## 1 General economy and reference to the plastics industry

ifo business climate index Germany: The mood among companies has brightened somewhat, see <a href="https://www.ifo.de/fakten/2024-02-23/ifo-geschaeftsklimaindex-gestiegen-februar-2024">https://www.ifo.de/fakten/2024-02-23/ifo-geschaeftsklimaindex-gestiegen-februar-2024</a>. The ifo business climate index rose to 85.5 points in February, following on from 85.2 points in January. This is due to slightly less pessimistic expectations. Assessments of the current situation are unchanged. Positive and negative responses currently more or less balance each other out. The economy is stabilising at a low level.

The business climate index has fallen in the manufacturing sector. The last time the current situation was assessed so badly was September 2020. Expectations remain very pessimistic, almost unchanged. The fall in incoming orders continues unabated. Companies have announced more cuts in production. In the main construction sector, the business climate indicator has risen slightly, albeit from a low level. This was due to slightly better assessments of the current situation. However, expectations have fallen to the lowest level since 1991.

PU plastics: For some time, it has been seen that PU plastics have largely remained unscathed from the continuing market upheavals affecting technical plastics and standard plastics. Both the range of applications and the material versatility of PU plastics are impressive. And the use of PU plastics is not restricted just to foam plastics. In this way, PU plastics are increasingly pushing into the applications for standard plastics and technical plastics – material substitutions. To date, very little attention has been paid to these changes in the plastics sector.

### 2 Primary markets - standard plastics

In January 2024, the trends for the future course of business are very hard to assess. Whereas some were talking about the light at the end of the tunnel, others are still talking about a subdued economy. The purchases seen and the associated low price rises were mainly due to advance purchases.

In January 2024, the EUWID average price of 1,343 €/t was more or less the same as in the previous month (1,341 €/t) see Tab. 1. In a year-on-year comparison, it can be seen that the average quotes from January 2024 (1,343 €/t) were 226 €/t lower than those of the previous year (1,569 €/t).

The plastic quotes changed on average as follows: LDPE by +15 €/t, LLDPE by +15 €/t, HDPE by +5 €/t, PP by +10 €/t and PVC by -10 €/t. The current market situation for standard plastics is portrayed well in EUWID, see <a href="www.euwid-recycling.de">www.euwid-recycling.de</a>, and PIE – Plastic Information Europe, see <a href="https://pieweb.plasteurope.com/">https://pieweb.plasteurope.com/</a>.

Table 1:	Standard plastics prices accord	ing to EUWID over the	e past five months, listed in €/t.
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Prices in €/t	January 2024	Dec. 2023	Nov. 2023	Oct. 2023	Sept. 2023
LDPE film grade	1210- 1240	1200- 1220	1230- 1260	1280- 1310	1200- 1250
LLDPE film grade	1200- 1250	1190- 1230	1230- 1270	1280- 1320	1200- 1260
HDPE injection moulding	1200- 1240	1190- 1240	1230- 1280	1280- 1330	1220- 1270
HDPE blow moulding	1190- 1250	1180- 1250	1210- 1290	1260- 1340	1200- 1280
PS crystal clear	1600- 1680	1600- 1680	1720- 1800	1870- 1950	1810- 1890
PS high impact	1730- 1780	1730- 1780	1850- 1900	2000- 2050	1940- 1990
PP homopolymer	1330- 1410	1330- 1390	1370- 1430	1420- 1480	1390- 1450
PP copolymer	1380- 1460	1380- 1440	1420- 1480	1470- 1530	1440- 1500
PVC tube grade	1080- 1160	1080- 1180	1110- 1210	1150- 1250	1130- 1230
PVC film/cables	1210- 1290	1210- 1310	1240- 1340	1280- 1380	1260- 1360
Average Price	1343 ± 205	1341 ± 204	1394 ± 236	1462 ± 276	1414 ± 272

PET: Demand is rising, not least due to the upheavals in international transport. The attacks on cargo ships in the Red Sea are forcing shipping companies into major diversions. As a result, transport times are longer, a shortage of containers results and transport is becoming more expensive. And, in turn, these market changes bring about advance purchases to counteract material shortages and to stave off price rises.

And, as a result, the price of PET goes up. In January 2024, packaging PET was quoted on average at 1,275 €/t and thus 70 €/t higher than in the previous month, see PIE – Plastic Information Europe<a href="https://pieweb.plasteurope.com/">https://pieweb.plasteurope.com/</a>. By way of comparison, EUWID A-PET and C-PET were quoted on average at 1,200 €/t, see <a href="https://www.euwid-recycling.de">www.euwid-recycling.de</a>.

