# bvse market report: plastics, January 2021

## 1 General economy with reference to the plastics industry

The mood among German managers has improved. The ifo business climate index rose to 92.1 points in December, following on from 90.9 points in November, also see www.ifo.de/ifo-geschaeftsklimaindex. Companies were more satisfied with their current business situation than in the previous month. Furthermore, they are less sceptical about the prospects for the six months ahead. Although the lockdown is severely affecting some sectors, the German economy as a whole is proving to be resilient.

The index has risen markedly in the manufacturing sector. Assessments of the current situation improved to the highest level since January 2020. And optimism also increased greatly with regard to the months ahead. In particular, the chemicals industry and machine construction contributed positively to this development.

On 14 January 2021, the 320°internet platform, see www.320grad.de:, reported that the EU-wide recycling of plastics packaging is stagnating. The most recent figures from Eurostat show: In 2018, the recycling of plastic packagings made no progress in the EU. The recycling rates in the EU states still vary greatly.

An estimated 41.5 % of packaging waste made of plastic was recycled in the EU in 2018. Current statistics also show that the EU could not report any progress for 2018. The recycling rates are at almost exactly the same level as the two previous years. In 2016, the average EU recycling rate for plastic packaging was 42 %; in 2017, it was 41.2 %.

## 2 Virgin grade

### 2.1 The standard plastics market

In December, surprisingly large price rises, which are due to supply shortages, were reported for standard plastics. In addition to equipment failures, necessary breaks for maintenance and increased plastic deliveries to the Far East, rising crude oil prices are cited as reasons for the price rises. Moreover, warehouses have been topped up to prevent failures due to the crisis. Experts expect a gradual consolidation of plastic markets in the second half of 2021 - the prices for standard plastics will probably rise.

And there was therefore another price rise this month: in the period from May 2020 (882 €/t) to December 2020 (1,075 €/t), the price for standard plastic rose by 159 €/t, see EUWID, www.euwid-recycling.de. In December 2020 the average price was 64 €/t higher than in the previous month (1,011 €/t), see Table 1. Specifically, the price rises are as follows: LDPE to 85 €/t, LLDPE to 50 €/t, HDPE to 28 €/t, PS to 150 €/t, PP to 43 €/t and PVC to 33 €/t. The prices for standard plastics are thus almost reaching the levels of the previous year! In a year-on-year comparison, it can be seen that the average quotes from December 2020 (1,075 €/t) were only 22 €/t lower than those of the previous year (1,097 €/t).

Packaging PET was quoted at an average price of 930 €/t in December 2020, thus unchanged since October 2020. Supply and demand are balanced in the European markets. There is no market impetus. Experts are expecting hardly any changes to the current situation in January 2021.

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

| Prices in €/t | Dec. 2020 | Nov. 2020 | Oct. 2020 | Sept. 2020 | Aug. 2020 |
|---|---|---|---|---|---|
| LDPE film grade | 1020- 1120 | 930- 1040 | 930- 1040 | 930- 1040 | 880- 980 |
| LLDPE film grade | 990- 1090 | 940- 1040 | 940- 1040 | 940- 1040 | 890- 990 |
| HDPE injection moulding | 960- 1030 | 930- 1000 | 930- 1000 | 930- 1000 | 890- 970 |
| HDPE blow moulding | 960- 1050 | 930- 1030 | 930- 1030 | 930- 1030 | 900- 1000 |

| | | | | | |
|---|---|---|---|---|---|
| PS crystal clear | 1190- 1300 | 1050- 1110 | 1000- 1060 | 1000- 1060 | 1030- 1090 |
| PS high impact | 1240- 1350 | 1130- 1190 | 1080- 1150 | 1080- 1150 | 1110- 1180 |
| PP homopolymer | 1040- 1110 | 1000- 1070 | 1000- 1070 | 1000- 1070 | 1020- 1080 |
| PP copolymer | 1090- 1170 | 1050- 1120 | 1050- 1120 | 1050- 1120 | 1060- 1120 |
| PVC tube grade | 890- 960 | 860- 930 | 820- 890 | 750- 800 | 710- 760 |
| PVC film/cables | 940- 1000 | 910- 960 | 870- 920 | 790- 840 | 750- 800 |
| **Average Price** | **1075 ± 124** | **1011 ± 87** | **994 ± 87** | **978 ± 112** | **961 ± 134** |

## 2.2 The technical plastics market

A clear price rise in December 2020: there was strong demand for technical plastics in November and December, in spite of the pandemic. And this resulted in increased demand for products in commerce and industry. Hence, there was especially greater demand for technical plastics in medical technology, the production of machines, vehicles and electrical and electronic equipment.

In December, the technical plastics were quoted in EUWID, see www.euwid-recycling.de, at an average of 2,265 €/t and thus 157 €/t higher than in the previous month (2,108 €/t), see Table 2. The average price in December 2020 (2,265 €/t) was 142 €/t lower than that of December in the previous year (2,407 €/t). The price changes are caused by an average price rise of 445 €/t for ABS, 300 €/t for PC, 50 €/t for PA 6 and 263 €/t for PA 66; only PMMA and POM were unchanged.

