1 The primary plastics market

The ifo business climate has held its own, cf. www.cesifo-group.de. The index fell only very slightly, from 101.8 points in June to 101.7 points in July. Business entrepreneurs were slightly more satisfied with their current business situation. However, they lowered their expectations to some extent. The German economy is continuing its expansion at a slower pace.

In the processing industry, the index has fallen for the sixth time in succession. This is due to industrial enterprises assessing the situation as markedly worse. However, the situation indicator continues to be far above its long-term average. On the other hand, company expectations have remained almost unchanged, i.e. slightly optimistic. The boost in demand has lost momentum. Capacity utilisation has held its own at 87.7 %.

And what does all this mean for the plastics industry? KI Dialog gives detailed answers concerning this sector, s. www.kiweb.de. Once again, the boom that has occurred over the past approximately three years gave a boost to the plastics industry in the German-language area during the first six months of 2018. The expectations for the second half of the year show even more clearly that things are no longer running smoothly in the economy. Only 30% of all companies currently believe that business will improve - as opposed to 18% who are expecting figures to fall. The KI expectation index for the next six months thus fell to the five-year low of 93.4 points, which means that prospects for the second half of the year are not too positive, even though they do not give cause to set alarm bells ringing.

Standard plastics

Standard plastics prices fell in July 2018. These are now listed at 1339 €/t and thus, 18 €/t lower than in the previous month, when they were quoted at 1357 €/t, cf. Table 1. While LDPE fell by an average 40 €/t, LLDPE by 35 €/t, HDPE by 20 €/t and PP by 50 €/t, PP and PVC held their own. The average listing for July 2018 (1139 €/t) was 65 €/t higher than that for June 2017 (1274 €/t). Packaging PET was quoted at an average 1450 €/t in July 2018, meaning that its price did not change compared to the preceding month. The price fall is explained by the decrease in precursor costs. In July, there was excess supply. As a result of the holidays, demand for standard plastics is lower than in the previous months. The month of August is assessed as being very calm.

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

Prices in €/t	July 2018	June 2018	May 2018	April 2018	March 2018
LDPE film grade	1290- 1400	1310- 1460	1260- 1400	1260- 1400	1300- 1400
LLDPE film grade	1270- 1390	1290- 1440	1240- 1380	1240- 1380	1280- 1380
HDPE injection moulding	1310- 1360	1330- 1380	1270- 1320	1260- 1310	1260- 1310
HDPE blow moulding	1330- 1380	1350- 1400	1290- 1340	1280- 1330	1280- 1330
PS crystal clear	1500- 1560	1550- 1610	1490- 1550	1540- 1600	1660- 1720
PS high impact	1600- 1660	1650- 1710	1590- 1650	1640- 1700	1760- 1820
PP homopolymer	1420- 1470	1420- 1470	1360- 1410	1350- 1400	1350- 1400
PP copolymer	1470- 1520	1470- 1520	1410- 1460	1400- 1450	1400- 1450
PVC tube grade	910- 970	910- 970	890- 950	880- 950	880- 950
PVC film/cables	960- 1010	960- 1010	940- 990	930- 990	930- 990
Average Price	1339 ± 219	1357 ± 232	1310 ± 217	1314 ± 256	1343 ± 266

2 The secondary plastics markets in 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 August 2018. These listings thus merely reflect an interim situation that will not become definitive until the beginning of September, cf. the left-hand columns in Tables 2 and 3.

2.1 Standard plastics:

During the summer holidays, the listings for standard plastics have fallen by an average 11 €/t, cf. Table 2. A comparison of the average price for July 2018 (541 €/t) with that for the previous year (556 €/t) shows the current price to be 15 €/t lower. The following prices changed by more than ± 40 €/t: HDPE regranulates +50 €/t, LDPE regrind -110 €/t, PP regrind -100 €/t, PS regranulates +70 and PVC_P -170 €/t. The July price index shows demand for plastics to be satisfactory compared to the preceding month - and that despite the summer break.

The preview of the August listings shows the average price (529 €/t) to be 12 €/t lower than in the previous month, when it was listed at 541 €/t. To date, the August price index, as per 22 August 2018, shows demand to be restrained. The low demand is certain to be due to the summer break. In August the PS price is likely to reach a peak level of 1110 €/t.

	Aug. ⁶ 18	July 18	June 18	May 18	April 18	July 17
HDPE regrind ¹	560	580	560	580	590	570
HDPE regranulates⁵	860	930	880	840	840	920
LDPE bale goods ²	180	200	180*	270	270	270
LDPE regrind ¹	560	550	640	610	480*	630
LDPE regranulates ⁵	780	800	770	740	840	800
PP bale goods ³	130*	140*	180	210	240	230
PP regrind ¹	600	540	640	530	520	560
PP regranulates ⁵	850	890	850	860	780	830
PS regrind⁴	640	640	640	600	610	610
PS regranulates ⁵	1110	1020	950	900	860	940
PVC_P regrind ¹	270*	300*	470*	450	460	400
PVC_U regrind ¹	410*	470	490*	520*	470	460
PET bale goods	120*	180	160*	220*	190	180
PET regrind coloured	340	340	320	340	360	390
Average Price	(529)	541	552	548	541	556

Table 2: Listings for standard plastics in plasticker; prices in €/t.

