bvse market report on plastics, September 2017

1 The primary plastics market

The German plastics industry's quarterly report is issued by the associations of Plastics Europe Germany, the Federation of the Plastics Processing Industry (GKV), the Division for Plastics and Rubber Machines in the German Engineering Association (VDMA) and BKV GmbH. The German plastics industry's report for the second quarter of 2017 is now available. The report represents data and figures for the plastics industry in Germany.

Plastics are booming! In the second quarter plastics manufacture rose by 0.9 % compared to the preceding quarter. The previous year's level was exceeded by as much as 3.5 %. The production of plastics materials rose by 0.5 % relative to the previous quarter. The rise in production thus attained 3.5 % compared to last year. The turnover reached in the area of plastics production in the second quarter increased by 2.2 % compared to the previous quarter and by as much as 13.3 % relative to the previous year. The turnover attained in the area of plastic material production rose by 1.1 % and was thus 4.1 % higher than in the preceding year.

1.1 Standard plastics: Stability is the plastics markets' motto for August. During this month, the average prices of standard plastics remained almost unchanged. A comparison of the August prices, amounting to 1270 €/t, with those listed in the previous month (1274 €/t) shows the current prices to be no more than 4 €/t lower, cf. Table 1. The average listings for August 2017, reaching 1270 €/t, were almost the same as those for August 2016, which amounted to 1261 €/t. The stable precursor prices are considered the main reason for the stability in plastics prices. Supply and demand were balanced during the summer break. Over the entire summer period there was considerable demand for plastics.

With the exception of PS, all standard plastics held their own. PS listings fell by an average 20 €/t. During the summer break a lot of purchases were made because processors are expecting prices to rise in the autumn. Packaging PET was listed at an average 1223 €/t and thus, 35 €/t higher than in the previous month, when its price reached 1188 €/t.

Table 1: EUWID listings for standard plastics over the past five months; prices in €/t.

Prices in €/t	August 2017	July 2017	June 2017	May 2017	April 2017
LDPE film grade	1270- 1380	1270- 1380	1350- 1460	1420- 1530	1440- 1550
LLDPE film grade	1250- 1350	1250- 1350	1300- 1400	1380- 1480	1420- 1520
HDPE injection moulding	1240- 1290	1240- 1290	1320- 1370	1380- 1430	1400- 1450
HDPE blow moulding	1260- 1310	1260- 1310	1340- 1390	1400- 1450	1420- 1470
PS crystal clear	1460- 1530	1480- 1550	1460- 1530	1430- 1500	1630- 1720
PS high impact	1560- 1630	1580- 1650	1560- 1630	1530- 1600	1730- 1820
PP homopolymer	1250- 1310	1250- 1310	1300- 1360	1350- 1410	1370- 1430
PP copolymer	1300- 1360	1300- 1360	1360- 1420	1410- 1470	1430- 1490
PVC tube grade	860- 920	860- 920	890- 940	900- 950	900- 950
PVC film/cables	910- 960	910- 960	940- 980	950- 990	950- 990
Average Price	**1270 ± 214**	**1274 ± 219**	**1315 ± 212**	**1348 ± 214**	**1404 ± 264**

1.2 Technical plastics: Technical plastics prices can at best be described as inconsistent. In August 2017 technical plastics were listed at an average 2716 €/t. Thus average prices in August 2017 rose by a total of 34 €/t compared to July 2017, cf. Table 2, with PMMA and PC being listed at higher and ABS being quoted at lower prices; only POM and PA held their own.

Thus, technical plastics prices remained at their highest level in many years. Price leaps of more than ±70 €/t can be reported for PMMA (+ 275/t) and crystal clear PC (+ 150 €/t). Demand for technical plastics was high during the summer months.

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

Prices in €/t	August 2017	June 2017	April 2017	February 2017
PMMA crystal clear	3400 – 3600	3050 – 3400	2800 – 3000	2600 – 2800
ABS natural	1750 – 1850	1800 – 1900	2000 – 2100	1800 – 1900
ABS white/black	1850 – 1900	1900 – 1950	2100 – 2150	1900 – 1950
ABS mixed colours	2450 – 2650	2500 – 2700	2700 – 2900	2500 – 2700
PC crystal clear	3300 – 3550	3200 – 3350	3200 – 3350	3000 – 3100
PC GF reinforced	3500 – 3750	3400 – 3650	3400 – 3500	3200 – 3300
POM natural	1900 – 2000	1900 – 2000	1900 – 2000	1850 – 1950
PA 6 natural/black	2350 – 2600	2350 – 2600	2350 – 2600	2150 – 2400
PA 6 GF reinforced	2450 – 2550	2450 – 2550	2450 – 2550	2250 – 2350
PA 66 natural	2950 – 3150	2950 – 3150	2750 – 2900	2550 – 2700
PA 66 GF reinforced	3000 – 3250	3000 – 3250	2800 – 3000	2600 – 2800
Average Price	**2716**	**2682**	**2657**	**2459**

2 The secondary plastics markets

2.1 The Plasticker Price Index

The plasticker internet platform, cf. 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 September 2017. These listings thus merely reflect an interim situation that will not become definitive until the beginning of October 2017.