Table 2: EUWID quotes for technical prices, which are published every two months, over the last six months; prices in €/t.

| Prices in €/t | Dec. 2020 | October 2020 | August 2020 | June 2020 |
|---|---|---|---|---|
| PMMA crystal clear | 2700 – 2900 | 2700 – 2900 | 2700 – 2900 | 2700 – 2900 |
| ABS natural | 1800 – 1900 | 1380 – 1430 | 1350 – 1400 | 1280 – 1330 |
| ABS w/b | 1900 – 2000 | 1450 – 1500 | 1450 – 1500 | 1380 – 1430 |
| ABS coloured | 2500 – 2700 | 2050 – 2070 | 2050 – 2070 | 1980 – 2130 |
| PC crystal clear | 2200 – 2400 | 1900 – 2000 | 1900 – 2000 | 2000 – 2100 |
| PC GF-reinforced | 2300 – 2500 | 2100 – 2200 | 2100 – 2200 | 2200 – 2300 |
| POM natural | 1750 – 1950 | 1750 – 1900 | 1750 – 1900 | 1750 – 1900 |
| PA 6 natural/black | 1850 – 1950 | 1800 – 1900 | 1800 – 1900 | 1800 – 1900 |
| PA 6 GF-reinforced | 1950 – 1950 | 1850 – 1900 | 1850 – 1900 | 1850 – 1900 |
| PA 66 natural | 3050 – 3150 | 2800 – 2900 | 2800 – 2900 | 2800 – 2900 |
| PA 66 GF-reinforced | 3050 – 3150 | 2800 – 2850 | 2800 – 2850 | 2800 – 2850 |
| **Average Price** | **2265** | **2108** | **2094** | **2099** |

# 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 January 2021; they will not become definitive until early February. The two quotes stated for January 2021 below therefore indicate only an interim situation, see the left-hand column in Table 3 and Table 4.

## 3.1 plasticker: Standard plastics

An average price of 456 €/t is calculated for December 2020. And this average price is 12 €/t higher than that of the previous month (444 €/t), see Table 3. The average price for December 2020 (456 €/t) was 40 €/t below that of the previous year (496 €/t). The price index shows adequate demand for plastic, if you take into account the interruptions due to the holidays.

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Reliable, significant price changes (±40 €/t) are: LDPE regranulates at +50 €/t and PS regrind at -50 €/t. The other price changes, such as PVC_P regrind, PVC_P regrind and PET bale goods, are not of sufficient statistical significance for their contribution to be listed here. The price of HDPE regrind is persisting at its 5-year low of 490 €/t. PS regrind at 490 €/t and PS regranulates at 690 €/t have also reached a 5-year-low.

The preview of the January quotes indicates an average price of 469 €/t, see Table 3. The price index of 12.02.2021 shows subdued demand for plastic to date.

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

| | January[6] 21 | Dec. 20 | Nov. 20 | Oct. 20 | Sept. 20 | Dec. 19 |
|---|---|---|---|---|---|---|
| HDPE regrind[1] | 490 | 490 | 490 | 490 | 490 | 600 |
| HDPE regranulates[5] | 670 | 710 | 670 | 690 | 700 | 820 |
| LDPE bale goods[2] | 150* | 160* | 200* | 170 | 170 | 90 |
| LDPE regrind[1] | 500 | 450 | 470 | 470 | 430 | 510 |
| LDPE regranulates[5] | 560 | 590 | 540 | 590 | 590 | 680 |
| PP bale goods[3] | 210* | 200* | 170* | 270* | 450* | 150 |
| PP regrind[1] | 510 | 510 | 480 | 480 | 490 | 570 |
| PP regranulates[5] | 710 | 720 | 690 | 710 | 720 | 790 |
| PS regrind[4] | 520 | 490 | 540 | 550 | 540 | 600 |
| PS regranulates[5] | 680 | 690 | 700* | 930 | 790 | 810 |
| PVC_P regrind[1] | 480* | 440* | 350* | 480* | 460* | 260* |
| PVC_U regrind[1] | 400* | 300* | 430 | 420 | 290* | 460* |
| PET bale goods | 310* | 300* | 180* | 70* | 90* | 210* |
| PET regrind mixed colours | 380 | 340 | 300 | 260 | 300 | 400 |
| **Average Price** | **(469)** | **456** | **444** | **470** | **465** | **496** |

*: 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

In December, the average price quoted in plasticker for technical plastics was almost unchanged (1,156 €/t) in comparison to the previous month (1,155 €/t), see Tab. 4. A comparison of the average prices from December 2020 (1,156 €/t) with those of December 2019 (1,227 €/t) shows a difference of 71 €/t.

These plastics show price changes of more than ± 70 €/t: ABS regranulates +250 €/t, PC regranulates -200 €/t and PBT regranulates +80 €/t. In spite of the holidays, the December price index records adequate demand for plastic in comparison with the previous month. The prices for ABS regrind at 550 €/t, PC regrind at 760 €/t and PBT regrind at 420 €/t are at a 5-year-low.

