1 General economy with reference to the plastics industry

The German plastic industry's fourth quarterly report for 2021 is now available. The quarterly report is supported by the associations PlasticsEurope Deutschland, the Umbrella Association of the Plastics Processing Industry GKV and the VDMA Specialist Association of Plastics and Rubber Machinery and BKV GmbH.

In the final quarter, German industrial production rose by 1.8 % in comparison to the previous quarter. The strongest growth was experienced in car production. However, reaching the precrisis level is still far from being achieved. In the fourth quarter, the high energy prices affected German industrial production, as did continuing problems in the logistics chain and the availability of precursor products. By contrast, the effects of the coronavirus restrictions were rather mild. They mainly affected the service sector. Retail turnover fell markedly. German GDP consequently fell by 0.7 % in comparison to the previous quarter, in spite of growth in industry.

In the fourth quarter of 2021, production of plastics in the primary form rose by 3.2 % in comparison to the previous quarter. The upwards trend therefore continued. By contrast, for three quarters in succession, the manufacture of plastic goods recorded a fall, and was 0.9 % lower than in the previous quarter. The previous year's level was missed by 4.7 %.

The sales of plastics in the primary form rose by 4 % in the fourth quarter in comparison to the previous quarter. And they were therefore 37.1 % higher than in the previous year. Sales in the manufacturing of plastic goods rose by 0.5 % in comparison to the previous quarter. In comparison to the previous year, sales were 6.7 % higher.

2 Primary markets - standard plastics

In January 2022, the EUWID average price of 1,971 €/t was an average of only 3 €/t higher than in the previous month (1,968 €/t), meaning that the quotes for standard plastics were stable see Table 1. In a year-on-year comparison, it can be seen that the average quotes from January 2022 (1,971 €/t) were as much as 757 €/t higher than those of the previous year (1,214 €/t), see EUWID, www.euwid-recycling.de. Whereas the price of HDPE fell by an average 100 €/t, PS was quoted an average 115 €/t higher. All other plastics were quoted unchanged in comparison to the previous month.

PET: There is a break in the PET markets because processors are counting on a market consolidation and thus falling prices for their processing input. The supply of virgin grade has improved slightly, but it is still low. In January 2022, packaging PET was quoted on average at 1,680 €/t and thus 40 €/t higher than in the previous month, see https://www.kiweb.de/.

Table 1. Standard plastics prices according to LOWID over the past live months, listed in e/t.						
Prices in €/t	January 2022	Dec. 2021	Nov. 2021	Oct. 2021	Sept. 2021	
LDPE film grade	1900- 2050	1900- 2050	1900- 2050	1800- 1950	1800- 1950	
LLDPE film grade	1850- 2000	1850- 2000	1850- 2000	1750- 1900	1750- 1900	
HDPE injection moulding	1600- 1800	1700- 1900	1700- 1900	1600- 1800	1600- 1800	
HDPE blow moulding	1550- 1750	1650- 1850	1650- 1850	1550- 1750	1550- 1750	
PS crystal clear	2150- 2250	2020- 2120	2000- 2100	1720- 1820	1700- 1800	
PS high impact	2200- 2300	2100- 2200	2100- 2200	1820- 1920	1800- 1900	
PP homopolymer	2100- 2300	2100- 2300	2100- 2300	2050- 2250	2050- 2250	
PP copolymer	2150- 2350	2150- 2350	2150- 2350	2100- 2300	2100- 2300	
PVC tube grade	1680- 1780	1680- 1780	1680- 1780	1550- 1650	1500- 1600	
PVC film/cables	1780- 1880	1780- 1880	1780- 1880	1650- 1750	1600- 1700	
Average Price	1971 ± 247	1968 ± 203	1966 ± 202	1834 ± 212	1822 ± 222	

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 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 February 2022; they will not become definitive until early March 2022. The two quotes stated for February 2022 below therefore indicate only an interim situation, see the left-hand column in Table 2 and Tab 3.

3.1 plasticker: Standard plastics

Table 2:

The prices for standard plastics in plasticker should mainly be seen as a trend at the moment. There is now a relatively large number of quotes that are based on a low number of offers and which should therefore be judged to be not very reliable. Whether the price jumps in plasticker for the quotes from January to those of February are justified in each case can be checked with a comparison with the KI - Plastics Information Europe and EUWID price indices. For this reason, the discussion of the plasticker prices below is conditional.

The average price for January 2022 (717 €/t) was thus 81 €/t higher than that of the previous month (636 €/t), see Table 2. The average price for January 2022 (717 €/t) was 244 €/t above that of the previous year (473 €/t). There were significant price changes of greater than ±40 €/t for: HDPE regrind +150 €/t, HDPE regranulates +130 €/t, LDPE regranulates +170 €/t, PP regranulates +190 €/t, PS regranulates +110 €/t and PET regrind mixed colours +240 €/t. The price index is characterised by subdued demand for plastic.

The preview of the February quotes is surprising because of the clear price falls here; the preview shows an average price that is 127 €/t lower, see Table 2. The price index of 25.02.2022, shows subdued demand for plastic to date.

