

bvse market report: plastics, September 2020

1 Germany: Top position or crisis in plastic recycling?

The study Material Flow Analysis for Plastics in Germany 2019 (Conversio Study), which is updated every two years, has just been published. The Conversio Study identified higher quantities of recyclates in 2019, see https://www.bvse.de/dateien2020/2-PDF/02-Pressse/03-Kunststoff/2020/0909-Kurzfassung_Stoffstrombild_2019.pdf.

The result for 2019 shows that recycled plastics were used more often than in the past and are becoming increasingly important for new plastic products. For example, last year, 13.7 % of the plastics processed were recyclates; two years previously, the proportion was just 12.3 %. Since the last survey in 2017, the amount of recyclates per year rose by around 5 %, which in turn led to a fall in the amount of new plastics used; in the same period, this fell by 2.5 %.

However, if you scrutinise the figures, you see a much more nuanced picture, see the bvse press release <https://www.bvse.de/gut-informiert-kunststoffrecycling/pressemitteilungen-kunststoffrecycling/6234-rezyklate-und-kreislauffuehrung-bei-kunststoffen.html>.

The amount of recyclates used of 13.7 % also includes 6.5 % post-production waste; this means that the amount of Post Consumer Recyclates (PCR) is only 7.2 %. Or put another way: only 430,000 tonnes virgin grade plastics were replaced by PCR recyclates in 2019. And the rise in the use of recyclates is based on the fact that the recyclates are not used for packaging plastics, but for products in building construction and civil engineering; this proportion is 580,000 tonnes. It is to be expected that the proportion of recyclates will continue to fall in 2020.

2 The primary plastics market

2.1 Standard plastics

The demand for plastics is improving slightly. For the third time, the record lowest price from May 2020 has been breached. Whereas private consumption of packaging plastics is at a constantly high level, demand in the trade and industry sectors is weakening.

In August 2020, the standard plastics were quoted in EUWID, see www.euwid-recycling.de, at 961 €/t and thus an average 17 €/t higher than in the previous month (944 €/t), see Table 1. In a year-on-year comparison, it can be seen that the average quotes from July 2020 (961 €/t) were 209 €/t lower than those of the previous year (1,170 €/t). In August 2020, all standard plastics, except for PS, were quoted higher: LDPE +30 €/t, LLDPE +20 €/t, HDPE +30 €/t, PP +15 €/t and PVC +15 €/t.

Packaging PET was quoted at an average price of 970 €/t in March, thus 5 €/t lower than in the previous month. PET was quoted at a stable, but low, price. The collapse in demand due to covid continues. There is a lack of impetus in the market.

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

Prices in €/t	August 2020	July 2020	June 2020	May 2020	April 2020
LDPE film grade	880- 980	850- 950	810- 910	790- 890	830- 930
LLDPE film grade	890- 990	870- 970	830- 930	810- 900	850- 950
HDPE injection moulding	890- 970	860- 940	820- 900	790- 870	820- 900
HDPE blow moulding	900- 1000	880- 960	840- 920	820- 900	850- 930
PS crystal clear	1030- 1090	1030- 1090	990- 1050	950- 1010	950- 1170
PS high impact	1110- 1180	1110- 1180	1070- 1140	1030- 1100	1030- 1100
PP homopolymer	1020- 1080	1000- 1060	970- 1030	940- 1000	990- 1040
PP copolymer	1060- 1120	1050- 1110	1020- 1080	990- 1050	1040- 1090
PVC tube grade	710- 760	700- 740	680- 720	660- 700	710- 750
PVC film/cables	750- 800	740- 780	720- 760	700- 740	750- 790
Average Price	961 ± 134	944 ± 138	910 ± 134	882 ± 128	916 ± 118

2.2 Technical plastics

The first positive reports have been seen in technical plastics. Demand is growing slightly, because production is slowly rising again. However, this market impetus is not yet reflected in the price quotes, which were stable in August. In August 2020, the standard plastics were quoted in EUWID, see www.euwid-recycling.de, at 2,094 €/t and thus almost the same as in June (2,099 €/t), see Table 2. The average price in August 2020 (2,094 €/t) was 500 €/t lower than that of August in the previous year (2,594 €/t). PMMA was able to hold its own very well up to April 2020 because of the strong demand for partitions or sneeze guards; but the quotes fell by 200 €/t in June 2020. In August the June level was maintained at an average 2,800 €/t.

