1 General economy with reference to the plastics industry

The fall in the Ifo Index is stronger than expected, see www.ifo.de/ifo-geschaeftsklimaindex. The mood among companies in Germany deteriorated as the year started. As the Munich Institute for Economic Research stated, the business climate index fell to 90.1 points in January. In December, the score was 92.2. Ifo President Fuest explained that the second coronavirus wave had temporarily put an end to the recovery of the German economy. In 2020, due to the coronavirus pandemic, the German economy had fallen further than at any time since the financial crisis of 2009. Economists are anticipating a tangible improvement in the economy in the current year. However, that depends on the future course of the pandemic.

The 40th survey on the economy in the plastics sector in KI Dialog draws a generally positive picture, see www.kiweb.de. The results are a textbook example of what economists call a V-shaped recovery. And the KI trend index has therefore undergone a leap only previously seen in 2009 during the financial crisis, of 44.7 points to 112.6 points. The companies' business situation has thus once again developed much better than was the case in the last sixmonthly survey. It was disproportionately good for plastics producers and distributors, of whom 87.8 % and 73.8 % respectively are looking forward to an improved business situation. Meanwhile, after ten good years, the plastics machinery manufacturing sector is satisfied that as many as 41.2 % of the companies surveyed could see an improving business situation. Among plastics processors, 51.8 % report that the situation has been better.

2 Virgin grades, standard plastics in this case

Force majeure, resulting from shortages in supply and excessive demand. The plastics shortages are the result of equipment failures, maintenance and strong demand from abroad. Moreover, warehouses are being topped up to prevent further shortages. And the crude oil price is also going through the ceiling: on 18 February 2021, the world market price for crude oil was US\$ 64.10 per barrel.

Catch-up effects: in the plastics sector, there is particularly strong demand for packagings. And the building and furniture industries are also booming. Demand is increasing markedly even in car manufacture. The prices for standard plastics will probably continue to rise in March

Packaging PET was quoted at an average price of 1,020 €/t in January 2021, thus 90 €/t higher than in the previous month. The reason for the price rise is the higher costs for the precursor products. In European markets, limited supply is met with continued low demand.

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

Prices in €/t	Jan. 2021	Dec. 2020	Nov. 2020	Oct. 2020	Sept. 2020
LDPE film grade	1200- 1290	1020- 1120	930- 1040	930- 1040	930- 1040
LLDPE film grade	1190- 1280	990- 1090	940- 1040	940- 1040	940- 1040
HDPE injection moulding	1150- 1200	960- 1030	930- 1000	930- 1000	930- 1000
HDPE blow	1150- 1220	960- 1050	930- 1030	930- 1030	930- 1030

moulding					
PS crystal clear	1320- 1430	1190- 1300	1050- 1110	1000- 1060	1000- 1060
PS high impact	1390- 1500	1240- 1350	1130- 1190	1080- 1150	1080- 1150
PP homopolymer	1180- 1280	1040- 1110	1000- 1070	1000- 1070	1000- 1070
PP copolymer	1230- 1330	1090- 1170	1050- 1120	1050- 1120	1050- 1120
PVC tube grade	940- 1000	890- 960	860- 930	820- 890	750- 800
PVC film/cables	970- 1030	940- 1000	910- 960	870- 920	790- 840
Average Price	1214 ± 156	1075 ± 124	1011 ± 87	994 ± 87	978 ± 112

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 2021; they will not become definitive until early March. The two quotes stated for February 2021 below therefore 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 473 €/t is calculated for January 2021. And this average price is 17 €/t higher than that of the previous month (456 €/t), see Table 2. The average price for January 2021 (473 €/t) was 17 €/t below that of the previous year (490 €/t). The price index shows just a subdued demand for plastic.

Significant price changes (±40 €/t) are: LDPE regrind +60 €/t, PS regranulates +60 €/t and PVC_U +90 €/t. The other price changes, such as PP bale goods and PET bale goods, are not of sufficient statistical significance for their contribution to be listed here.

The preview of the February quotes indicates an average price of 486 €/t, see Table 2. The price index of 17.02.2021, shows satisfactory demand for plastic to date.

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

	February ⁶ 21	January 21	Dec. 20	Nov. 20	Oct. 20	Jan. 20
HDPE regrind ¹	520	500	490	490	490	570
HDPE regranu- lates ⁵	790	690	710	670	690	750
LDPE bale goods ²	140*	150*	160*	200*	170	160*
LDPE regrind ¹	460	510	450	470	470	480
LDPE regranu- lates ⁵	590	570	590	540	590	600
PP bale goods ³	350*	270*	200*	170*	270*	180*
PP regrind ¹	520	510	510	480	480	560
PP regranulates ⁵	730	720	720	690	710	790
PS regrind⁴	460	510	490	540	550	630*
PS regranulates ⁵	840	750	690	700*	930	840
PVC_P regrind ¹	480*	510*	440*	350*	480*	290*
PVC_U regrind ¹	400	390	300*	430	420	510*
PET bale goods	140	160*	300*	180*	70*	130*
PET regrind mixed colours	390	380	340	300	260	370
Average Price	(486)	473	456	444	470	490

*: 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"; ⁵: preview (may be amended by additional quotes)

3.2 plasticker: Technical plastics

In January 2021, the average price quoted in plasticker for technical plastics was an average 73 €/t higher (1,229 €/t) in comparison to the previous month (1,156 €/t), see Tab. 3. A comparison of the average prices from January 2021 (1,229 €/t) with those of January 2020 (1,168 €/t) shows a difference of 61 €/t.

