bvse market report on plastics, September 2018

1 The primary plastics market

The mood in German boardrooms has markedly improved, cf. www.cesifo-group.de . The index rose from 101.7 points in July to 103.08 points in August. Business entrepreneurs were, once again, slightly more satisfied with their current business situation. They adjusted their expectations upwards to a considerable extent. Besides the strong domestic economy, the ceasefire in the trade conflict with the USA is contributing to the improvement in business sentiment. The German economy has reached a summer high. The current figures are indicating an 0.5 per cent economic growth during the third quarter.

And what does that mean for the plastics industry? The quarterly report for the second quarter of 2018, published by PlasticsEurope Germany (cf. <u>www.plasticseurope.org/de</u>) for the German plastics industry, is now available.

Production: In the second quarter, production of plastics in primary form fell by 3.4 % compared to the previous quarter. The preceding year's level (- 1.6 %) was not reached. Production of plastic materials fell by 0.9 % compared to the preceding quarter. However, production rose by 1.8 % relative to the preceding year.

Turnover: The turnover of plastics in primary form fell by 0.6 % in the second quarter compared to the previous three months. Turnover rose by 1.6 % relative to the same period of the preceding year. As far as the production of plastic materials is concerned, turnover fell by 0.3 %. Turnover was higher than last year by as much as 3.0 per cent.

1.1 Standard plastics

The average listings for standard plastics held their own in August 2018, cf. Table 1. The average listing for August 2018 ($1341 \notin/t$) exceeded that for August 2017 ($1270 \notin/t$) by 71 \notin/t . Packaging PET was listed at an average 1450 \notin/t in August 2018 and thus remained unchanged compared to the preceding month. Supply and demand for standard plastics have been balanced in August and September. As a result of the summer holidays, demand for primary plastics was lower in August than in the preceding months.

Prices in €/t	August 2018	July 2018	June 2018	May 2018	April 2018
LDPE film grade	1280- 1390	1290- 1400	1310- 1460	1260- 1400	1260- 1400
LLDPE film grade	1260- 1380	1270- 1390	1290- 1440	1240- 1380	1240- 1380
HDPE injection moulding	1310- 1360	1310- 1360	1330- 1380	1270- 1320	1260- 1310
HDPE blow moulding	1330- 1380	1330- 1380	1350- 1400	1290- 1340	1280- 1330
PS crystal clear	1520- 1580	1500- 1560	1550- 1610	1490- 1550	1540- 1600
PS high impact	1620- 1680	1600- 1660	1650- 1710	1590- 1650	1640- 1700
PP homopolymer	1420- 1470	1420- 1470	1420- 1470	1360- 1410	1350- 1400
PP copolymer	1470- 1520	1470- 1520	1470- 1520	1410- 1460	1400- 1450
PVC tube grade	910- 970	910- 970	910- 970	890- 950	880- 950
PVC film/cables	960- 1010	960- 1010	960- 1010	940- 990	930- 990
Average Price	1341 ± 223	1339 ± 219	1357 ± 232	1310 ± 217	1314 ± 256

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

1.2 Technical plastics

In August 2018, technical plastics were listed at an average 3044 €/t and thus, 21 €/t higher than in June, when they reached 3023 €/t, cf. Table 2. And thus, average prices in August 2018 (3044 €/t) were listed an average 328 €/t higher than those in August 2017 (2716 €/t). The only reason for the price increase in August 2018 is that

bvse market report on plastics, September 2018

PA 66 prices have risen by an average $163 \notin t$. The ABS price has fallen by $30 \notin t$. Demand for technical plastics was considerable during the summer months, too. Demand and supply are largely balanced. The overall economic situation has led to a weakness in PA 66 supply, which has caused a boom in demand in August and September. Technical plastics prices are still at record levels. Never before have technical plastics been as valuable as they are today!