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

Prices in €/t	August 2020	June 2020	April 2020	February 2020
PMMA crystal clear	2700 – 2900	2700 – 2900	2900 – 3100	2900 – 3100
ABS natural	1350 – 1400	1280 – 1330	1350 – 1400	1550 – 1600
ABS w/b	1450 – 1500	1380 – 1430	1450 – 1500	1650 – 1700
ABS coloured	2050 – 2070	1980 – 2130	2050 – 2200	2250 – 2400
PC crystal clear	1900 – 2000	2000 – 2100	2150 – 2250	2300 – 2500
PC GF-reinforced	2100 – 2200	2200 – 2300	2350 – 2450	2500 – 2700
POM natural	1750 – 1900	1750 – 1900	1800 – 1900	1850 – 1950
PA 6 natural/black	1800 – 1900	1800 – 1900	1800 – 1900	1850 – 2000
PA 6 GF-reinforced	1850 – 1900	1850 – 1900	1850 – 1900	1950 – 2000
PA 66 natural	2800 – 2900	2800 – 2900	3000 – 3100	3150 – 3250
PA 66 GF-reinforced	2800 – 2850	2800 – 2850	3000 – 3050	3000 – 3050
Average Price	2094	2099	2173	2327

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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 September 2020; they will not become definitive until early October. The two quotes stated for September 2020 below indicate only an interim situation, see the left-hand column in Table 3 and Table 4.

3.1 plasticker: Standard plastics

All-time lows for the quotes for standard plastics! An average price of 439 €/t is calculated for August 2020. And this average price is thus 15 €/t lower than that of the previous month (454 €/t), see Table 3. The average price for August 2020 (439 €/t) was 97 €/t below that of the previous year (536 €/t). The August price index shows continued subdued demand for plastic.

The following price changes were more than ± 40 €/t: LDPE regrind -70 €/t, PP regrind +90 €/t, PP regranulates -60 €/t and PET regrind mixed colours -50€/t. And with the reservation of statistical significance: PP bale goods +100 €/t, PVC_P regrind +50 €/t, PVC_U regrind - 150 €/t and PET- bale goods -60 €/t. A 5-year-low was reached for the prices for HDPE regranulates at 490 €/t, LDPE regrind at 430 €/t, LDPE regranulates at 580 €/t, PP regrind at 450 €/t, PP regranulates at 670 €/t, PVC_P at 230 €/t and PET regrind at 290 €/t.

The preview of the September quotes shows an average price of 476 €/t, which is 37 €/t higher than in the previous month, see Table 3. The September 2020 price index, 17.09.2020, shows subdued demand for plastic.

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

	Sept. ⁶ 20	August 20	July 20	June 20	May 20	August 19
HDPE regrind ¹	500	490	510	490	510	600
HDPE regranulates ⁵	720	690	720	730	660	870
LDPE bale goods ²	160	170	200	160	160	240*
LDPE regrind ¹	420	430	500	500	520	500
LDPE regranulates ⁵	610	580	580	580	590	680
PP bale goods ³	530	240	140*	140	190*	370
PP regrind ¹	540	570	460	520	530	570
PP regranulates ⁵	700	670	730	770	830	880
PS regrind ⁴	540	570	570	590	630	630
PS regranulates ⁵	820	810	800	830	730	760
PVC_P regrind ¹	450	250	200*	300*	260 (450*)	350*
PVC_U regrind ¹	280	230	380*	410*	400	530*
PET bale goods	70	160	220*	140*	210*	200
PET regrind mixed colours	330	290	340	360	370	320
Average Price	(476)	439	454	466	471	536

*: 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)

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3.2 plasticker: Technical plastics

In August, too, there was only slight movement in the prices of technical plastics. Since May 2020, the average prices for technical plastics have been static, see Table 4. In August 2020 the average price for technical plastics in plasticker is 1,143 €/t and thus 18 €/t lower than in the previous month (1,161 €/t). A comparison of the average prices from August 2020 (1,143 €/t) with those of the previous year (1,253 €/t) nevertheless shows a difference of 110 €/t.

