#### **1** General economy with respect to the plastics industry

ifo business climate index: in May 2021, the ifo business climate index rose markedly, see <u>www.ifo.de/ifo-geschaeftsklimaindex</u>. The mood in the board rooms of German industry had noticeably improved. In May, the ifo business climate index rose to 99.2 points, after 96.6 points (seasonally adjusted) in April. This is the highest score since May 2019. Companies were more satisfied with their current business situation. Moreover, they are more optimistic about the months ahead. The German economy is picking up speed.

The index rose slightly in the manufacturing sector. Companies were noticeably more satisfied with their current business. A considerable damper was put on expectations, but they remained positive. Order volumes increased and companies are expecting price rises.

Quarterly plastics industry report Germany: the report of the plastics industry in Germany for QI 2021 is now available. The quarterly report is funded by the associations PlasticsEurope Deutschland, the General Association of the Plastics Processing Industry (GKV), the Technical Association for Plastic and Rubber Processing Machines in the VDMA and BKV GmbH; it is published by PlasticsEurope Deutschland e.V.

In the first quarter of 2021, the production of plastics in primary form rose further in Germany, by 3.2 % in comparison to the previous quarter. And production increased by a strong 5.9 % over the previous year. In March 2020, production started to decline because of the coronavirus. Turnover of plastics in primary form rose markedly in the first quarter of 2021 in comparison to the previous quarter, by 22.3 %. It was thus also 6.8 % above the level of the previous year.

In comparison to the previous quarter, the manufacture of plastic goods recorded only slight growth of 0.3 %. The previous year's level was surpassed by 2.6 %. Turnover in the manufacture of plastic goods rose by 6.5 % in comparison to the previous quarter. Turnover was 3.1 % higher than in the previous year.

#### 2 Primary markets – standard plastics

The upturn in prices for standard plastics is weakening slightly. Experts expect that plastics prices will remain high for a while. However, we can now see the first mechanisms that will help to calm the markets.

In May 2021, the average price of 2,020  $\in$ /t is 84  $\in$ /t higher than in the previous month (1,936  $\in$ /t), see Tab. 1. A comparison with a year earlier shows that the average price of May 2021 (2,020  $\in$ /t) is as much as 1,138  $\in$ /t higher than that of the previous year (882  $\in$ /t), see EUWID, <u>www.euwid-recycling.de</u>. The average price rises in detail are: LDPE film 125  $\in$ /t, LLDPE film 125  $\in$ /t, HDPE 45  $\in$ /t, PS 100  $\in$ /t, PP 100  $\in$ /t and PVC 50  $\in$ /t.

PET: the PET markets are gradually returning to normal. However, in May the demand for PET bottles was described as still much lower than before the coronavirus crisis. However, availability of virgin grade is much better. Packaging PET was quoted at an average 1,380  $\in$ /t in May 2021, and thus 15  $\in$ /t lower than in the previous month.

Prices in €/t	May 2021	April 2021	March 2021	Feb. 2021	Jan. 2021
LDPE film	2050- 2250	1950- 2100	1850- 2000	1450- 1550	1200- 1290
LLDPE film	2050- 2250	1950- 2100	1800- 1900	1440- 1540	1190- 1280
HDPE injection moulding	1950- 2100	1920- 2050	1650- 1800	1350- 1430	1150- 1200
HDPE blow moulding	1950- 2100	1910- 2040	1630- 1780	1330- 1410	1150- 1220

Table 1: Standard plastics prices according to EUWID over the last five months, listed in  $\notin/t$ .

