0 24 - 25 June 2025 – 27th International Conference on Plastic Recycling in Dresden

The 27th International Conference on Plastic Recycling, held at the Maritim Hotel & International Congress Centre Dresden on 24 and 25 June 2025 has a very diverse programme, see_<u>https://altkunststofftag.bvse.de/</u>. On the conference page you will find the online registration, information about booking hotels and organisational tips.

From our agenda: at 2.30 on Tuesday 24 June 2025, Talk II will be held on "**Plastic Recycling Contro**versy: Thermal Recovery – Opportunity of Waste?" This talk will look into the meaning of plastic recycling. This is where opposing views could or should be made clear. The speakers who are confident enough to tackle the controversies of this subject are Dr. Alexander Gosten, DGAW; Prof. Dr. Peter Quicker, RWTH Aachen TEER; Thomas Fischer, DUH and Christan Kampmann, PreZero.

The first day of the event ends with our **traditional BBQ** on the roof of the Congress Center with a view of Dresden and Elbe. This is an opportunity for networking and socialising with people from the industry in a relaxed atmosphere.

1 General economy with reference to the plastics industry

The mood among companies brightened somewhat in April, see <u>https://www.ifo.de/fakten/2025-04-24/ifo-geschaeftsklimaindex-leicht-gestiegen-april-2025</u>. The ifo business climate index rose, surprisingly to many experts. In spite of the tariff disputes with the USA, bosses in German companies assessed the mood to be slightly better. The index determined by the Munich ifo Institute rose by 0.2 points to 86.9 points in April. According to the institute, this development is due to the construction sector and services. Business expectations have fallen among exporters.

From the ifo economic survey, 29 April 2025, see

<u>https://www.ifo.de/fakten/2025-04-29/unsicherheit-der-deutschen-wirtschaft-nimmt-zu</u>. Uncertainty in the German economy is growing. Companies in Germany are increasingly having difficulties in predicting how their business will develop. In April, 28.3 % of the companies surveyed stated that this is "hard" for them – after 24.8 % in March. The responses serve as an indicator of economic uncertainty. The indicator thus rose to its highest level since November 2022. "Ever more companies are currently in the dark about their own future," says Klaus Wohlrabe, Head of ifo Surveys. "The tariff crisis with the USA, which is coming to a head, is the main driver of this. Positive signals, such as the negotiated coalition paper of the new government, have not been able to compensate for this so far," "What companies need now above all else is the ability to plan," Wohlrabe continued. "The longer the uncertainty continues, the more investments and recruitment will be delayed."

The rise in uncertainty was particularly startling in industry, where the share rose by around 11 percentage points to 38.7 %. In practically every sector, companies are finding it more difficult to predict their own development. The electrical sector and automotive construction are particularly uncertain, at more than 45 %. Only in the main construction sector has the uncertainty fallen. Whereas in March as many as 26.3 % reported that it was difficult to predict their own business development, the figure was only 23.2 % in April. One reason for this could be the infrastructure package that is on the horizon.

2 Primary markets - standard plastics

In April 2025, the average of the EUWID prices was $1,435 \notin t$ and therefore $22 \notin t$ lower than in the previous month $(1,457 \notin t)$, see Tab. 1. In a year-on-year comparison, it can be seen that the average quotes from April 2025 $(1,435 \notin t)$ were 79 $\notin t$ lower than those of the previous year $(1,514 \notin t)$. The prices of standard plastics fell in April 2025. PP homopolymer -50 $\notin t$, PP copolymer -50 $\notin t$, PS

crystal clear -50 €/t and PS high impact -50 €/t. PE commodities were quoted at unchanged prices. The current market situation for virgin grade standard plastics is portrayed well in EUWID, see <u>www.euwid-recycling.de</u>, and PIE – Plastic Information Europe, see <u>https://pieweb.plasteurope.com/</u>.