Jan. 21

	February ⁶ 22	January 22	Dec. 21	Nov. 21	Oct. 21
HDPE regrind ¹	590	750	600	580	570
HDPE regranu-	050	4050	000	000	000

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

	22					
HDPE regrind ¹	590	750	600	580	570	500
HDPE regranu- lates⁵	950	1050	920	960	880	690
LDPE bale goods ²	170*	470*	350*	370*	170*	150*
LDPE regrind ¹	430*	480*	470*	430*	340*	510
LDPE regranu- lates ⁵	820	1020	850	890	740	570
PP bale goods ³	280*	-	310*	380*	570*	270
PP regrind ¹	530	650*	630	730*	650	510
PP regranulates ⁵	970	1590	1400	1530	970	720
PS regrind ⁴	610	720*	700*	760*	700	510
PS regranulates ⁵	1040	1270	1160	990	920	750
PVC_P regrind ¹	660	690*	490*	0*	360*	510*
PVC_U regrind ¹	500	630*	480*	0*	0*	390
PET bale goods	360*	0*	70*	90*	290*	160*
PET regrind mixed colours	350	720	480	520	520	380
Average Price	(590)	717	636	588	549	473

^{*:} 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 January 2022, there was an average price of 1,978 €/t, which was 171 €/t higher than that of the previous month (1,807 €/t), see Table 3. The average price for January 2022 (1,978 €/t) was as much as 749 €/t higher than that of the previous year (1,229 €/t).

These plastics show significant price changes of more than ± 70 €/t: ABS regrind +110 €/t, ABS regranulates +170 €/t, PC regrind +180 €/t, PC regranulates +80 €/t, PBT regranulates +520 €/t, PA 6 regranulates +200 €/t, PA 6.6 regrind -90 €/t, POM regrind +260 €/t and POM regranulates +590 €/t. ABS regrind, PC regrind, PC regranulates, PBT regrind, PBT regranulates, PA 6.6 regranulates, POM regrind and POM regranulates all recorded a 5-year high. The price index shows a subdued demand for plastic.

The probable average price in February 2022 (1,724 €/t) is quoted much lower than in the previous month (1,978 €/t). The February price index of 36.02.2022 shows subdued demand for plastic.

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	February ⁶ 22	January 22	Dec. 21	Nov. 21	Oct. 21	Jan. 21
ABS regrind	810	1060	950	880	680	530
ABS regranu- lates ⁵	1960	2330	2160	1900	1810	1500
PC regrind	1080	1240	1060	1010	950	650
PC regranulates ⁵	2640	3180	3100	2560	2230	1870
PBT regrind	590	760*	750*	680*	540	470
PBT regranulates	2330	2690	2170	2170	2210	1710
PA 6 regrind	930	960*	1000	950*	890	890
PA 6 regranu- lates ⁵	2450	2600	2400	2480	2360	1970
PA 6.6 regrind	960	1110*	1200	1190	930	910
PA 6.6 regranu- lates ⁵	2840	3320	3250	3190	2980	2090
POM regrind	760	1060*	800	800*	730	510
POM regranu- lates ⁵	3340	3430	2840	2790	2330	1650
Average Price	(1724)	1978	1807	1717	1553	1229

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

4 Secondary Plastics Markets

The secondary plastics markets were inconsistent in January; they are difficult to assess. In this connection, we refer to the stable prices for virgin grades in January. Was the zenith for high quotes for plastic wastes reached in January? Whereas plasticker listed marked prices rises of 81 €/t, EUWID recorded rises of 5 €/t to 30 €/t for selected grades. The assessment is also made more difficult by the fact that plasticker is recording clearly falling prices for February.

Both EUWID and plasticker record the demand for plastic wastes and recyclates as more subdued than in previous months. However, the plastic recyclers were hardly able to satisfy the many requests for recyclates.

Things have quietened down with respect to the export of plastic wastes. Shipments within the EU are still possible, but exports to non-EU states are stalling. Exports are restricted by the high prices for fuel and containers. And the prices for containers are continuing to rise,

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

for example the worldwide FBX freight index of 26.02.2022 quotes US\$ 9,789 for a 40-foot container.

And looking to the future is made more difficult due to the war Russia is waging against Ukraine. First of all, there are the existing high prices for energy and plastic wastes. The impact of the war on energy prices, the availability of crude oil, precursor products, virgin grade plastics and thus also recyclates cannot yet be evaluated.

4.1 Plastic wastes

In the post-user sector, we are still seeing price rises by increments. EUWID shows that the prices for PE post user plastic wastes were rising in January 2022, by an average of 13 €/t. The changed quotes for PE post-user wastes as bale goods for the price index were: LDPE shrink hoods natural 520-580 €/t, LDPE shrink hoods mixed colours 170-260 €/t, film transparent natural <70 µm 420-470 €/t, film transparent coloured <70 µm 160-190 €/t, LDPE agricultural film b/w -20 to 0 €/t, commercial mixed film (90/10) 260-310 €/t, commercial mixed film (80/20) 200-240 €/t, HDPE blow-moulded bodies_coloured 270-370 €/t.

4.2 Recyclates

The boom in the demand for recyclates continues unabated. The demand for recyclates exceeded the supply by far. Plastics recyclers report that their recyclates are sold out months in advance. Prices for regranulates are still reaching those for virgin grade or are even exceeding them.

The regrinds of PVC production wastes and from PVC window grades showed price rises of an average 12 €/t and 10 €/t respectively. PS regrinds are quoted at unchanged prices. And PE and PP regrinds are quoted at stable prices.

4.3 PET Recycling

Demand for recycled PET (r-PET) greatly exceeds supply. Major market players secure the quantities of r-PET that they require for use in beverage bottles. And every day, new inquiries are received for the use of recycled PET and the aim is almost always for a recycled content of 100 %.

The shortage of PET is continuing to drive the prices both for virgin grade and for recyclates. The virgin grade prices are being reached and surpassed by the prices for regranulates. At the peak, up to 2,050 €/t are charged for food-safe regranulates; regrinds are quoted at up to 1,650 €/t.

PET recyclers are still lacking processing input. And imports of beverage bottles from the EU to Germany are limited. Bottle prices are rising; the prices for used PET single-use bottles changed in January as follows: PET transparent +40 €/t, PET mixed +30 €/t, and PET coloured +10 €/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 www.euwid.de, or in EUWID Plastics <a href="https://www.euwid.e

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

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