

bvse market report on plastics, December 2016

1 The primary plastics market

The German plastics industry's report on the third quarter of 2016, edited by Plastics Europe Germany, is now available. In the third quarter plastics production did not continue to rise. The production index stagnated at the previous year's level after smoothing of the trend curve. However, the previous year's level was exceeded by 2.6%. The manufacture of plastics products achieved an 0.6 % rise compared to the preceding quarter. Thus production went up by 3.3 % compared to the previous year.

In total, the amount produced in the user industries was low. Production stagnated or fell slightly. The electronics industry was the only sector to see a rise in production. In the main construction trades the amount produced in the third quarter fell by 0.5 % compared to the preceding three months. The previous year's figure was exceeded by 1.4 %. Production in the food industry stagnated. The previous year's level was exceeded by 2.0 %.

The quantities produced in the automotive sector stagnated in the third quarter. The production level exceeded the average of the quantities produced in the previous year by 3.4 %. The production index for the electronics industry rose by 0.4 % relative to the previous quarter, which equals a 2.3 per cent increase compared to the preceding year. In the mechanical engineering sector production fell by 0.4 % compared to the preceding three months. The previous year's level was exceeded slightly by 0.4 %.

Standard plastics: In November 2016 the average price of standard plastics fell by 10 €/t. Or to put it another way, the average standard plastics price remained almost unchanged, see Table 1. A comparison between the average listings for November 2016 (1249 €/t) and those for November 2015 (1290 €/t) shows the price fall to be 41 €/t. The lowest level so far in 2016 was reached in February at 1230 €/t; the current listing is no longer too far from that. Packaging PET was listed at an average price of 1063 €/t and thus, 18 €/t higher than in the previous month.

Comparatively low demand from plastics processors is meeting with slight surplus supply on the plastics producers' part. Due to the forthcoming Christmas holidays, the year is expected to end in a calm economic situation, which is likely to last from mid-December to early January.

For a detailed analysis including information on price indices for virgin materials, used plastics and precursors, please refer to EUWID Recycling und Entsorgung (EUWID Recycling and Waste Management), cf. www.euwid.de, or to EUWID Kunststoff (EUWID Plastics), cf. www.euwid-kunststoff.de, and KI-Kunststoffinformation (KI Information on Plastics), cf. www.kiweb.de.

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

Prices in €/t	Nov. 2016	Oct. 2016	Sept. 2016	Aug. 2016	July 2016
LDPE film grade	1340- 1440	1340- 1440	1340- 1440	1340- 1440	1360- 1480
LLDPE film grade	1310- 1400	1310- 1410	1310- 1410	1310- 1410	1330- 1450
HDPE injection moulding	1330- 1370	1360- 1400	1360- 1400	1360- 1400	1380- 1430
HDPE blow moulding	1330- 1370	1360- 1400	1360- 1400	1360- 1400	1380- 1430
PS crystal clear	1330- 1380	1310- 1380	1340- 1430	1340- 1430	1340- 1430
PS high impact	1420- 1480	1400- 1480	1430- 1530	1430- 1530	1430- 1530
PP homopolymer	1220- 1290	1220- 1290	1200- 1270	1180- 1250	1180- 1250
PP copolymer	1270- 1340	1270- 1340	1250- 1320	1230- 1300	1230- 1300
PVC tube grade	830- 870	830- 860	830- 860	840- 870	850- 880
PVC film/cables	870- 910	870- 900	870- 900	880- 910	890- 920
Average Price	1249 ± 217	1259 ± 211	1263 ± 217	1261 ± 213	1274 ± 217

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2 The secondary plastics market

The remaining days of the 2016 plastics year are not expected to see any major changes. Overall, the year 2016 has been static, only few incentives have boosted business. The period from March to September in particular was very calm. The market did not see a certain resurgence until the last quarter. And now the holidays are coming up. The Christmas break will last from mid-December to early January. And then the Chinese holidays will start with the New Year's celebrations on 28 January 2017.

