1 The general economy

Results from the ifo economic survey in June 2022, the ifo business climate index Germany, are now available, see <u>https://www.ifo.de/node/70162</u>.

The mood in German board rooms has deteriorated. It fell to 92.3 points in June, following on from 93.0 points in May. Companies were slightly less satisfied with their current business situation. Expectations were much more pessimistic. The threats of gas shortages are causing great concern to German businesses.

The index received a severe blow in the manufacturing sector. Companies assess the current business situation as less good. Moreover, they are noticeably pessimistic about the second half of the year. The chemicals industry in particular is extremely unsettled.

2 Primary markets - standard plastics

In May 2022 the EUWID average price of 2,188 \in /t was 67 \in /t lower than in the previous month (2,255 \in /t), see Table 1. In a year-on-year comparison, it can be seen that the average quotes from May (2,188 \in /t) were 168 \in /t higher than those of the previous year (2,020 \in /t), see EUWID, <u>www.euwid-recycling.de</u>. Subdued demand has been cited as a reason for the price drops. The fall in demand, in turn, is due to the hope of further price falls in the coming months.

Furthermore, processors are pausing their orders because other materials and supplies to manufacture the entire product are not available in the supply chain. The price change in May is therefore classed as a sideways movement. We saw a similar halt to prices in February. The quotes for PE fell by an average 125 \in /t, PP by 75 \in /t and PVC by 40 \in /t. However, PS was quoted at 30 \in /t higher.

PET: Firstly, things don't happen how we expect them to. Imported quantities from Asia are alleviating the demand pressure, in spite of the seasonally increased demand for beverage bottles. As a result, the prices for packaging PET stabilised in May. Packaging PET was quoted at an average price of 1,760 \in /t in May 2022, and thus 90 \in /t lower than in the previous month, see <u>https://www.kiweb.de/</u>

Prices in €/t	May 2022	April 2022	March 2022	Feb. 2022	Jan. 2022
LDPE film grade	2000- 2150	2150-2300	1950- 2100	1850- 2000	1900- 2050
LLDPE film grade	1950- 2100	2100-2250	1900- 2050	1800- 1950	1850- 2000
HDPE injection moulding	1800- 2000	1900- 2100	1700- 1900	1550- 1750	1600- 1800
HDPE blow moulding	1750- 1950	1850- 2050	1650- 1850	1500- 1700	1550- 1750
PS crystal clear	2580- 2680	2550-2650	2150-2250	2050- 2150	2150- 2250
PS high impact	2630- 2730	2600-2700	2200-2300	2100- 2200	2200-2300
PP homopolymer	2300- 2450	2350-2550	2150-2350	2050- 2250	2100- 2300
PP copolymer	2350- 2500	2400-2600	2200-2400	2100- 2300	2150- 2350
PVC tube grade	1860- 1960	1900- 2000	1800- 1900	1700- 1800	1680- 1780
PVC film/cables	1960- 2060	2000-2100	1900- 2000	1800- 1900	1780- 1880
Average Price	2188 ± 278	2255 ± 278	2035 ± 213	1925 ± 227	1971 ± 247

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

3 Secondary plastics markets in the plasticker price index

The internet platform plasticker, 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 2022; they will not become definitive until early July 2022. The

two quotes stated for June 2022 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

3.1 plasticker: Standard plastics

The price rally continued in May 2022. The average price in May was quoted at 806 \in /t and was thus 141 \in /t higher than that of the previous month (665 \in /t), see Table 2. And this average price (806 \in /t) was 186 \in /t above that of the previous year (620 \in /t).

The price movements in the individual commodities were particularly large! There were significant price changes of greater than $\pm 40 \notin /t$ for: HDPE regrind $\pm 110 \notin /t$, LDPE regranulates $\pm 160 \notin /t$, PP regranulates $\pm 120 \notin /t$, PP bale goods $\pm 80 \notin /t$, PP regrind $\pm 110 \notin /t$, PS regranulates $\pm 400 \notin /t$ and PET bale $\pm 240 \notin /t$. Highs were recorded for HDPE regranulates at 1,190 \notin /t and PS regranulates at 1,750 \notin /t . The price index is characterised by slightly improved demand for plastic in comparison to the previous month.

The probable average price in June 2022 (829 \in /t) is once again quoted by 23 \in /t higher than in the previous month (806 \in /t) see Table 2. The price index of 23.06.2022, shows subdued demand for plastic to date.

