# bvse market report: on plastics, October 2021

#### **1** Position Paper: Plastics for Circular Economy and Climate Protection

The German plastics and recycling industry has published a joint position on the circular economy and climate protection, see <u>https://www.bvse.de/dateien2020/2-PDF/02-Presse/03-Kunststoff/2021/2021</u> Kunststoffe fuer Kreislaufwirtschaft und Klimaschutz .pdf. The representatives of the plastics value-added chain are thus setting a clear signal for constructive cooperation among themselves. Their declared goal is a functioning circular economy for plastics in order to benefit even more from the advantages of the material.

The transformation of the industry is already well underway. The move to a circular economy changes the way in which plastic products will be manufactured, used, and recycled in the future. At the same time, it presents great opportunities for sustainable growth and managing in the industry. One important prerequisite for this is that the end of products' lives must be considered during development and manufacture; recyclability and the use of recyclates are the key requirements for circular progress.

A catalogue of measures for more circular economy: The position paper contains detailed proposals concerning which areas need changes for the required impulses for more circular economy. As well as recycling-friendly product design, dealing with exports of waste plastics or the EU-wide end of their landfill and the expansion of disposal and recovery structures, this also includes improving the market conditions for the use of recyclates. A clear political timetable and the necessary legal framework conditions are needed for this.

Close alliance between the plastics and recycling industry: The plastics processing industry associations, the GKV Umbrella Association of the Plastics Processing Industry and its sponsor associations, Plastics Europe Deutschland and the VDMA Specialist Association of Plastics and Rubber Machinery, on the one hand, and the Organisations of the disposal and recycling industry BDE and byse have adopted a joint position on more circular economy and climate protection.

Together, the associations want to advance open exchange and dialogue on innovations and sustainable developments in the plastics processing industry, in particular towards a circular economy. With an annual turnover of more than EUR 100 billion, a high export ratio and its innovative capacity, the plastics processing industry with its increasingly more sustainable direction is among the world's best, not just in high-tech applications.

#### 2 Primary markets

Plastics are still being traded at very high prices. The processors' demand for standard and technical plastics is high. The supply situation for standard plastics has improved slightly in comparison to the previous month. By contracts, there has been no improvement for technical plastics; only production shutdowns are reducing demand for plastics.

Circuli vitiosi – Vicious Circle\_1: Freight capacities are still tight, there is thus a shortage of containers for transport on water and land. Moreover, there are not enough drivers to transport raw materials and goods. And finally, there is a shortage of HGVs because new HGVs cannot be manufactured or delivered due to a scarcity of production parts.

Circuli vitiosi – Vicious Circle\_2: In addition to the supply crisis, the rises in energy prices, principally for natural gas and electricity, also have to be taken into account in the increased costs. As a result, precursor products, the plastics themselves and the goods manufactured from them become much more expensive.

#### 2.1 Standard plastics

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The prices for standard plastics are quoted broadly stable, with a tendency to further rising prices. In October 2021 the average price of  $1,834 \notin t$  was an average  $12 \notin t$  higher than in the previous month  $(1,822 \notin t)$ , see Table 1. In a year-on-year comparison, it can be seen that the average quotes from October 2021  $(1,834 \notin t)$  were  $840 \notin t$  higher than those of the previous year (994  $\notin t$ ), see EUWID, <u>www.euwid-recycling.de</u>. Plastics made of PS recorded prices rising by  $20 \notin t$  and PVC was quoted  $50 \notin t$  higher; PE and PP remained unchanged.

PET: The PET boom is continuing. In packaging, the trend towards PET is unchanged. However, supply of virgin grades is stagnating. No end to the supply crisis is in sight for the time being. In October 2021, packaging PET was quoted on average at 1,570  $\in$ /t and thus 165  $\in$ /t higher than in the previous month, see <u>https://www.kiweb.de/</u>. Contract volumes are available in the range of 1,150  $\in$ /t to 1,250  $\in$ /t, see <u>www.euwid.de</u>. It is surprising that the shortage of PET has not further advanced PS, which could be used as an alternative packaging material.