| Prices in €/t | April 2025 | March 2025 | Feb 2025 | Jan. 2025 | Dec. 2024 |
|----------------------------|------------|---------------|------------|------------|------------|
| LDPE film grade | 1330- 1440 | 1330- 1440 | 1330- 1400 | 1260- 1320 | 1260- 1320 |
| LLDPE film grade | 1290- 1350 | 1290- 1350 | 1290- 1330 | 1230- 1270 | 1230- 1270 |
| HDPE injection moulding | 1320- 1350 | 1320- 1350 | 1320- 1350 | 1260- 1290 | 1260- 1290 |
| HDPE blow moulding | 1320- 1370 | 1320- 1370 | 1320- 1370 | 1260- 1310 | 1260- 1310 |
| PS crystal clear | 1710- 1760 | 1760- 1810 | 1710- 1760 | 1660- 1710 | 1630- 1680 |
| PS high impact | 1840- 1860 | 1890- 1910 | 1840- 1860 | 1790- 1810 | 1760- 1780 |
| PP homopolymer | 1380- 1460 | 1430- 1510 | 1430- 1510 | 1380- 1460 | 1380- 1460 |
| PP copolymer | 1430- 1510 | 1480- 1560 | 1480- 1560 | 1430- 1510 | 1430- 1510 |
| PVC tube grade | 1130- 1230 | 1140- 1240 | 1140- 1240 | 1110- 1210 | 1110- 1210 |
| PVC film/cables | 1260- 1360 | 1270- 1370 | 1270- 1370 | 1240- 1340 | 1240- 1340 |
| Average Price | 1435 ± 203 | 1457 ± 221 | 1444 ± 198 | 1393 ± 203 | 1387 ± 191 |

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

PET: Supply and demand are in equilibrium due to imports. The demand for bottle PET remained subdued in April. In April 2025, packaging PET was quoted on average at 1,075 \notin /t and thus 30 \notin /t lower than in the previous month, see PIE – Plastic Information Europe<u>https://pieweb.plasteurope.com/</u>. There is speculation about further falling PET prices. As a consequence, plastics processors are ordering only the quantities that are needed for immediate processing.

3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, 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 May 2025 here; they will not become definitive until early June 2025. The two quotes stated for May 2025 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

3.1 plasticker: Standard plastics

The April price index shows better demand for plastic than in the previous month. In April 2025, standard plastics were quoted at an average price of $556 \notin /t$ and were thus $21 \notin /t$ higher than in the previous month ($535 \notin /t$), see Tab. 2. The average price for April 2025 ($556 \notin /t$) was $53 \notin /t$ below that of the previous year ($609 \notin /t$). There were significant price changes of greater than $\pm 40 \notin /t$ for: LDPE regranulates $\pm 70 \notin /t$, PP regrind $\pm 90 \notin /t$, PP regranulates $\pm 60 \notin /t$ and PS regrind $\pm 120 \notin .$ Those price changes for which supply figures were too low (*) for statistical significance are not included here.

The likely average price in May 2025 (569 \notin /t) is thus 13 \notin /t higher than in the previous month (556 \notin /t), see Tab. 2. The price index May of 15.05.2025 shows lower demand in comparison to the previous month.

| | May ⁶ 25 | April 25 | March 25 | Feb. 25 | January 25 | April 24 |
|--------------------------------|---------------------|----------|----------|---------|------------|----------|
| HDPE regrind ¹ | 550 | 570 | 580 | 580 | 590 | 620 |
| HDPE regranulates ⁵ | 820 | 850 | 890 | 840 | 790 | 980 |
| LDPE bale goods ² | 200* | 360 | 450* | 460* | 180* | 280* |
| LDPE regrind ¹ | 460 | 390 | 450* | 400* | 420* | 410 |
| LDPE regranulates ⁵ | 680 | 710 | 640 | 650 | 670 | 860 |
| PP bale goods ³ | 190 | 180 | 200 | 220 | 230* | 210 |
| PP regrind ¹ | 580 | 560 | 470 | 530 | 500 | 630 |
| PP regranulates ⁵ | 740 | 800 | 740 | 840 | 850 | 920 |
| PS regrind ⁴ | 890 | 810 | 690 | 680* | 620* | 760 |
| PS regranulates ⁵ | 880 | 850 | 810 | 850 | 890 | 820 |
| PVC_P regrind ¹ | - | 580* | 500* | 340* | 290* | 870* |
| PVC_U regrind ¹ | 590* | 430* | 410* | 400* | 450* | 480* |
| PET bale goods | 420* | 270* | 230* | 310* | 340* | 320* |
| PET regrind mixed colours | 400 | 430 | 430* | 430* | 440* | 370 |
| Average Price | (569) | 556 | 535 | 538 | 519 | 609 |