	June ⁶ 22	May 22	April 22	March 22	Feb. 22	May 21
HDPE regrind ¹	930	740	630	710	590	620
HDPE regranulates⁵	1250	1190	1090	1100	950	1040
LDPE bale goods ²	160*	330*	260*	400*	120*	280*
LDPE regrind ¹	790*	640*	640*	650*	430*	490*
LDPE regranulates⁵	1230	1030	910	1070	820	780
PP bale goods ³	180*	260*	340*	380*	250*	210*
PP regrind ¹	870*	670	780	790	530	600
PP regranulates ⁵	1600	1480	1370	1490	970	1120
PS regrind ⁴	1090*	720*	780*	880*	610	680
PS regranulates ⁵	1750	1750	1350	1330	1040	1480
PVC_P regrind ¹	900*	900*	660*	650*	660*	350*
PVC_U regrind ¹	0*	730*	0*	0*	500*	570
PET bale goods	10*	250*	140*	200*	360*	70*
PET regrind mixed colours	850	600	360	390	350	390
Average Price	(829)	806	665	717	584	620

Table 2: Standard plastics price according to plasticker; listed 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 (may be amended by additional quotes)

3.2 plasticker: Technical plastics

For May 2022, there was an average price of 2,023 €/t, which was 50 €/t higher than that of the previous month (1,973 €/t), see Table 3. The average price for May (2,023 €/t) was 851 €/t above that of the previous year (1,172 €/t).

These plastics show significant price changes of more than ± 70 €/t: ABS regrind +350 €/t, ABS regranulates -160 €/t, PBT regrind -290 €/t, PC regrind -220 €/t, PC regranulates - 120 €/t, PBT regrind +100 €/t, PBT regranulates -210 €/t, PA 6 regrind +100 €/t, POM regrind

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+320 \in /t and POM regranulates +120 \in /t. Highs were recorded for ABS regrind at 1,370 \in /t, ABS regranulates at 2,660 \in /t, PA 6.6 regrind at 1,060 \in /t and POM regranulates 3,560 \in /t. The price index reveals a slightly improved demand for plastic over the previous month.

The probable average price in May 2022 (1,999 \in /t) is thus 24 \in /t lower than in the previous month (2,023 \in /t). The price index of 23.06.2022 shows satisfactory demand for plastic.

	June ⁶ 22	May 22	April 22	March 22	Feb. 22	May 21
ABS regrind	1460	1370*	1020*	970	810	610
ABS regranulates⁵	2370	2660	2500	2500	1980	980
PC regrind	1130*	900*	1120*	1240*	1080	830
PC regranulates ⁵	2790	2890	3010	3010	2640	1640
PBT regrind	980*	620*	520*	810*	590	430
PBT regranulates	2350	2520	2730	2940	2330	1640
PA 6 regrind	1130	1060	960*	860*	930	860
PA 6 regranulates⁵	2870	2710	2650	2720	2450	1790
PA 6.6 regrind	980+	1010*	960	1250*	960	910
PA 6.6 regranulates⁵	3400	3870	3980	3870	2810	2120
POM regrind	1190*	1110*	790*	1140*	760	610
POM regranulates⁵	3340	3560	3440	3040	3340	1640
Average Price	(1999)	2023	1973	2029	1723	1172

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

*: Supply figure too low to attain statistical significance; ^{5.} equivalent to the grade "regranulates, black"; ^{6.} preview (may be amended by additional quotes)

4 Secondary plastics markets

The secondary plastics could not compensate for the large shortcomings in supply of virgin grade; supply deficits could only be cushioned or alleviated. Recyclers and processors hope that the markets will calm down or consolidate in the summer break. On the one hand, this refers to the shortage of processing input - there is a shortage of plastic. On the other hand, as with virgin grade, secondary plastics are suffering from rises in transport and energy costs.

According to EUWID, the demand for plastic wastes and recyclates for standard plastics was assessed as high. The May EUWID price index records moderate price rises for film wastes; however, regrinds are stagnating. In plasticker we see much higher quotes for plastic wastes, in this case standard plastics and technical plastics. And consequently, plasticker reports satisfactory demand.

4.1 Plastic wastes

The new price rises for wastes are still due to shortages in supply, see <u>www.euwid-recycling.de</u>. However, the strong price pressure is reduing slightly. And this is undoubtedly due to the fact that virgin grades were quoted lower in the May quotes. In EUWID we see price rises of an average $10 \notin/t$ to $40 \notin/t$ for PE post user bale goods. LDPE film from production wastes was quoted at an average $15 \notin/t$ higher. And PP film from production wastes increased by an average $10 \notin/t$.

4.2 Recyclates

In EUWID we see price rises for some plastic regrinds. The boom in the demand for recyclates continues. Prices for regranulates are still reaching those for virgin grade, or are even exceeding them. Prices for plastics are extremely volatile. Plastics recyclers are complaining about a shortage of processing input and excessively high prices for them. In addition, high energy costs, in particular for granulating, have to be paid. Furthermore, transport and logistics are causing high costs.

4.3 PET Recycling

Recycling PET has gone crazy! One explanation for the continuing recycling boom is that the quantities are being secured in order to be able to comply with the requirements for recyclate usage quotas. The virgin grade prices are being greatly surpassed by the prices for regrinds (flakes) and regranulates. Whereas the price of virgin grades has fallen by around $90 \notin/t$, the prices of regrinds have risen by around $105 \notin/t$ and of regranulates by $100 \notin/t$.

But the prices for used PET single-use bottles are still rising; these prices changed in May as follows: PET transparent +35 \in /t, PET mixed +30 \in /t, and PET coloured +20 \in /t. Detailed monthly reports on the PET prices for virgin grade and used bottles can be found in EUWID and KI Plastics Information Europe.

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-recycling.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 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

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Dr. Thomas Probst, bvse