2.1.1 Standard plastics: In August 2017 the average price in plasticker was listed 25 €/t lower than in the previous month, cf. Table 3. The listings for August 2017 (531 €/t) were 33 €/t lower than those in the previous month, which reached 564 €/t. In August the market was fluctuating wildly; price reductions prevailed. Marked price changes, i.e. changes by more than ± 40 €/t, were reported for the following materials in August 2017: LDPE regrind - 60 €/t, LDPE regranulates - 50 €/t, PS regranulates -130 €/t, PVC_P +60 €/t and PET regrind - 60 €/t. Demand for plastics was satisfactory to good in August.

A first preview of the September listings, which cannot be definitively reported until the beginning of October 2017, shows the average price to be 18 €/t higher. As per 15 September 2017 demand for plastics was satisfactory on the plastics markets. The prices of LDPE regrind, PS regranulates and PVC_U are expected to change more considerably.

Table 3: Listings for standard plastics in plasticker; prices in €/t.

	Sept. 2017[6]	Aug. 2017	July 2017	June 17	May 17	Aug. 2016
HDPE regrind[1]	600	570	570	580	590	600
HDPE regranulates[5]	910	880	920	880	930	850
LDPE bale goods[2]	240	260	270	250	290	190
LDPE regrind[1]	700	570	630	490*	490	660*
LDPE regranulates[5]	760	750	800	780	800	820
PP bale goods[3]	200	260	230	260	220	240
PP regrind[1]	520	550	560	530	520	540
PP regranulates[5]	790	800	830	860	800	800
PS regrind[4]	660	600	610	600	620	670
PS regranulates[5]	900	810	940	980	960	990

PVC_P regrind[1]	400	460	400	450*	490	390
PVC_U regrind[1]	510	430	460	500	480	460
PET bale goods	170	170	180	180	180	240
PET regrind coloured	330	330	390	340	320	440
Average Price	**(549)**	**531**	**556**	**549**	**549**	**564**

*: 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 that may be amended by additional quotes

2.2.2 Technical plastics: Technical plastics prices have fallen considerably. In August 2017 the average technical plastics price in plasticker was listed 66 €/t lower than in the previous month, cf. Table 4. A comparison of the average prices for August 2017, reaching 1238 €/t, with those for August 2016, which amounted to 1150 €/t, shows the current price to be 88 €/t higher. Demand for technical plastics is falling compared to the preceding month. Regranulate prices in particular have fallen considerably. Marked price changes, i.e. changes by more than ± 70 €/t, were reported in August 2017 for: ABS regranulates +160 €/t, PC regranulates -130 €/t, PBT regranulates - 150 €/t, PA 6 regranulates - 140 €/t and POM regranulates - 510 €/t. The turbulent price development in POM regranulates is surprising.

The first preview of the September listings, which cannot be definitively reported until the beginning of October 2017, shows the average price to have fallen once again by 1228 €/t. Up until 15 September 2017 the plasticker internet platform indicated a further fall in the demand for technical plastics. The preliminary September listings point to price stabilisation.

Table 4: Listings for technical plastics in plasticker; prices in €/t.

	Sept. 2017[6]	**Aug. 2017**	**July 2017**	**June 17**	**May 17**	**Aug. 2016**
ABS regrind	650	640	670	680	680	670
ABS regranulates[5]	1460	1530	1370	1370	1370	1320
PC regrind	810	840	880	930	920	830
PC regranulates[5]	2190	2140	2270	2170	2400	1930
PBT regrind	410	440	470	490	480	470
PBT regranulates	1650	1640	1810	1790	1690	1450
PA 6 regrind	860	870	850	970	860	950
PA 6 regranulates[5]	1750	1750	1890	1840	1820	1500
PA 6.6 regrind	860	860	820	890	870	900
PA 6.6 regranulates[5]	1680	1740	1750	1750	1760	1600
POM regrind	740	720	670	750	750	600
POM regranulates[5]	1670	1690	2200	2130	2400	1580
Average Price	**(1228)**	**1238**	**1304**	**1305**	**1333**	**1150**

[5]: equivalent to the quality grade 'regranulates, black; [6]: preview that may be amended by additional quotes.

2.3 Evaluation of the plastics markets

A comparison of the information provided by EUWID with that published by plasticker for September 2017 shows that the EUWID Price Watch for used plastics indicates marked price falls of an average 15 €/t to 100 €/t in the area of post-user PE film. The prices of post-industrial PE fell, too. PVC quality grades were listed slightly higher. Some listings in the EUWID Price Watch are only submitted with reservation.