2.2 Technical plastics:

^{*:} 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

6.6 regranulates fell by 320 €/t in July. Nevertheless, PA 6.6 regranulates, which were listed at 2000 €/t in July, continue to maintain a very high price level.

The preview of the August listings published on 22 August 2018 shows the average price, listed at 1254 €/t, to be more or less identical to that quoted in the previous month. The August price index shows demand for plastics to be satisfactory, considering the holiday season.

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

	Aug.6	July 18	June 18	May 18	April 18	July 17
	18	-				-
ABS regrind	640	700	710	710	680	670
ABS regranulates ⁵	1350	1280	1390	1470	1400	1370
PC regrind	1020	970	980	860	800	880
PC regranulates ⁵	2150	2070	1950	2010	2060	2270
PBT regrind	440	450	490	430	480	470
PBT regranulates	1640	1590	1750	1630	1590	1810
PA 6 regrind	820	850	890	890	820	850
PA 6 regranulates ⁵	1790	1850	1880	1860	1790	1810
PA 6.6 regrind	900	890	910	940	900	820
PA 6.6 regranulates ⁵	2010*	2000	2320	2040	1810	1750
POM regrind	660*	600*	610	680	620	670
POM regranulates ⁵	1630	1710	1630	1650	1800	2220
Average Price	(1254)	1247	1293	1264	1229	1298

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

3 Evaluation of the secondary plastics markets

A comparison of the information provided by EUWID and plasticker for July 2018 shows that the film grade prices listed in the EUWID Price Watch have fallen by an average 11 €/t. All other prices remained stable in EUWID. Overall, the listings in plasticker have fallen. According to plasticker, demand for waste plastics was satisfactory in July, considering the summer holidays. EUWID provides very detailed reports on numerous market fluctuations resulting from the current upheavals. Demand for recyclates is assessed as considerable in both publications.

3.1 Waste plastics:

In Germany a sufficient amount of waste plastics is available at sufficient quality. The upheavals in the export trade with the Far East are leading to an excess supply of used plastics in Germany. In addition, high-quality waste plastics from other European countries are being imported to this country. High-quality grades from abroad are thus pushing aside the lower grades of waste arising on the domestic market.

In the upstream chain it is now crucial to separate the materials in order to generate high-quality goods that meet the plastics recyclers' demands. High-quality waste plastics are still in great demand, which is why their listings are remaining largely stable. Plastics recyclers are only accepting materials of the highest quality.

The price listings in EUWID for July show that film grade has been losing in value once again. Only high-quality film grade is finding its sales channels in Germany. Thus, post-user PE bale goods were listed an average 11 €/t lower in June than in the preceding month. Thin film grade and farm film require higher supplementary payments than the EUWID listings directly indicate.

It was clearly discernible that the alternative shipping routes for the export trade with the Far East (Vietnam, Malaysia, Indonesia, Taiwan) would soon come to a standstill, too. And this is what has now happened. Import restrictions and bans on importing materials to Malaysia,

Vietnam and Taiwan have put an end to waste plastics exports to the Far East. The alternative transport route to Bangladesh is now coming to a standstill, too. However, recyclates may still be imported to China as products so long as these meet the relevant requirements. China is conducting very detailed checks on the quality of the regranulates.

An increasing amount of used plastics are being shipped to other countries within Europe. The materials are being transferred to Bulgaria, Rumania and Poland in particular. However, it should be noted that Bulgaria and Rumania are making investments in plastics recycling. These countries are producing the recyclates intended for the export trade with China. According to a detailed report by the EU Recycling Magazine (EU-Recyclingmagazin), published in August 2018, a considerable amount of mixed waste has been shipped to waste disposal sites in Poland. It may be assumed that the proportion of plastics is high in this case.

3.2 Recyclates:

The demand from plastics recyclers is determining the plastics markets. Plastics recyclers are only accepting waste plastics of the highest quality. Demand for recyclates is still considerable during the summer break. The prices listed in the price indices for waste plastics only apply so long as a sufficient supply of material is available at an acceptable quality. Plastics recyclers are rejecting low-quality materials.

There is considerable demand for plastics recyclates all across the world. As a consequence, clients also pay for high quality accordingly. Regrind, regranulates and compounds are keeping their market prices stable. Overall, quality in the plastics recycling sector can only be improved so long as high-quality input is available.

The continuing hot summer is ensuring large quantities of beverage bottles. A large amount of beverage bottles ensures that recyclers have sufficient input. Recyclers are continuing to fill their incoming goods warehouses. The large supply of beverage bottles has led to a fall in the prices of used bottles. The following prices were listed for used and returnable PET bottles in July: transparent PET (95/5 to 100) -10€/t, mixed PET (70/30 to 90/10) -10€/t and coloured PET (< 70/30) held its own.

The plastics manufacturing and plastics processing industries are increasingly investing in the plastics recycling sector. Supermarket companies are taking over waste disposal companies that represent the value chain down to the recycling process. And this is the way plastics recycling is undergoing a considerable boom.

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. 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** (<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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