grade	1580- 1680	1630- 1730	1680- 1780	1730- 1830	1790- 1890
PVC film/cables	1700- 1800	1750- 1850	1800- 1900	1840- 1940	1890- 1990
<b>Average Price</b>	<b>1679 ± 164</b>	<b>1694 ± 177</b>	<b>1717 ± 181</b>	<b>1833 ± 230</b>	<b>1992 ± 332</b>

PET: The PET markets are very well supplied with European goods and imports. A very large supply of PET is countered by much lower demand. The move into processing is stalling because demand for goods is falling due to the recession and for seasonal reasons. Moreover, the producers' and processors' warehouses are replete with stock. Further price falls are likely.

Packaging PET was quoted at an average price of 1,470 €/t in November 2022, and thus 60 €/t lower than in the previous month. European PET for packagings and bottles was quoted on average at 1,300 €/t in December 2022. The current PET quotes refer to the information from EUWID [www.euwid-recycling.de](http://www.euwid-recycling.de) and from PIE – Plastics Information Europe <https://www.pieweb.plasteurope.com/>.

### 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 the month of the report, in this case December 2022; they will not become definitive until early January 2023. The two quotes stated for December 2022 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

#### 3.1 plasticker: Standard plastics

In November, too, we had further falling quotes for standard plastics. In November, the standard plastics were quoted at an average 741 €/t and were thus 42 €/t lower than the average quote for October of 783 €/t, see Tab. 2. The average price for November (741 €/t) was a good 155 €/t above that of the previous year (586 €/t). The November price index is characterised by slightly better demand for plastic than in the previous month. The Christmas break cannot yet be felt in this demand.

Marked price changes can be seen in the individual commodities. There were significant price changes of greater than ±40 €/t for: HDPE regranulates -100 €/t, LDPE bale goods +160 €/t, LDPE regrind -80 €/t, LDPE regranulates -50 €/t, PP regrind -60 €/t, PS regrind -160 €/t, PVC\_P -160 €/t, PVC\_U -80 €/t and PET regrind mixed colours +60 €/t.

The probable average price in December 2022 (743 €/t) is practically the same as in the previous month (741 €/t) see Tab. 2. The price index of 13.12.2022, shows subdued demand for plastic.

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

	December <sup>6</sup> 22	Nov. 22	Oct. 22	Sept. 22	August 22	Nov. 21
HDPE regrind <sup>1</sup>	660	720	760	770	780	580
HDPE regranulates <sup>5</sup>	1030	960	1060	980	1080	960
LDPE bale goods <sup>2</sup>	440*	310	150*	270	290	350*
LDPE regrind <sup>1</sup>	460*	520*	600*	560*	500*	430*
LDPE regranulates <sup>5</sup>	900	940	990	990	910	890
PP bale goods <sup>3</sup>	480	380	400*	470*	230*	380*
PP regrind <sup>1</sup>	780	840	900	790	750	730*
PP regranulates <sup>5</sup>	1120	1090	1130	1300	1480	1530
PS regrind <sup>4</sup>	820*	870*	1030*	1100*	750*	760*
PS regranulates <sup>5</sup>	1240	1220	1230	1470*	1640	990
PVC_P regrind <sup>1</sup>	830*	860*	1010*	900*	620*	0*
PVC_U regrind <sup>1</sup>	520	730*	810*	720*	700*	0*
PET bale goods	410*	400	400	450*	360*	90*
PET regrind mixed colours	710	550	490	480	560	520
<b>Average Price</b>	<b>(743)</b>	<b>741</b>	<b>783</b>	<b>804</b>	<b>761</b>	<b>586</b>

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

### 3.2 plasticker: Technical plastics

The quotes for technical plastics are continuously falling in small steps. For November 2022, there was an average price of 1,873 €/t, which was 31 €/t lower than that of the previous month (1,904 €/t), see Table 3. The average price for November 2022 (1,873 €/t) was 156 €/t above that of the previous year (1,717 €/t).

Marked price changes can be seen in the individual commodities. There were significant price changes of greater than ±70 €/t for: ABS regrind -170 €/t, PC regranulates +150 €/t, PBT regranulates +270 €/t, PA 6.6 regrind -110 €/t, PA 6.6 regranulates +260 €/t and POM regranulates -600 €/t. And what a price drop for POM regranulates! The price index for November 2022 is characterised by subdued demand for plastic.

The probable average price in December 2022 (1,849 €/t) is thus 24 €/t lower than in the previous month (1,873 €/t). The price index of 13.12.2022 shows subdued demand for plastic. The POM quotes will probably fall sharply again in December.