Prices in €/t	October 2021	Sept. 2021	Aug. 2021	July 2021	June 2021
LDPE film grade	1800- 1950	1800- 1950	1800- 1950	1900- 2050	2000- 2150
LLDPE film grade	1750- 1900	1750- 1900	1750- 1900	1850- 2000	2000- 2150
HDPE injection moulding	1600- 1800	1600- 1800	1600- 1800	1700- 1900	1900- 2050
HDPE blow moulding	1550- 1750	1550- 1750	1550- 1750	1650- 1850	1900- 2050
PS crystal clear	1720- 1820	1700- 1800	1750- 1850	1750- 1850	1950- 2100
PS high impact	1820- 1920	1800- 1900	1850- 1950	1850- 1950	2050-2200
PP homopolymer	2050- 2250	2050- 2250	2050-2250	2050- 2250	2050- 2250
PP copolymer	2100-2300	2100- 2300	2100-2300	2100-2300	2100-2300
PVC tube grade	1550- 1650	1500- 1600	1480- 1580	1450- 1550	1400- 1500
PVC film/cables	1650- 1750	1600- 1700	1580- 1680	1550- 1650	1500- 1600
Average Price	1834 ± 212	1822 ± 222	1826 ± 227	1860 ± 229	1960 ± 259

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

#### 2.2 Technical plastics

The strong demand for technical plastics is still countered with shortages - and this leads to price rises. In October 2021, technical plastics were quoted in EUWID, see <u>www.euwid-recycling.de</u>, at 3,548 €/t and thus an average 73 €/t higher than in August 2021 (3,475 €/t), see Table 2. The average price in October 2021 (3,548 €/t) was 1,440 €/t higher than that of October in the previous year (2,108 €/t). The above-mentioned price changes are due to an average increase for PMMA of 150 €/t, ABS of 50 €/t, PC of 50 €/t, POM of 200 €/t and PA 66 of 100 €/t.

Table 2: EUWID quotes for technical prices, which are published every two months, over the last six months; prices in €/t.

Prices in €/t	October 2021	August 2021	June 2021	April 2021
PMMA crystal clear	3500 – 3750	3350 – 3600	3050 - 3300	3050 - 3300
ABS natural	2850 - 3050	2800 – 3000	2800 - 3000	2800 - 3000
ABS w/b	2950 – 3150	2900 – 3100	2900 - 3100	2900 - 3100
ABS coloured	3600 - 3800	3550 - 3750	3550 - 3750	3550 - 3750
PC crystal clear	4000 - 4200	3950 – 4150	3950 – 4150	3450 – 3650
PC GF-reinforced	4400 - 4600	4350 – 4550	4350 – 4550	3850 - 4050
POM natural	2350 – 2550	2150 – 2350	2150 – 2350	2150 – 2350
PA 6 natural/black	2700 – 2800	2700 – 2800	2700 – 2800	2500 - 2600
PA 6 GF-reinforced	3050 – 3150	3050 – 3150	3050 – 3150	2850 – 2950

PA 66 natural	4150 – 4500	4050 - 4400	3850 - 4200	3700 – 4000
PA 66 GF-reinforced	4300 – 4650	4200 – 4550	4000 - 4350	3850 – 4150
Average Price	3548	3475	3411	3252

#### 3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see <u>http://plasticker.de</u>, 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 November 2021; they will not become definitive until early July. The two quotes stated for November 2021 below therefore indicate only an interim situation, see the left-hand column in Table 3 and Table 4.

### 3.1 plasticker: Standard plastics

The average price for October 2021 (549  $\in$ /t) was thus 58  $\in$ /t higher than that of the previous month (491  $\in$ /t). 3. The average price for October 2021 (549  $\in$ /t) was 79  $\in$ /t above that of the previous year (470  $\in$ /t). There were significant price changes of greater than ±40  $\in$ /t for: HDPE regrind -50  $\in$ /t, HDPE regranulates +50  $\in$ /t, LDPE regranulates +50  $\in$ /t and PET regrind mixed colours +100 $\in$ /t. The changes to the quotes for LDPE bale goods, PVC\_P, PVC\_U and PET bale goods are not taken into account due to the small number of reports. At 340  $\in$ /t, LDPE regrind was now at a 5-year low. The regrinds of PP (650  $\in$ /t), PS (700  $\in$ /t) and PET\_mixed colours (520  $\in$ /t) have reached 5-year highs. The price index is characterised by adequate demand for plastic.