In plasticker, average standard plastics prices were listed lower, too, namely by as much as 25 €/t. While plasticker shows satisfactory demand for plastics, the market situation described by EUWID is difficult throughout.

It should be noted that the waste plastics prices listed by EUWID and plasticker are only reliable if the quality specifications agreed are met.

2.3.1 Waste plastics - a difficult situation:

The world of trading and brokering is in turmoil. Waste plastics markets are in turmoil not only on a national, but also on an international scale. It is hard to find buyers for the used plastics that have been exported to the People's Republic of China to date. As a result of the "National Sword 2017" campaign, China is only accepting a very limited amount of used plastics.

Waste disposal companies, too, are having a hard time getting rid of their waste plastics. Managers at the sources of waste generation do not understand that they are now faced with increased costs and higher challenges. The present situation is described as being dramatic. The situation of used plastics is more and more escalating. The export trade for certain waste plastics has collapsed almost completely. Film grade is hardly finding any buyers. Thin film and contaminated waste plastics can at best be sold by making additional payments.

In Germany in particular there is excess supply of used plastics - more and more waste is accumulating here. It is not entirely easy to tread the paths of energy-efficiency, either. Capacity in waste incineration plants is scarce. Cement factories are only accepting processed waste that must not exceed certain critical values, such as those for chlorine and heavy metals. Used plastics can also be processed into substitute fuels or secondary fuels. However, in Germany the application of these materials is limited, too. This market trend is not expected to change in the near future.

What nobody has been prepared to understand to date is that the quality of the waste plastics must meet the plastics recyclers' expectations. Only then will it be possible to market used plastics adequately in Germany and in Europe. The sources of waste generation are thus required to considerably improve waste plastics separation. Contaminated waste plastics are hard to sell. Mixtures of various materials with plastics lead to increased costs, too.

Furthermore, used plastics must be separated in accordance with the specifications required by recyclers. Those who wish to succeed in the plastics markets need to really understand plastics recycling, including its requirements concerning quality, recycling and products. Or to put it another way: what counts is quality, quality and - once again - quality.

In Germany a large supply of used plastics is matched by a low outflow into processing and recycling. Post-user waste can find its way into recycling only if the agreed quality specifications are met. Recyclers are only accepting the very best quality grades. There is still considerable demand for post-industrial waste. Recyclers are only accepting high-quality waste plastics from HDPE, PP and PS. Transparent PET beverage bottles, too, are finding their way into processing; coloured PET is hardly being accepted.

2.3.2 Recyclates:

The requirements for recyclates used in the plastics processing industry are continually rising. There is sufficient demand from the part of the plastics processing industry for regrind and regranulates from HDPE, PP and PS when the industry's quality specifications are met. This is why plastics recyclers are increasingly focusing on input processing quality. Germany is benefiting from the booming economy, which is having a direct impact on demand for plastics.

And finally, there is demand for recyclates used for applications other than plastics. In this area in particular, recyclers are benefiting from lower input prices or additional payments. In these markets, too, higher-quality input is having a positive impact on the downstream plastics processing industry.

Recyclates from technical plastics in particular have their own distribution channels. Recyclates are balancing out scarce supply of primary materials. However, the requirements concerning these recyclates are, as a rule, markedly higher than those for standard plastics. Technical plastics recyclates are almost always processed in such a way that they contain no other materials.

PET recycling is well positioned. PET recycling is benefiting from supply shortages in primary materials. Above and beyond this, virgin material prices have risen by 35 €/t. PET recyclers are buying an increasing amount of beverage bottles in order to satisfy the additional surge in demand. In addition, PET recyclers are doing their utmost to fill their warehouses. PET beverage bottles in particular are in great demand. In August transparent PET (95/5 to 100) was listed 8 €/t higher, mixed PET (70/30 to 90/10) 5 €/t higher and coloured PET (< 70/30) 5 € lower than in the previous month.

3 Explanatory information on price listings

For a detailed analysis including information on price indices for virgin materials, used plastics and precursors, please go to EUWID Recycling und Entsorgung (Recycling and Waste Management), cf. www.euwid.de, or EUWID Plastics, www.euwid-kunststoff.de. EUWID: no guarantee for any of the prices. All EUWID prices are quoted ex works. As a rule, the prices quoted refer to quantities in excess of 20 tonnes.

The monthly quotes for **secondary plastics**, which are updated on an hourly basis, can be calculated using the price lists derived from the quotations published in the raw material exchange **plasticker** (www.plasticker.de). The prices listed in this index are quoted with 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 materials. 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, Wednesday 20 September 2017 Dr Thomas Probst, bvse