PS crystal clear	2250- 2350	2150- 2250	1850- 1950	1370- 1470	1320- 1430
PS high impact	2350- 2450	2250-2350	1950- 2050	1450- 1550	1390- 1500
PP homopolymer	2000- 2200	1900- 2100	1700- 1800	1400- 1500	1180- 1280
PP copolymer	2050- 2250	1950- 2150	1750- 1850	1450- 1550	1230- 1330
PVC tube grade	1350- 1450	1300- 1400	1100- 1200	1000- 1090	940- 1000
PVC film/cables	1450- 1550	1400- 1500	1200- 1300	1020- 1100	970- 1030
Average Price	2020 ± 324	1936 ± 302	1706 ± 282	1373 ± 177	1214 ± 156

### 3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see <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 June 2021; they will not become definitive until early July. The two quotes stated for June 2021 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

### 3.1 plasticker: Standard plastics

The changes in the plastics markets can now also be clearly seen in plasticker. The average price for May 2021 is 620  $\in$ /t. And this average price is 61  $\in$ /t higher than that of the previous month (559  $\in$ /t), see Table 2. And the average price of May 2021 (620  $\in$ /t) is 149  $\in$ /t higher than that of the previous year (471  $\in$ /t). Significant price changes (±40  $\in$ /t) include: HDPE regranulates +80  $\in$ /t, LDPE regranulates +100  $\in$ /t, PP regrind +50  $\in$ /t, PP regranulates +160  $\in$ /t, PS regrind +80  $\in$ /t and PS regranlates at +320  $\in$ /t. The other price changes, such as for PP baled goods, PVC-P, PVC-U and PET baled goods, are not of sufficient statistical significance to be listed individually here. In May, the regranulate prices reached highs. The price index records satisfactory demand for plastics.

The preview of the June quotes indicates an average price of 630 €/t, see Table 2. The price index of 11.06.2021 shows subdued demand for plastic to date.

	June <sup>6</sup> 21	May 21	April 21	March 21	Feb. 21	May 20
HDPE regrind <sup>1</sup>	640	620	620	580	520	510
HDPE regranu- lates⁵	1050	1040	960	880	800	660
LDPE bale goods <sup>2</sup>	250*	280*	260*	160*	140	160
LDPE regrind <sup>1</sup>	470	490*	530	490	470	520
LDPE regranu- lates <sup>5</sup>	980	780	680	640	600	590
PP bale goods <sup>3</sup>	230*	210*	270*	360*	350*	190*
PP regrind <sup>1</sup>	600	600	550	530	520	530
PP regranulates <sup>5</sup>	1090	1120	960	850	740	830
PS regrind <sup>4</sup>	710*	680	600	570	510	630
PS regranulaest <sup>5</sup>	1440	1480	1160	920	880	730
PVC_P regrind <sup>1</sup>	360*	350*	240*	530*	450*	260
PVC_U regrind <sup>1</sup>	570*	570*	480*	520*	400	400
PET bale goods	70*	70*	140*	80*	100*	210*
PET regrind mixed colours	360	390	380	380	380	370
Average Price	(630)	620	559	535	490	471

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

\*: Supply figure too low to attain statistical significance; <sup>1</sup>: equivalent to the grade "post-industrial mixed colours"; <sup>2</sup>: equivalent to K49; <sup>3</sup>: equivalent to K59; <sup>4</sup>: equivalent to "standard mixed colours"; <sup>5</sup>: equivalent to the grade "regranulates, black"; <sup>6</sup>: preview (may be amended by additional quotes).

### 3.2 plasticker: Technical plastics

In plasticker technical plastics are going through the roof! Thus, in May 2021 the average price was  $1,592 \in /t$ . And this average price is  $153 \in /t$  higher than that of the previous month  $(1,439 \in /t)$ , see Table 3. And the average price of May 2021  $(1,592 \in /t)$  is as much as  $420 \in /t$  higher than that of the previous year  $(1,172 \in /t)$ .

These plastics show price changes of more than ±70 €/t: PC regrind +150 €/t, PC regranulates +200 €/t, PBT regrind +90 €/t, PBT regranulates +90 €/t, PA 6 regrind +80 €/t, PA 6.6 regranulates +300 €/t, PA 6.6 regrind +80 €/t, PA 6.6 regranulates +210 €/t and POM regranulates +700 €/t. The price index shows a subdued demand for plastic.

The probable average price in June 2021 (1,578  $\in$ /t) is quoted at 14  $\in$ /t lower than in the previous month (1,592  $\in$ /t). Or put another way, the quotes at a high level are remaining roughly the same. The June price index of 15.06.2021 shows subdued demand for plastic.