## 3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see <a href="http://plasticker.de">http://plasticker.de</a>, 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 2024; they will not become definitive until early March 2024. The two quotes stated for February 2023 below therefore indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

### 3.1 plasticker: Standard plastics

Standard plastics were quoted at an average 579 €/t in January 2024 and were thus almost identical to the average quote for December 2023 of 576 €/t, see Tab. 2. The average price for January 2024 (579 €/t) was 150 €/t below that of the previous year (729 €/t). There were significant price changes of greater than  $\pm 40 €/t$  for: LDPE regranulates -50 €/t, PS regranulates -150 €/t and PVC\_U regrind  $\pm 60 €/t$ . The January price index is characterised by continued subdued demand for plastic.

The probable average price in February 2024 (586 €/t) is almost equal to the previous month, see Tab. 2. The price index of 16.02.2024, shows only low demand for plastic.

Table 2:	Standard pla	stics price	according to	plasticker; liste	ed in €/t.

	February <sup>6</sup> 24	Jan. 24	Dec. 23	Nov. 23	Oct. 23	Jan. 23
HDPE regrind <sup>1</sup>	570	580	580	580	640	760
HDPE regranulates⁵	860	840	870	880	920	1020
LDPE bale goods <sup>2</sup>	250*	230*	230*	160*	300*	270*
LDPE regrind <sup>1</sup>	600*	560*	410*	360*	290*	480*
LDPE regranulates <sup>5</sup>	790	810	860	800	840	850
PP bale goods <sup>3</sup>	210	230	230	200*	220	510*
PP regrind <sup>1</sup>	610	600	580	600	640	780
PP regranulates⁵	830	830	830	850	940	1070
PS regrind <sup>4</sup>	740	740	700	680	710	690*
PS regranulates⁵	820	830	980	1000	980	1210*
PVC_P regrind <sup>1</sup>	630*	610	640*	660*	700*	850*
PVC_U regrind <sup>1</sup>	610	610	550	550	630*	640*
PET bale goods	260*	260*	200*	190*	320	470*
PET regrind mixed colours	430	380	410	450	480	610
Average Price	(586)	579	576	569	615	729

\*: 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 2024, there was an average price of 1,618 €/t, which was only 25 €/t lower than that of the previous month (1,643 €/t), see Table 3. The average price for January 2024 (1,618 €/t) was 445 €/t below that of the previous year (2,063 €/t).

There were significant price changes of greater than ±70 €/t for: PC regrind +130 €/t, PC regranulates -150 €/t, PBT regranulates +110 €/t, PA 6 regranulates -120 €/t and PA 6.6 regranulates -100 €/t. The January price index is characterised by subdued demand for plastic.

The probable average price in February 2024 (1,593 €/t) is thus 25 €/t lower than in the previous month (1,618 €/t). The price index of 16.02.2024 shows subdued demand for plastic.

	February <sup>6</sup> 24	Jan. 24	Dec. 23	Nov. 23	Oct. 23	Jan. 23
ABS regrind	780	800	740	670	700	1020
ABS regranulates <sup>5</sup>	1320	1230	1370	1350	1400	1810
PC regrind	1240	1250	1120	1210	1270	1480
PC regranulates⁵	2050	2220	2370	2190	2080	2710
PBT regrind	670	660*	620	660	670	900*
PBT regranulates	2320	2330	2220	2450	2520	3560
PA 6 regrind	930	940	960	970	1050	1120*
PA 6 regranulates <sup>5</sup>	2320	2340	2460	2340	2610	3090
PA 6.6 regrind	920	980	1030	1130	1190	1370*
PA 6.6 regranu-	3120	3160	3260	3130	3480	3770
lates <sup>5</sup>						
POM regrind	720*	680*	690	690	740	990*
POM regranulates <sup>5</sup>	2730	2820	2870	2740	3030	2930
Average Price	(1593)	1618	1643	1628	1728	2063

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

#### 4 Secondary plastics markets

German recyclers are suffering in particular from the much too high costs for staff, transport and energy. The tax burden is also high. And finally, there is therefore no means of amendments, renewals and expansions - no investments are made. Only inadequate use is made of the great potential of plastic recycling for a closed loop economy.

What is surprising is the widespread plastic bashing, which has now even extended to recycling. The advantages of plastics are not only not understood, but also deliberately denied. And the old and so untrue tales of harmful components in plastics are brought forward again. These provocateurs are unaware that the strict requirements of chemicals legislation, for example REACH, CLP, POP, and from food legislation, have been fully implemented for many years. It is precisely for this reason that plastic recyclates are a suitable complement to virgin grade!

EuRIC reports, see https://euric-aisbl.eu/resource-hub/press-releases-statements/recyclers-urge-euaction-to-protect-europes-plastics-recycling-industry-from-recycled-plastics-influx-amid-ppwr-talks.