Only one quote, that of POM regranulates shows a clear price drop of 230 €/t. A 5-year-low was reached with ABS regrind at 550 €/t and PBT regrind at 420 €/t. The August price index records subdued demand for plastic in comparison with the previous month.

The preview of the September quotes shows a slightly rising average price for technical plastics. The average price in September (1,181 €/t) was quoted at 38 €/t higher than in the previous month (1,143 €/t). The September price index of 17.09.2020 shows subdued demand for plastic.

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

	Sept. ⁶ 20	August 20	July 20	June 20	May 20	August 19
ABS regrind	540	550	560	600	610	690
ABS regranulates ⁵	1110	1100	1030	940	980	1120
PC regrind	840	840	820	860	830	910
PC regranulates ⁵	1720	1560	1590	1580	1640	2000
PBT regrind	430	420	430	450	430	500
PBT regranulates	1810	1630	1610	1620	1640	1760
PA 6 regrind	810	830	840	860	860	790
PA 6 regranulates ⁵	1850	1820	1820	1750	1790	1780
PA 6.6 regrind	860	890	920	920	910	870
PA 6.6 regranulates ⁵	2250	2050	2060	2020	2120	2190
POM regrind	610	580	580	600	610	560
POM regranulates ⁵	1340	1440	1670	1520	1640	1860
Average Price	(1181)	1143	1161	1143	1172	1253

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

4 Evaluation of the secondary plastic markets

4.1 Plastic wastes and recyclates

There is still very little movement to be felt on the secondary plastics market. There is still hardly any demand for plastic wastes or for recyclates. The stoppages can be seen both in standard plastics and technical plastics. Only the demand for recycled product made from mixed plastics, which are used in building construction and civil engineering, is satisfactory. Unfortunately, hardly any impetus can be seen for plastic recycling for the months ahead.

Both price indices, i.e. EUWID and plasticker, report subdued demand for plastic waste in August. The EUWID price index for standard plastics shows hardly any changes for all waste plastics; and plasticker identifies another price fall in August. The ratio of the prices of virgin grades to recyclates, which is 2:1 on average, is interesting.

Good film waste from trade and industry are still in demand. In August, the mean EUWID quotes for PE post user films are: LDPE shrink hoods natural 290 €/t, LDPE shrink hoods

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mixed colours 75 €/t, thin film transparent natural 168 €/t, thin film transparent coloured 20 €/t, LDPE agricultural film -50 €/t, commercial mixed film (90/10) 80 €/t and commercial mixed film (80/20) 45 €/t.

Plastics processors can now order good recyclate qualities at relatively low prices. The environmental aspect of recyclates has been recognised by some market leaders, because only recyclates are sustainable plastics. Recyclates minimise littering; they have a consistently positive energy balance and prevent the discharge of greenhouse gases.

4.3 PET Recycling

PET recycling urgently needs demand from plastics processors. What is needed is market impetus from bottle manufacturers and other PET processors who are committed to the particular sustainability of PET recyclates and demonstrate it. The environmental balance of this plastic can be greatly improved by means of the proportion of PET recyclates in products. To date, only PET recycling is food-safe. Moreover, there are very many products where PET recyclates can be used beneficially.

There is still a great deal of pressure on PET recycling. PET recycling can hardly hold its ground against cheap virgin grades. PET virgin grades are sometimes available for 700 €/t. The prices of regrinds and regranulates are under pressure from the cheap virgin grades. Bottle volumes in the summer were satisfactory. Due to the season, volumes are lower in autumn and winter. In addition to the national volumes, recyclers can also access European markets. PET recyclers are working short hours or have closed their operations down.

After the falls in April, May, June and July, the August quotes for used PET returnable bottles also fell, PET clear -10 €/t, PET mixed -20 €/t and PET coloured -25 €/t.

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-kunststoff.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

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