	June <sup>6</sup> 21	May 21	April 21	March 21	Feb. 21	May 20
ABS regrind	600	590	640	580	550	610
ABS regranu- lates <sup>5</sup>	2100	2310	2300	1810	1480	980
PC regrind	1030	1000	850	840	830	830
PC regranulates <sup>5</sup>	2000	2200	2000	1970	1850	1640
PBT regrind	610	620*	530*	470	450	430
PBT regranulates	2050	2020	1930	1920	1810	1640
PA 6 regrind	960*	950	870	870	890	860
PA 6 regranu- lates <sup>5</sup>	2380	2430	2130	2070	2000	1790
PA 6.6 regrind	1020	1050	970	940	930	910
PA 6.6 regranu- lates <sup>5</sup>	2870	2770	2560	2560	2130	2120
POM regrind	580*	660*	690	580	610	610
POM regranu- lates <sup>5</sup>	2730	2500	1800	1770	1710	1640
Average Price	(1578)	1592	1439	1365	1270	1172

Table 3: Technical plastics price according to plasticker; listed in  $\notin/t$ .

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

#### 4 Secondary Plastics Markets

#### 4.1 Plastic wastes

Plastic wastes made of HDPE, PP and PS are in demand on the market. The price of postindustrial PE film waste is unchanged. The price of post user PE film waste is falling in the quotes by an average  $15 \notin t$  to  $55 \notin t$ . The price changes of the last few months are restoring the price difference between virgin grade and recyclates, which had diminished in the interim.

In May 2021 the EUWID quotes for post user PE films were: LDPE shrink hoods natural 460  $\in$ /t, LDPE shrink hoods mixed colours 175  $\in$ /t, thin film transparent natural 265  $\in$ /t, thin film transparent coloured 70  $\in$ /t, LDPE agricultural film -40  $\in$ /t, commercial mixed film (90/10) 145  $\in$ /t and commercial mixed film (80/20) 110  $\in$ /t.

### 4.2 Recyclates

The price rise for plastic recyclates, i.e. regrinds and recyclates, is diminishing. Nevertheless, recyclate prices are still recording highs. And the demand for plastic recyclates is extremely high. Plastics processors are increasingly using recyclates, mixed with virgin grade. Whereas some processors are having good experiences with the use of recyclates, others are reluctant to make the effort to continuously adapt their processing to the changed conditions.

Regrinds: the regrinds from PE production waste cost an average 30 €/t and the regrinds from PP production waste can an average 41 €/t more, see EUWID price index for plastic waste. The regrinds from HDPE post user, i.e. hollow bodies mixed colours 200 €/t, crates sorted according to colour 600 €/t and crates mixed colours 490 €/t, are quoted an average of 22 €/t higher. PS production wastes are quoted an average 40 €/t higher. PVC production wastes are enjoying average price rises of 33 €/t and PVC window frames of 23 €/t.

Regranulates: The regranulates are caught up in the price recovery of the virgin grades. Average price rises of 38 €/t are cited for regranulates in May 2021. The price rises vary greatly across the commodities. The plastics recyclers have been able to impose moderate price rises. The regranulates will maintain their price level in the months ahead.

## 4.3 PET Recycling

Whereas the supply of used PET bottles is deemed paltry in May 2021, the situation has improved in June. The volume of used PET beverage bottles is rising. The reasons for this are the good weather, the removal of Covid-related restrictions and the European Championship football matches.

The prices for used PET disposal bottles changes in May as follows: PET transparent +40  $\in$ /t, PET mixed +60  $\in$ /t and PET coloured +20  $\in$ /t. The virgin grade prices fell slightly in May, from a very high level (-15  $\in$ /t). On average, PET flakes are rising by 100  $\in$ /t and PET regranulates by 25  $\in$ /t. Demand for PET regrinds and PET regranulates continues to be strong.

## 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 <u>www.euwid.de</u>, or in EUWID Plastics <u>www.euwid-kunststoff.de</u>. 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 <u>www.plasticker.de</u>. The prices listed in this index are quoted without reservation - as the majority of the quotes are 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 from the prices quoted by EUWID.