<sup>\*:</sup> Supply figure too low to attain statistical significance; 5. equivalent to the grade "regranulates, black"; 6. preview (may be amended by additional quotes)

As a reaction to the ongoing negotiations on the amendment of the European Regulation on Packagings and Packaging Waste (PPWR) EuRIC urges the legislator to protect the European plastic recycling sector and to get to grips with the large-scale introduction of recyclates without delay. The introduction of affordable plastics, both of virgin grade and recyclates does not contribute to the EU's closed loop economy goals. These plastics mainly imported from Asia are processed under conditions that do not meet EU standards.

### 4.1 Recycling standard plastics

In the new year, there has been very little revival on the markets for standard plastics. The new year has started slowly. No market impetus can be discerned in Germany or Europe. There is no demand for European recycled plastics from the international markets.

This means that plastics processors' warehouses are filling again, which had been run down due to the contracts concluded at the end of the year. The upheavals in transport by shooting on cargo ships in the Red Sea will probably slightly increase recyclate sales in February. Plastics processors will probably buy more in February to secure their processing quantities at the current low prices.

Both plasticker and EUWID identify only low demand for plastic in January 2024. As a consequence, stable prices for plastic wastes will result from this. Due to the economic weaknesses, much less commercial film is produced, resulting in demand surges for good film both in the EU and international markets. In EUWID the prices for waste plastics are unchanged in January.

EUWID not only lists prices for plastic wastes, in this case bale goods, but also for regrinds. In January 2024, the prices for regrinds are stable, see <a href="www.euwid-recycling.de">www.euwid-recycling.de</a>. PIE − Plastic Information Europe lists prices for regranulates. And these quotes for regranulates are uneven, see <a href="https://pieweb.plasteurope.com/">https://pieweb.plasteurope.com/</a>. The prices of PE grades, in this case LDPE and HDPE, are falling slightly; the price of PP is rising by an average 13 €/t and PS by 10 €/t.

EUWID RE 8, 2024, p. 24 reports that the German exports of waste plastics reached a new low in 2023. As can be seen from the figures published by destatis, Germany exported around 688,000 tonnes of plastic waste last year. That is 9 % less than in the previous year. Thus reaching the lowest export level since 2006.

### 4.2 Recycling technical plastics

Although the price fall in plasticker is not constant and is sometimes only in small stages, it is still obvious. The average price for January 2024 (1,618 €/t) was as much as 445 €/t lower than that of the previous year (2,063 €/t). Demand for technical plastics was subdued.

In PIE – Plastic Information Europe, too, the regranulates prices fell slightly in January 2024, see <a href="https://pieweb.plasteurope.com/">https://pieweb.plasteurope.com/</a>. However, the quotes for some compounds were unchanged. The average price falls are between 10 €/t and 45 €/t, depending on the compound. A stable market situation at a low level can be seen in technical plastics.

### 4.3 PET recycling

The PET markets revived in January - at last. The import of foreign goods has slowed down due to the shooting on cargo ships in the Red Sea; as a result, foreign goods have become more expensive. Moreover, production of virgin grade has been reduced in Europe. And finally, the Lunar New Year, i.e. Lunar New Year, 10 to 24 February 2024, also leads to a short-term fall in production.

Processors are now aware that the statutory obligations on the use of recyclates in single-use plastic bottles across Europe will have to be met from January 2025. The delisting of recyclates in bottle manufacture will now finally be ended. Whereas in Germany, the SUPD utilisation rate of 25 % can easily be met, improvements will have to be implemented across Europe. These improvements will also take effect in Germany because the PET markets are interlinked across Europe. Ultimately, the question must be asked as to whether there will be enough PET recyclates available in Europe in future for the food industry to satisfy the requirements of both the SUPD and those of the revised PPWR?

Due to the demand for PET recyclates, the price of the processing input for used PET single-use deposit bottles has also risen. The relative price changes in comparison to the previous month were: PET transparent +30 €/t, PET mixed +15 €/t and PET coloured +5 €/t, see EUWID.

The difference between transparent recycling flakes and virgin grade is stated as an average 350 €/t by EUWID and an average 390 €/t by PIE – Plastic Information Europe. Regranulates are still quoted as more expensive than virgin grade; in EUWID by 50 €/t and in PIE – Plastic Information Europe by 115 €/t. Detailed monthly reports on the PET prices for virgin grade and used beverage bottles can be found in EUWID and PIE - 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 <a href="www.euwid.de">www.euwid.de</a>. EUWID: No guarantee for any of the prices here; 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 <a href="https://www.plasticker.de">www.plasticker.de</a>. 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

A detailed discussion with information of price indices for virgin grades and waste plastics as well as precursor products can be found in PIE – Plastics Information Europe, see <a href="www.kiweb.de">www.kiweb.de</a>. For virgin grades, the indices for standard plastics (Plastixx ST) and technical plastics (Plastixx TT) provide a good overview of the price trends. Pieweb quotes the monthly regranulates prices for standard plastics and technical plastics in the secondary markets. For secondary plastics, there are also details on PET, in this case flakes (flakes transparent, flakes mixed colours) as well as transparent regranulates.

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