1 General economy with reference to the plastics industry

The ifo business climate index rose in September 2020, also see www.ifo.de/ifo-geschaeftsklimaindex. The mood in German board rooms has once again improved. The ifo business climate index rose to 93.4 points in September, following on from 92.5 points in August. Companies once again assessed their current situation more positively than in the previous month. And they are expecting their businesses to recover even more. The German economy is stabilising in spite of rising infection figures.

The business climate index has risen noticeably in the manufacturing sector. Far fewer companies rate their current business situation as poor. Moreover, industrial companies expect their economic position to continue to improve. The electrical industry in particular is optimistic.

In August, PlasticsEurope, see www.plasticseurope.org/de, published the II Quarter Report for the plastics industry in Germany. The plastics industry is made up of plastics manufacturers, plastics processors and plastics machinery manufacturers. The German plastics industry accounts for an approx. 6 % share in German industrial production. In 2019, around 421,000 people had a future-proof job here in around 3,500 companies, with a turnover volume of 97 billion euros.

In the II quarter of 2020, production of plastics in the primary form fell by 2.1 % in comparison to the previous quarter. In comparison to the previous year, production fell by 5 %. The manufacture of plastic goods recorded a drop of 3.1 %, also in comparison to the previous quarter. The previous year's level was clearly missed by 10 %. The sales of plastics in the primary form fell by 3.5 % in the second quarter in comparison to the previous quarter. Sales fell by 11.3 % in comparison to the same period of the previous year. Turnover for manufacturing plastic goods also fell by 2.8 %. In comparison to the previous year, the turnover was 9.1 % lower.

2 The primary plastics market - standard plastics

Higher prices with stagnating sales: Plentiful supply is faced with astonishingly low demand. One of the reasons why demand is low is because plastics processors ordered cheaply at low prices in previous months. The processors' warehouses are replete with stocks.

In September 2020, the standard plastics were quoted in EUWID, see www.euwid-recycling.de, at 978 €/t and thus an average 17 €/t higher than in the previous month (961 €/t), see Table 1. In a year-on-year comparison, it can be seen that the average quotes from September 2020 (978 €/t) were 166 €/t lower than those of the previous year (1,144 €/t). In September, the PE and PVC commodities were quoted higher, with LDPE +55 €/t, LLDPE +50 €/t, HDPE +33 €/t, PVC +40 €/t and the PP and PS commodities PP -10 €/t, PS -30 €/t lower.

Packaging PET was quoted at an average price of 920 €/t in September 2020, thus 50 €/t lower than in the previous month. A lack of demand, good import offerings and full warehouses, as well as falling precursor product prices, led to the clearly lower PET quotes.

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

Prices in €/t	September 2020	August 2020	July 2020	June 2020	May 2020
LDPE film grade	930- 1040	880- 980	850- 950	810- 910	790- 890
LLDPE film grade	940- 1040	890- 990	870- 970	830- 930	810- 900
HDPE injection moulding	930- 1000	890- 970	860- 940	820- 900	790- 870
HDPE blow moulding	930- 1040	900- 1000	880- 960	840- 920	820- 900
PS crystal clear	1000- 1060	1030- 1090	1030- 1090	990- 1050	950- 1010
PS high impact	1080- 1150	1110- 1180	1110- 1180	1070- 1140	1030- 1100
PP homopolymer	1000- 1070	1020- 1080	1000- 1060	970- 1030	940- 1000
PP copolymer	1050- 1120	1060- 1120	1050- 1110	1020- 1080	990- 1050
PVC tube grade	750- 800	710- 760	700- 740	680- 720	660- 700
PVC film/cables	790- 840	750- 800	740- 780	720- 760	700- 740
Average Price	978 ± 112	961 ± 134	944 ± 138	910 ± 134	882 ± 128

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 October 2020; they will not become definitive until early November. The two quotes stated for October 2020 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

3.1 plasticker: Standard plastics

An average price of 465 €/t is calculated for September 2020. And this average price is thus 34 €/t higher than that of the previous month (431 €/t), see Table 2. The average price for September 2020 (465 €/t) was 48 €/t below that of the previous year (513 €/t). The September price index continues to show slightly higher demand in comparison with the previous month - nevertheless the demand for plastic will have to still be classed as subdued.

Only one significant price change can be seen, namely for PP regranulates at +50 €/t. The biggest prices changes for PP bale goods, PVC-P regrind, PVC_U regrind and PET bale goods are not sufficient statistical significance for their contribution to be listed here. A 5-year low was reached for the prices for HDPE regrind at 490 €/t, LDPE regrind at 430 €/t, PET bale goods at 90 €/t.

The preview of the October quotes shows an average price of 458 €/t, which is almost identical the quote of the previous month (463 €/t), see Table 2. Although the price index for October 2020, 12.10.2020, shows slightly improved demand for plastic in comparison to the previous month, the demand for plastic remains subdued.