In the November Price Index, plasticker reported that standard plastics prices had held their own. The purchase bids and quotes in plasticker indicate sufficient to good demand for standard plastics. In November the EUWID Price Watch for used plastics showed polyolefin and polystyrene prices to be falling. Demand for secondary plastics is considered restrained by EUWID.

2.1 Waste plastics:

The market for used plastics is weak. Waste plastics prices are falling more and more. The price listings are reflecting this trend at a certain time lag and with some restraint. Waste plastics warehouses are still replete with stocks. Plastics recyclers are in a position to choose the quantities and quality grades they need from the abundant supplies available. Or to put it another way, waste plastics markets are mainly being determined by demand from the plastics recyclers' part. Only to a limited extent is it possible to reduce quantities by shifting them to the export business or to waste incineration.

The comparatively high incineration prices, which lead to increasing quantities of used plastics being sorted out and put on the markets, is determining waste plastics prices. Above and beyond this, exports to the Far East are faltering. In addition, the oil price, which has ranged from 28 US \$/barrel to 56 US \$/barrel so far, is having the effect of primary plastics being offered in the market at relatively favourable prices. And this, for its part, is leading to considerable price pressure on the used plastics.

In November the prices of used PO and PS plastics fell by 5 €/t to 15 €/t, cf. EUWID. Partial price reductions in the lower, but even more so in the upper price range are often conspicuous in this respect.

Film grade in particular is being affected by the price falls. Post-industrial waste from PE and PP is listed 8 €/t lower on average. In the case of post-user PE price falls of 6 €/t are affecting bale goods only. Post-industrial PS prices have fallen by an average 12 €/t. The PVC listings have not changed.

PET: Demand from the recyclers is still determining the prices of waste beverage bottles. In addition, PET recyclers are still being provided with considerable PET bottle supply. The warehouse stocks of PET bottles can be cleared for the forthcoming Christmas break. The price listings for PET beverage bottles remained unchanged in November.

2.2 Recyclates:

In November demand for recyclates increased. Recyclates are also benefiting from the continuous fall in waste plastics prices. Plastics recyclers are appreciative of the supply security being ensured by recyclates. Re grind is listed at stable prices. The sale of re grind, regranulates and compounds even rose in the last quarter. One should note the shifts in demand from HDPE to PP and vice versa, which have been lasting for quite a while. Plastics recyclers are responding extremely flexibly in this respect, thus balancing out all market interventions.

The PS markets are still subject to considerable turmoil as a result of the extremely rigid state interventions. Germany's homemade HBCD problem is not only having an extremely

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negative impact on the disposal of flame retardant insulations panels, but also on the recycling of packaging polystyrene, which does not contain any HBCD at all. Construction sites are coming to a standstill. Building owners and craftspeople are despairing of the drastic price rises caused intentionally by the administrative bodies of various German federal states. The Federal Ministry for the Environment has been trying from the outset to prevent some federal states from interfering with the existing waste management paths. Prices of 3,000 €/t to 9,000 €/t are being charged for the disposal of mono batches containing flame retardant insulation panels. It is therefore hardly surprising to see that some people are going down illegal routes to the detriment of man and the environment. While all other European member states are implementing legal and, on top of that, pragmatic solutions for the disposal of flame-retardant insulation panels, Germany's environmental politicians are still tilting at windmills at the federal state level, cf. Don Quijote by Miguel de Cervantes, 1605 and 1615. With this subject, it is extremely difficult to maintain the seriousness required of a reporter.

There is sufficient demand for PET flakes. The use of flakes and regranulates ranges from bottle-to-bottle recycling, to stripping, fibres and film through to deep-drawn products. The recycle qualities needed or generated are determining their use and thus, the corresponding price level. The prices of PET recyclates are holding their own and are following the developments in virgin materials.

3 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 December 2016. These listings thus merely reflect an interim situation that does not become definitive until the beginning of January 2017. 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.