The preview of the November quotes shows a higher average price in the amount of  $585 \notin t$  than that of the previous month ( $549 \notin t$ ), see Table 3. The price index of 12.11.2021 shows just satisfactory demand for plastic to date.

	November <sup>6</sup> 21	October 21	Sept. 21	Aug. 21	July 21	October 20
HDPE regrind <sup>1</sup>	590	570	620	630	600	490
HDPE regranu- lates <sup>5</sup>	960	880	830	920	930	690
LDPE bale goods <sup>2</sup>	130*	170*	290*	270*	240	170
LDPE regrind <sup>1</sup>	530*	340*	380	420	450	470
LDPE regranu- lates <sup>5</sup>	860	740	690	700	720	590
PP bale goods <sup>3</sup>	570*	570*	0*	0*	200*	270*
PP regrind <sup>1</sup>	750*	650	620	570	560	480
PP regranulates <sup>5</sup>	1370	970	930	880	910	710
PS regrind <sup>4</sup>	820*	700	700*	650*	600	550
PS regranulates <sup>5</sup>	1070	920	890	850*	960	930
PVC_P regrind <sup>1</sup>	0*	360*	270*	400*	350*	480*
PVC_U regrind <sup>1</sup>	0*	0*	50*	540*	520*	420
PET bale goods	0*	290*	180*	160*	200	70*
PET regrind mixed colours	540	520	420	440	480	260
Average Price	(585)	549	491	531	551	470

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

\*: 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

For October 2021, there was an average price of 1,553 €/t, which was 65 €/t lower than that of the previous month (1,569 €/t), see Table 4. The average price for October 2021 (1,553 €/t) was as much as 380 €/t higher than that of the previous year (1,173 €/t).

These plastics show price changes of more than  $\pm$  70  $\in$ /t: ABS regranulates -90  $\in$ /t, PC regranulates -180  $\in$ /t, PBT regrind -170  $\in$ /t, PA 6 regrind -170  $\in$ /t, PA 6.6 regrind -140  $\in$ /t, PA 6.6 regranulates +410  $\in$ /t and POM regranulates +450  $\in$ /t. Overall, there is a great deal of movement in the individual quotes. PA 6.6 regranulates recorded a 5-year high. Regranulates are volativle; this can be seen in the rollercoaster of prices. The price index shows a satisfactory demand for plastic.

The boom in technical plastics is continuing. The probable average price in November (1,705  $\in$ /t) is quoted much higher than in the previous month (1,553  $\in$ /t). The October price index of 16.11.2021 shows only adequate demand for plastic.

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	November <sup>6</sup> 21	October 21	Sept. 21	Aug. 21	July 21	Oct. 21
ABS regrind	810	680	660	630	630	550
ABS regranu- lates⁵	1890	1810	1900	2390	2280	1000
PC regrind	960	950	930	1000	860	820
PC regranulates <sup>5</sup>	2430	2230	2410	2130	1980	1730
PBT regrind	680*	540	710	560	540	440
PBT regranulates	2360	2210	2200	2440	2080	1600
PA 6 regrind	970*	890	1060	970	900	820
PA 6 regranu- lates⁵	2470	2360	2420	2310	2420	1670
PA 6.6 regrind	1180	930	1070	1040	930	860
PA 6.6 regranu- lates⁵	3100	2980	2570	2550	2830	2090
POM regrind	750*	730	700	650	690	540
POM regranu- lates⁵	2860	2330	2780	2160	2250	1960
Average Price	(1705)	1553	1618	1569	1533	1173

Table 4: Technical plastics price according to plasticker; listed in €/t.

<sup>5</sup>: equivalent to the grade "regranulates, black"; <sup>6</sup>:preview (may be amended by additional quotes).