Prices in €/t	August 2018	June 2018	April 2018	February 2018
PMMA crystal clear	3450 – 3650	3450 – 3650	3450 – 3650	3450 - 3650
ABS natural	1920 – 1970	1950 – 2000	1950 – 2000	1950 – 2000
ABS white/black	2020 – 2070	2050 – 2100	2050 – 2100	2050 – 2100
ABS mixed colours	2620 – 2770	2650 – 2800	2650 – 2800	2650 - 2800
PC crystal clear	3650 - 3850	3650 – 3850	3650 - 3850	3650 - 3850
PC GF reinforced	3850 - 4050	3850 – 4050	3850 - 4050	3850 - 4050
POM natural	2100 – 2200	2100 – 2200	2100 – 2200	2000 – 2100
PA 6 natural/black	2500 – 2700	2500 – 2700	2500 – 2700	2500 – 2700
PA 6 GF reinforced	2600 – 2650	2600 – 2650	2600 - 2650	2600 – 2650
PA 66 natural	4000 - 4200	3800 - 4000	3450 – 3650	3300 – 3500
PA 66 GF reinforced	4050 - 4100	3850 – 4050	3500 – 3700	3350 - 3550
Average Price	3044	3023	2959	2923

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

2 The secondary plastics market according to the Plasticker Price Index

The plasticker internet platform, cf. <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 September 2018. These listings thus merely reflect an interim situation that will not become definitive until the beginning of October, cf. the left-hand columns in Tables 3 and 4.

2.1 Standard plastics

In August, standard plastics prices fell by an average $12 \notin /t$, cf. Table 3. The average price for August 2018 ($529 \notin /t$) is almost identical to that of last year ($531 \notin /t$). The following prices changed by more than $\pm 40 \notin /t$: HDPE regranulates -80 \notin /t , PP regrind +60 \notin /t , PP regranulates -50, PS regranulates +90, PVC_U -60 \notin /t and PET bale goods -60 \notin /t . PS regranulates rose to peak levels that had not been reached in 54 months. PP bale goods are listed at 150 \notin /t , which is relatively low. A comparison of the August price index with that for the previous month shows demand for plastics to be low, which is probably due to the summer break.

The preview of the September listings shows the average price, listed at 534 \in /t, to be 5 \in /t higher than in the preceding month, when it reached 529 \in /t. The September price index, as per 11 September 2018, shows demand for plastics to be sufficient to date. In August, the PS price is likely to reach a high of 1160 \in /t!

byse market report on plastics, September 2018

	Sept. ⁶ 18	Aug. 18	July 18	June 18	May 18	August 17
HDPE regrind ¹	580	570	580	560	580	570
HDPE regranulates ⁵	840	850	930	880	840	880
LDPE bale goods ²	180	190	200	180*	270	260
LDPE regrind ¹	610*	550*	550	640	610	570
LDPE regranulates ⁵	750	770	800	770	740	750
PP bale goods ³	160*	150*	140*	180	210	260
PP regrind ¹	590	600	540	640	530	550
PP regranulates ⁵	790	840	890	850	860	800
PS regrind ⁴	650	640	640	640	600	600
PS regranulates ⁵	1160	1110	1020	950	900	810
PVC_P regrind ¹	290*	280*	300*	470*	450	460
PVC_U regrind ¹	410*	410*	470	490*	520*	430
PET bale goods	120*	120*	180	160*	220*	170
PET regrind coloured	340	330	340	320	340	330
Average Price	(534)	529	541	552	548	531

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

*: 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 Technical plastics

In August 2018, the average technical plastics price in plasticker (1254 \in /t) changed only slightly compared to the previous month, when it had reached 1247 \in /t, cf. Table 4. A comparison of the average prices for August (1254 \in /t) with those for the previous year (1238 \in /t) shows the current price to be 16 \in /t higher. The August price index shows demand for technical plastics to be relatively low. In August 2018, only two prices changed markedly, i.e. by more than ± 70 \in /t: ABS regranulates by +90 \in /t and PC regranulates -80 \in /t. PA 6.6, which reached 2010 \in /t, continued to maintain a very high price level in August 2018, too.

The preview of the September listings of 11 September 2018 shows the average price, which reached $1268 \notin t$, to be $14 \notin t$ higher than in the previous month. The September price index shows demand for plastics to be sufficient.

	Sept. ⁶	Aug. 18	July 18	June 18	May 18	April 18
	18					
ABS regrind	620	630	700	710	710	640
ABS regranulates ⁵	1420	1370	1280	1390	1470	1530
PC regrind	1010	1000	970	980	860	840
PC regranulates ⁵	2130	1990	2070	1950	2010	2140
PBT regrind	450	450	450	490	430	440
PBT regranulates	1770	1640	1590	1750	1630	1640
PA 6 regrind	840	830	850	890	890	870
PA 6 regranulates ⁵	1780	1780	1850	1880	1860	1750
PA 6.6 regrind	900	890	890	910	940	860
PA 6.6 regranulates ⁵	1840	2010	2000	2320	2040	1740
POM regrind	680	660	600*	610	680	720
POM regranulates ⁵	1770	1660	1710	1630	1650	1690
Average Price	(1268)	1254	1247	1293	1264	1238

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

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

byse market report on plastics, September 2018

3 Evaluation of the secondary plastics markets

A comparison of the information provided by EUWID and plasticker for August 2018 shows that the film grade prices listed in the EUWID Price Watch have fallen by an average $15 \notin/t$ compared to the preceding month. All other prices remained stable in EUWID. Overall, the listings in plasticker have fallen by $12 \notin/t$. According to plasticker, demand for waste plastics was low in August. EUWID provides reports on slight market fluctuations. Demand for recyclates is assessed as considerable in both publications.