3.1 Standard plastics: In November 2016 the average price listed in plasticker almost held its own: at 527 €/t relative to the previous month, when it was quoted at 531 €/t, cf. Table 2. HDPE regrind, PP regrind and PS regranulates reached the lowest level so far this year. The listings for November 2016 (531 €/t) were 64 €/t lower than those for November 2015 (595 €/t). In November 2016 there was considerable demand for standard plastics. While the average price only changed slightly, the individual quotes shifted to a considerable extent. The following prices changed by more than +/- 40 €/t: LDPE regranulates – 70 €/t and PS regrind + 50 €/t.

The first preview of the 2016 December listings, which cannot be definitively reported until January 2017, shows the average price to be 9 €/t lower than in the previous month. Or to put it another way, the listings almost held their own. At the beginning of December, on 13 December 2016, the plastics markets were restrained.

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

	Dec. 16 ⁶	Nov. 16	Oct. 16	Sept. 16	Aug. 16	July 16	Nov. 15
HDPE regrind ¹	590	570	590	600	600	610	630
HDPE regranulates ⁵	820	840	860	840	850	910	910
LDPE bale goods ²	220	240	210	200	190	180	240
LDPE regrind ¹	570	620	580	580	660*	670	650
LDPE regranulates ⁵	780	800	870	850	820	840	740
PP bale goods ³	290	260	250	230	240	230	320
PP regrind ¹	510	520	540	520	540	570	610
PP regranulates ⁵	760	750	750	800	800	840	950
PS regrind ⁴	640	650	600	640	670	640	640
PS regranulates ⁵	880	880	900	980	990	880	1050
PVC_P regrind ¹	360	380	360	360	390	420	450
PVC_U regrind ¹	420	430	410	420	460	430	440
PET bale goods	170	190	110*	230	240	180	240
PET regrind coloured	300	310	350	370	440	400	460
Average Price	(522)	531	527	544	564	557	595

*: 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

3.2 Technical plastics: In November 2016 the average technical plastics price in plasticker was listed 39 €/t higher than in the previous month, cf. Table 3. For the time being, technical plastics prices have bottomed out. A comparison of the average listings for November 2016 (1143 €/t) with those for November 2015 (1255 €/t) shows the current price to be 112 €/t lower. The prices of the following quality grades changed considerably (by more than +/- 70 €/t) in November 2016: ABS regranulates +120 €/t, PBT regranulates +120 €/t, PA 6-regranulates + 210 €/t and PA 6.6 regranulates +120 €/t. In November technical plastics markets were described as hardly ambitious.

A first preview of the December listings, which cannot be definitively reported until the beginning of January, shows that the average price had held its own compared to the preceding month. Up until 14 December 2016 the plasticker internet platform continued to indicate moderate to satisfactory demand for technical plastics.

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

	Dec. 16 ⁶	Nov. 16	Oct. 16	Sept. 16	Aug. 16	July 16	Nov. 15
ABS regrind	640	650	670	680	670	660	750
ABS regranulates ⁵	1280	1280	1160	1110	1320	1270	1410
PC regrind	900	830	860	890	830	810	890
PC regranulates ⁵	1950	1790	1790	1770	1930	1800	1930
PBT regrind	460	430	470	470	470	500	510
PBT regranulates	1410	1470	1350	1450	1450	1600	1640
PA 6 regrind	880	870	860	890	950	920	1070
PA 6 regranulates ⁵	1600	1600	1390	1410	1500	1590	1800
PA 6.6 regrind	900	860	850	890	900	920	1100
PA 6.6 regranulates ⁵	1700	1720	1560	1550	1600	1730	1830
POM regrind	610	560	580	570	600	590	610
POM regranulates ⁵	1490	1650	1690	1460	1580	1490	1520
Average Price	(1152)	1143	1103	1095	1150	1156	1255

⁵: Equivalent to the quality grade 'Regranulates, black'; ⁶: Preview that may be amended by additional quotes

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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 tons. The monthly quotes for **secondary plastics**, 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** (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. 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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