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

	December <sup>6</sup> 22	Nov. 22	Oct. 22	Sept. 22	Aug. 22	Nov. 22
ABS regrind	880	840	1010	1040	960	880
ABS regranulates <sup>5</sup>	1790	1820	1810	1990	2390	1900
PC regrind	1360*	1310*	1340	1270	1210	1010
PC regranulates <sup>5</sup>	2580	2820	2670	2520	2700	2560
PBT regrind	680*	700*	720*	820	690	680*
PBT regranulates	2330*	2310	2040	2260	2510	2170
PA 6 regrind	990*	1070	1130	1110	1060	950*
PA 6 regranulates <sup>5</sup>	3130	3020	3050	3050	3100	2480
PA 6.6 regrind	1530	1180*	1290	1410	1410	1190

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PA 6.6 regranalates <sup>5</sup>	3860	3760	3500	3520	3570	3190
POM regrind	740*	860	900*	890	830	800
POM regranalates <sup>5</sup>	2320	2790	3390	3300	3470	2790
<b>Average Price</b>	<b>(1849)</b>	<b>1873</b>	<b>1904</b>	<b>1932</b>	<b>1992</b>	<b>1717</b>

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

### 4 Secondary plastics markets

2022 was a difficult year for plastics. Up to April it was characterised by a lack of virgin grade plastics, which then developed into excess supply. And all of this had drastic consequences for secondary plastics - great, even the greatest, volatilities resulted. Recyclates were in demand until April, highly sought, even. In the shortage, neither price nor grade counted, only availability. And now, with a surplus of virgin grade, these same grades are once again too expensive, too poor - the poor relations again. It is high time that plastics processors find a way to deal with recyclates rationally, irrespective of the market.

Surprisingly, the crisis has shown that the pricing of virgin grade is completely different from that of recyclates. Whereas virgin grade largely map the ecologically disadvantageous mineral oil route, recyclates are particularly environmentally friendly - they protect raw materials, energy consumption and they reduce greenhouse gas emissions. For virgin grades, the plastics prices are indirectly dependent on the prices for crude oil. Indirectly because the naphtha price and the price for the precursor products influence the plastics prices more clearly than the crude oil. By contrast, recyclates depend on the availability of the collected items and the costs for sorting and treating them.

The plastics recyclers who have weathered the threats of coronavirus since March 2020 and those of the war in Ukraine since February 2022 are owed the greatest respect. It is incredibly difficult to absorb the constantly rising costs for energy, transport, bureaucracy and wages and to master the existing market turbulence. And moreover, the legislator constantly disadvantages recycling by SMEs, see the unequal treatment under competitive conditions, instead of encouraging them. For example, we see that plastic recycling is discriminated against in the Electricity Price Break Act [StromPBG] and the classification in NACE in comparison to plastics producers and processors, see <https://www.bdsv.org/unser-service/presse/news-gemeinsame-presseerklaerung-von-bdsv-bde-bvse-und-vdm-recyclingwirtschaft-fordert-nachbesserungen/>.

#### 4.1 Plastic wastes and recyclates

Plastics recyclers are suffering from the higher costs, which are thwarted by falling recyclate prices. Recyclers started an extended winter break as early as November. Plastics recyclers have been reducing their production for some time. Price indices depict market trends well, but transactions can be well below the stated prices. The EUWID quotes for plastic waste, i.e., bale goods, in this case PE, PP, PS, and PVC, are quoted slightly lower than in the previous months. Plastics recyclers are well supplied with processing input.

#### 4.2 PET Recycling

After a brief pause, the struggle for the distribution of PET for recycling has been given a fresh impetus. PET for recycling from beverage bottles is highly sought-after. Preform manufacturers and fillers are trying to secure their allocations of PET for recycling. Slowly, packers are becoming aware that PET for recycling is the only plastic that is food-safe. The revision

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of the European Packagings Directive (PPWD) casts a long shadow with respect to quotas for recyclates for contact-sensitive packagings.

But the above-mentioned distribution struggle cannot be seen in the markets. There is excellent availability of virgin grade in Germany and from importers. The very good supply of cheap virgin grade is putting PET recycling under considerable pressure.

Falling virgin grade prices are increasing the pressure on PET recycling. Used PET bottles are readily available on the markets. PET recyclers are further expanding their warehouses. Foreign goods are also readily available on German markets. In November, too, the prices for used PET single-use bottles have once again fallen significantly: PET transparent - 135 €/t, PET mixed -130 €/t and PET coloured -90 €/t. Detailed monthly reports on the PET prices for virgin grade and used 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](http://www.euwid.de), or in EUWID Plastics [www.euwid-recycling.de](http://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](http://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

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