	October ⁶ 20	Sept. ⁶ 20	August 20	July 20	June 20	Sept. 19
HDPE regrind ¹	480	490	490	510	490	560
HDPE regranu- lates ⁵	690	700	690	720	730	800
LDPE bale goods ²	150	170	170	200	160	240*
LDPE regrind ¹	450	430	430	500	500	480
LDPE regranu- lates ⁵	600	590	580	580	580	670
PP bale goods ³	230*	450*	240*	140*	140	290*
PP regrind ¹	490	490	450	460	520	570
PP regranulates ⁵	720	720	670	730	770	830
PS regrind⁴	490	540	570	570	590	610
PS regranulates⁵	940	790	810	800	830	880
PVC_P regrind ¹	510*	460*	250*	200*	300*	370*
PVC_U regrind ¹	270*	290*	230*	380*	410*	380
PET bale goods	90*	90*	160*	220*	140*	160*
PET regrind mixed colours	300	300	290	340	360	340
Average Price	(458)	465	431	454	466	513

Table 2: Standard plastics price according to plasticker; listed in €/t.

3.2 plasticker: Technical plastics

Only small movements in the average prices for technical plastics can still be seen. Since May 2020, the average prices for technical plastics have been static, see Table 3. In September 2020, the average price for technical plastics in plasticker is $1,151 \in /t$ and thus only 8 \in /t higher than in the previous month $(1,143 \in /t)$. A comparison of the average prices from September 2020 $(1,151 \in /t)$ with those of the previous year $(1,225 \in /t)$ shows a difference of $74 \in /t$.

These plastics show price changes of more than ± 70 €/t: PC regranulates +140 €/t, PBT regranulates +140 €/t and POM regranulates -130 €/t. A 5-year-low was reached with ABS regrind at 550 €/t and POM regranulates 1,310 €/t. The October price index records slightly higher demand for plastic in comparison with the previous month.

The preview of the October quotes shows a rising average price for technical plastics. The average price in October $(1,217 \le /t)$ was quoted at $66 \le /t$ higher than in the previous month $(1,151 \le /t)$. The October price index of 12.10.2020 shows subdued demand for plastic.

^{*:} 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)

	Oct. ⁶ 20	Sept. 20	Aug. 20	July 20	June 20	Sept. 19
ABS regrind	540	550	550	560	600	610
ABS regranu- lates ⁵	1040	1030	1100	1030	940	1230
PC regrind	840	850	840	820	860	940
PC regranulates ⁵	1750	1700	1560	1590	1580	1640
PBT regrind	440	440	420	430	450	510
PBT regranulates	1620	1770	1630	1610	1620	1570
PA 6 regrind	790	810	830	840	860	810
PA 6 regranu- lates ⁵	1790	1810	1820	1820	1750	1760
PA 6.6 regrind	850	870	890	920	920	870
PA 6.6 regranu- lates ⁵	2160	2110	2050	2060	2020	2120
POM regrind	570	560	580	580	600	590
POM regranu- lates ⁵	2210	1310	1440	1670	1520	2050
Average Price	(1217)	1151	1143	1161	1143	1225

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

4 Evaluation of the secondary plastic markets

4.1 Plastic wastes and recyclates

No end to the current crisis is in sight yet; the second wave of the coronavirus pandemic is emerging. The German plastics recyclers are in a very difficult situation because the sales channels for the recyclates have dwindled away. The running costs for staff and operating the facilities are very hard to shoulder. Short-time allowances and plant closures only help to bridge the precarious situation to a limited extent.

In addition to the difficult situation outlined above, plastics recyclers are suffering from the fact that mainly unsatisfactory sorting grades are available. The sorting grades available are continuing to deteriorate. And, as a result, the expenses required to manufacture marketable recyclates.

Both price indices, i.e. EUWID and plasticker, report extremely subdued demand for plastic waste in August. The EUWID price index for standard plastics shows slight price falls for waste plastics, whereas plasticker reports a higher average price. Since plasticker covers both recyclates and virgin grades in its price index, the reason for the price rises is a price rise for virgin grades. Furthermore, some price information in plasticker is not reliable because the sales involved are below statistical significance.

The EUWID price index for waste plastics shows very low price corrections for the post-industrial waste of PE, PP, PS and PVC and for PE post-user. The average price falls for production waste are: PE 8 €/t, PP 3 €/t, PS 6 €/t and PVC 3 €/t. In September, the mean EUWID quotes for PE post user films are: LDPE shrink hoods natural 290 €/t, LDPE shrink hoods mixed colours 65 €/t, thin film transparent natural 173 €/t, thin film transparent coloured 18 €/t, LDPE agricultural film -50 €/t, commercial mixed film (90/10) 75 €/t and commercial mixed film (80/20) 40 €/t.

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

4.2 PET Recycling

PET recycling is particularly affected by the turbulence of the market. The cheap virgin grade is pushing recyclates out of their markets. PET virgin grades are sometimes available for 700 €/t. Sales of regrind and regranlates are stagnating. Whereas transparent recyclates are finding a few niches, there is hardly any demand for mixed colour grades. PET recyclers are working short hours or have closed their operations down.

In spite of the continuing falls in prices for manufacturing grades since April 2020, PET recyclers need even more marked price falls to be able to work adequately. In the times of the crisis, PET recyclers have built up large stocks of manufacturing grades. For the sixth time in succession, the quotes for used PET returnable bottles have fallen. In August, the relative changes were: PET transparent -5 €/t, PET mixed -10 €/t, and PET coloured -15 €/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

Bonn, Friday, 23. October 2020

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