These plastics show price changes of more than ± 70 €/t: ABS regranulate +260 €/t, PC regrind -110 €/t, PC regranulate +390 €/t, PA 6 regranulate +110 €/t and POM regranulate +200 €/t. In spite of the holidays, the January price index records subdued demand for plastic in comparison with the previous month. The prices for ABS regrind at 530 €/t and PC regrind at 650 €/t are at a 5-year-low.

The average price in February 2021 (1,277 €/t) was quoted at 48 €/t higher than in the previous month (1,229 €/t). The February price index of 17.02.2021 shows adequate demand for plastic.

	February ⁶ 21	Jan. 21	Dec. 20	Nov. 20	Oct. 20	Jan. 20
ABS regrind	540	530	550	560	550	620
ABS regranu- lates ⁵	1670	1500	1240	990	1000	1480
PC regrind	790	650	760	780	820	890
PC regranulates⁵	1830	1870	1480	1680	1730	1530
PBT regrind	450	470	420	430	440	480
PBT regranulates	1750	1710	1750	1670	1600	1570
PA 6 regrind	910	890	870	870	820	840
PA 6 regranu- lates ⁵	2020	1970	1860	1800	1670	1750
PA 6.6 regrind	930	910	860	920	860	880
PA 6.6 regranu- lates ⁵	2090	2090	2080	2100	2090	2150
POM regrind	610	510	550	570	540	680
POM regranu- lates ⁵	1730	1650	1450	1490	1960	1440
Average Price	(1277)	1229	1156	1155	1173	1193

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

4 Evaluation of the secondary plastic markets

4.1 Restructuring of international plastic shipping

The German dealers and brokers are in despair about the chaos that prevails after the so-called reorganisation of plastic shipping. Some federal states demand implementation of 2 % contamination fraction among waste materials, whereas other federal states have recognised that national sorting specifications allow much higher residual content. And finally, the previous practice of exporting plastic waste is being continued in Belgium and the Netherlands, which leads to further distortions of competition.

All of this not only results in considerable competitive disadvantages for German dealers and brokers, but functioning markets in the exchange of goods are being stifled by the authorities.

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

The damage caused to the German economy by the failed export regulations is immense. And the damage that this causes the environment is also immense; because the European exchange of waste materials is being blocked and waste imports to Germany from third countries are barely possible. Or, put another way, the legislator has defined the regulations in such a way that ever-increasing quantities of plastic waste end up in waste incineration plants and ever fewer secondary raw materials can be recycled - this is a fatal misguided development.

4.2 Plastic wastes and recyclates

The secondary plastics markets are characterised by inconsistency and contradictory trends: there are on the one hand, the marked price rises in primary goods, which are now influencing the secondary markets, and, on the other, a surplus of plastic waste that is bringing prices down.

The demand for good plastic recyclates is high because, on the one hand, shortages in primary production of plastics has to be compensated for and, on the other, the production of commodities is being ramped up again. Whereas the bale goods for PE and PP production waste remain unchanged, the regrind goods are being quoted higher, see EUWID price index for waste plastics. The regrinds from PE production waste cost an average 23 €/t more and 14 €/t more for PP. The trend for strong demand for regrinds can also be seen in the post-user sector: HDPE regrind are quoting an average 13 €/t higher. And in absolute terms, the quotes here: HDPE blow-moulded bodies coloured 95 €/t, HDPE crates sorted colours 440 €/t and HDPE crates mixed colours 365 €/t.

In January, the EUWID price index for waste plastics identified only slight price changes for PE post-user waste. The PE post user sector reports price shifts for films, which have moved down by an average of 8 €/t. In January, the mean EUWID quotes for PE post user films were: LDPE shrink hoods natural 295 €/t, LDPE shrink hoods mixed colours 75 €/t, thin film transparent natural 163 €/t, thin film transparent coloured 25 €/t, LDPE agricultural film -38 €/t, commercial mixed film (90/10) 70 €/t and commercial mixed film (80/20) 45 €/t.

4.3 PET Recycling

In January and February, the volume of bottles is low due to the season. Furthermore, the coronavirus effect is still being felt, which increases the shortage of used PET returnable bottles. The prices for used PET single-use bottles changed in January as follows: PET transparent +10 €/t, PET mixed +7.50 €/t, and PET coloured remained unchanged. The PET recyclers believe that the prices for used PET bottles are much too high.

However, it is positive that the higher prices for virgin grades (+90 €/t) are improving the demand for recyclates, both regrinds and regranulates. The improvement in demand for PET recyclates should continue in March. The improved demand will mean that it will be possible to achieve higher recyclate prices.

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, Monday, 1. March 2021 Dr Thomas Probst, byse