The average price in January 2021 (1,233 €/t) was quoted at 77 €/t higher than in the previous month (1,156 €/t). The December price index of 12.01.2021 shows subdued demand for plastic.

Table 4: Technical plastics price according to plasticker; listed in €/t.

| | January[6] 21 | Dec. 20 | Nov. 20 | Oct. 20 | Sept. 20 | Dec. 19 |
|---|---|---|---|---|---|---|
| ABS regrind | 530 | 550 | 560 | 550 | 550 | 600 |

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|---|---|---|---|---|---|---|
| ABS regranulates[5] | 1450 | 1240 | 990 | 1000 | 1030 | 1250 |
| PC regrind | 650 | 760 | 780 | 820 | 850 | 890 |
| PC regranulates[5] | 1870 | 1480 | 1680 | 1730 | 1700 | 1820 |
| PBT regrind | 470 | 420 | 430 | 440 | 440 | 510 |
| PBT regranulates | 1750 | 1750 | 1670 | 1600 | 1770 | 1600 |
| PA 6 regrind | 890 | 870 | 870 | 820 | 810 | 880 |
| PA 6 regranulates[5] | 2000 | 1860 | 1800 | 1670 | 1810 | 1830 |
| PA 6.6 regrind | 930 | 860 | 920 | 860 | 870 | 920 |
| PA 6.6 regranulates[5] | 2100 | 2080 | 2100 | 2090 | 2110 | 2200 |
| POM regrind | 510* | 550 | 570 | 540 | 560 | 710 |
| POM regranulates[5] | 1650 | 1450 | 1490 | 1960 | 1310 | 1510 |
| **Average Price** | **(1233)** | **1156** | **1155** | **1173** | **1151** | **1227** |

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

## 4 Evaluation of the secondary plastic markets

### 4.1 Restructuring of international plastic shipping

The restructuring of international plastic shipping, valid as of 1 January 2021, is deftly missing all of the required standards. The restructuring of the Basel Convention together with the Waste Shipment Regulation deliberately prevent new recycling facilities being opened in Europe, higher quality recycling being carried out, bureaucracy being dismantled and prescribed recycling rates being met. Or, to put it another way, the conversion of economic structures towards a circular economy is being nullified.

Thanks to the setting of a 2% goal for the contamination fraction, we have a *de facto* compulsion for notifying the shipment – dismantling bureaucracy? This requirement is very hard to meet even with deposit PET bottles. Furthermore, this requirement actively prevents the exchange of plastic quantities for recycling. For example, this limits the possibility of topping up the capacity utilisation of European PET recycling facilities with quantities from third parties. Or, put in another way: the more difficult shipment of PET bottles from third countries (including developing countries) to the EU can actually mean that the introduction of beverage bottles into the oceans increases because they can no longer be sent for orderly recycling - marine littering?

### 4.2 Plastic wastes and recyclates

The impetus from the primary markets in December have not yet been felt by the secondary plastics. In the secondary markets, the quotes for standard plastics and technical plastics have barely changed. Only a preview of the January quotes shows higher prices for plastic wastes and recyclates.

The hard lockdown in Germany will last until the end of January at least, but probably longer. And plastic recycling is still under great pressure. The demand for plastic recyclates from commerce and industry is still low. In the private sector, a larger surge in demand can now been seen which will take effect in the medium term. Then, sports and leisure items, electronic and electrical devices and furnishings will be in demand. There is also increased demand for plastic items in private construction - this includes renovations, extensions and conversions. The demand for packaging materials (lightweight packagings, medical products), in particular, is strong.

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In December, the EUWID price index identifies only a few price changes for waste plastics. The PE post user sector reports small price shifts for films, which have moved up or down by an average of 5 €/t to 10 €/t. In December, 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 178 €/t, thin film transparent coloured 33 €/t, LDPE agricultural film -38 €/t, commercial mixed film (90/10) 80 €/t and commercial mixed film (80/20) 63 €/t. Furthermore, HDPE blow-moulded bodies were quoted an average of 15 €/t higher, or in absolute terms at 95 €/t and HDPE crates mixed colours an average of 5 €/t higher or in absolute terms at 425 €/t.

## 4.3 PET Recycling

In Europe, increasing numbers of PET recycling facilities are being commissioned, even in the current crisis. PET is proving to be particularly recycling-friendly. A wide range of products are made of the recyclates. And r-PET suitably complements the virgin grades. For example, PET recyclates can also be found in food applications.

And PET recycling is still under pressure. Cheap virgin grades are putting pressure on recyclate prices. And the cheap virgin grades are pushing recyclates out of their traditional markets. The volume of bottles is low due to the crisis because sales in kiosks and in restaurants are still very low. Moreover, all over Europe there is now strong demand for used PET bottles to utilise capacity in the facilities that have been built.

And, finally, the PET recyclers estimate the prices for used PET bottles as too high still because high bottle prices mean higher recyclate prices on the markets. In December, the prices for PET transparent, PET mixed and PET coloured remained unchanged in comparison to the previous month.

## 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

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