### 4 Secondary Plastics Markets

#### 4.1 International plastics shipping

The new Correspondents' Guidelines No. 12 from the EU-COM is now available, which explains the requirements for the shipping of plastic wastes, see

https://ec.europa.eu/environment/system/files/2021-

<u>11/Correspondents%27%20guidelines%20No%2012%20final%20Nov%202021.pdf</u>. The new Guidelines will take effect on 3 December.

Entries B3011 and EU3011 describe the green-listed plastics. Entries A3210 and AC300 describe plastics that are classed as hazardous and for which notification is required. In contrast to this, Entries Y48 and EU48 describe mixtures of non-hazardous plastics, for which notification is also required.

Guideline No. 12 determines that the share of materials alien to plastics for shipping will be set at 6 % within the EU and 2 % outside the EU. It must also be remembered that there are

differences between the European entries EU3011, AC 300, EU48 and the international entries B3011, A3210 and Y48.

#### 4.2 Plastic wastes and recyclates

In EUWID, there is a mathematical average price rise of 8  $\in$ /t across all quoted commodities. In plasticker the standard plastics are quoted much higher, namely by an average 58  $\in$ /t. This difference is due to the fact that plasticker quotes waste, recyclates and virgin grades in its price information.

The EUWID price index for October shows rises for bale goods and regrinds. And the EUWID price index shows rises both for production wastes and for PE post user wastes. The price rises for all wastes are in the range of  $5 \notin t$  to  $20 \notin t$  on average. And some price changes are lopsided, i.e., either at the lower or the upper price margin.

There is particular demand for film wastes. In the film sector, the volume from pi - post industrial - and pc - post consumer - is still limited. PE production wastes are quoted an average 8  $\in$ /t higher. PP production wastes are quoted an average 10  $\in$ /t higher. PVC production wastes are quoted an average 10  $\in$ /t higher. PVC window grade are quoted an average 8  $\in$ /t higher. Prices for production wastes made of PS were quoted unchanged.

The changed prices for PE post user wastes are as follows: LDPE shrink hoods natural 460-540 €/t, LDPE shrink hoods mixed colours 140-220 €/t, film transparent natural <70 µm 320-365 €/t, film transparent coloured <70 µm 80-110 €/t, LDPE agricultural film b/w -40 bis -20 €/t, commercial mixed film (90/10) 180-215 €/t, commercial mixed film (80/20) 140-170 €/t, HDPE blow-moulded bodies\_coloured 200-290 €/t, HDPE crates\_mixed colours 530-670 €/t and HDPE crates\_mixed colours 450-530 €/t.

## 4.3 PET Recycling

Exceedingly high demand for PET recyclates can be seen. PET is setting the trend in the packaging sector, in this case for bottles, dishes and films. In the packagings sector, the demand for PET flakes and PET regranulates is very, very high. In particular, food retailers are trying to secure the required quotas of r-PET for.

The PET recyclers are still complaining about the severely insufficient quantities of used beverage bottles. Buying used PET bottles from abroad is much harder. For example, making up the quantities with imports from OECD and non-OECD countries is no longer possible due to the EU Commission's irrational import restrictions. The prices for used PET single-use bottles changed in October as follows: PET transparent +10  $\in$ /t, PET mixed +10  $\in$ /t, and PET coloured ±0  $\in$ /t.

The shortage of PET is driving the prices both for virgin grade and for recyclates. The virgin grade prices, see EUWID and KI Plastics Information Europe are going through the roof. And the virgin prices are actually exceeded by the prices for PET regrinds and PET regranulates. 1,800  $\in$ /t to 1,950  $\in$ /t are charged for food-safe regranulates. Detailed monthly reports on the PET prices for virgin grade and used bottles can be found in EUWID and KI 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 <u>www.euwid.de</u>, or in EUWID Plastics <u>www.euwid-kunststoff.de</u>. EUWID: No guarantee for

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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 <u>www.plasticker.de</u>. 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

Bonn, Friday, 3. December 2021 Dr Thomas Probst, bvse