3.1 Waste plastics

There are indications in Germany that waste plastic disposal is becoming more difficult and, above and beyond this, more expensive. During the summer break, waste disposal companies were able to forward waste plastics only to a limited extent. An increasing amount of waste plastics from the manufacturing and industrial sectors are being screened out. Waste incineration plants used the summer break to review their facilities, which caused the amount of waste available in disposal companies to rise. The use of alternative fuels in German cement factories is reaching record highs. The European domestic markets are using increasing quantities of plastic waste for the purpose of processing them into waste derived fuels.

There is excess supply of waste plastics in Germany. In the upstream plastics chain, it is now essential to generate high quality grades through waste separation in order to meet the plastic recyclers' demands. Demand for high-quality waste plastics continues to be high. Plastic recyclers are only accepting the very best quality grades of waste. The prices of unsorted and sorted waste plastics are continuing to fall. EUWID reports in its Price Watch for August 2018 that film grade materials are losing in value again. The price reductions for film grade amount to an average 15 €/t. Only very good film grade materials are still finding their sales channels in Germany. There is still excess supply of PP waste. PS waste is being sought. German plastic recyclers are using their plants to capacity and are thus considerably contributing to reducing waste quantities.

There are hardly any sales channels in the export trade with the Far East. Import restrictions to Malaysia, Vietnam, Taiwan and Bangladesh are taking effect. Waste plastic exports to the Far East have, for the most part, come to a standstill. Many import ports for waste have now been closed. Only India is continuing to import waste plastics. However, recyclates can still be imported to the People's Republic of China as products if they meet the relevant requirements. China is closely monitoring the quality of the regranulates. The shifts and changes in the exports and imports of used plastics during the first six months of 2018 are described by EUWID, RE 37, 2018, page 21.

It is noticeable that an increasing amount of waste plastic exports within Europe are being shifted to Turkey, Bulgaria, Romania and Poland. These countries are expanding their plastic recycling facilities. In particular, they are generating recyclates aimed at being shifted to China. The EU Recycling Magazine 08/2108, page 5, provides a detailed report on the extensive disposal of mixed waste in Poland. The proportion of plastics is likely to be high in this case.

3.2 Recyclates:

The plastic recyclers' demand is determining plastics markets. Plastic recyclers are only accepting waste plastics of the very best quality. There was considerable domestic demand for recyclates during the summer break, too. Plastic recyclates are also in great demand on a global scale. Regrind, regranulates and compounds are maintaining stable market prices. The prices listed for waste plastics in the indices only apply so long as the qualities and quantities really meet an acceptable standard.

bvse market report on plastics, September 2018

Technical plastics are a real highlight, albeit only for recycling experts. Technical plastics show long-term price highs. However, in their case it is only possible to offer those recyclates that match the virgin materials. There is demand for materials segregated by type rather than for unmixed commodities.

The summer, which is still very warm, continues to ensure a considerable supply of beverage bottles. A considerable supply of beverage bottles ensures sufficient input for recyclers. Recyclers are continuing to fill their incoming goods warehouses. They are also setting up new warehouses. According to some reports, PET recyclers now have stocks available for three months. An increasing number of bottle-filling companies now prefer to offer bottles made of r-PET. The proportion of r-PET, non-beverage bottles in particular, is now rising considerably. Even bottles that have an r-PET proportion of 80% are being launched on the market. The large supply of beverage bottles is leading to reductions in the prices of used bottles. The following prices were listed for used and returnable PET bottles in August: PET transparent (95/5 bis 100) -10 €/t, mixed PET (70/30 bis 90/10) -12 €/t and coloured PET (<70/30) remained unchanged.

4 Explanatory information on the 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. <u>www.euwid.de</u>, or EUWID Plastics, <u>www.euwid-kunststoff.de</u>. 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** (<u>www.plasticker.de</u>). 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.

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