Table 2: Standard plastics price according to plasticker; listed in \notin/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 April 2025, there was an average price of 1,408 \in /t, which was 65 \in /t lower than that of the previous month (1,473 \in /t), see Table 3. The average price for April 2025 (1,408 \in /t) was 156 \in /t below that of the previous year (1,564 \in /t).

There is a great deal of movement in the prices for technical plastics. There were significant price changes of greater than $\pm 70 \notin/t$ for: ABS regranulates+ $80 \notin/t$, PC regrind $\pm 150 \notin/t$, PC regranulates $-370 \notin/t$, PBT regranulates $\pm 80 \notin/t$, PA 6 regrind $\pm 180 \notin/t$, PA 6 regranulates $-190 \notin/t$, POM regrind $-210 \notin/t$ and POM regranulates $-500 \notin/t$. Those price changes for which supply figures were too low (*) for statistical significance are not included here. The April price index reveals improved demand over the previous month.

The probable average price in May 2025 $(1,348 \notin t)$ is thus 60 \notin t lower than in the previous month $(1,408 \notin t)$. The price index May of 15.05.2025 shows lower demand in comparison to the previous month.

| | May ⁶ 25 | April 25 | March 25 | Feb. 25 | January 25 | April 24 |
|--------------------------------|---------------------|----------|----------|---------|------------|----------|
| ABS regrind | 630 | 650 | 650 | 670 | 620 | 710 |
| ABS regranulates ⁵ | 1250 | 1370 | 1290 | 1270 | 1270 | 1390 |
| PC regrind | 1160 | 1070 | 920 | 980 | 1000 | 1140 |
| PC regranulates ⁵ | 1990 | 2070 | 2440 | 2520 | 2650 | 2110 |
| PBT regrind | 560 | 570 | 610 | 650 | 660 | 840 |
| PBT regranulates | 1790 | 2150 | 2070 | 2140 | 1980 | 2020 |
| PA 6 regrind | 690 | 920 | 740 | 760 | 770 | 700 |
| PA 6 regranulates ⁵ | 1760 | 1850 | 2040 | 2120 | 2270 | 2320 |
| PA 6.6 regrind | 1070 | 1100 | 1050 | 1060 | 1130 | 1010 |
| PA 6.6 regranu- lates⁵ | 2490 | 2440 | 2450 | 2390 | 2540 | 2920 |

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

| POM regranulates ⁵ | 2090 | 2060 | 2560 | 2620 | 2470 | 2740 |
|-------------------------------|--------|------|------|------|------|------|
| Average Price | (1348) | 1408 | 1473 | 1491 | 1513 | 1564 |

*: 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

CR – Chemical Recycling: Following the "Panorama" broadcast of 10 April 2025, various media are addressing the subject of Chemical Recycling. For example, the internet platform 320° writes that plastic recycling in Europe is not developing as expected. For chemical recycling in particular, the quantities remain well below the announcements.

In 2021, the association of the European plastics industry, Plastics Europe, held out the prospects of 1.2 m (million) tonnes of plastics being recovered by chemical recycling each year by 2025. Later, the forecast was reduced to 900,000 tonnes. But research from the ARD magazine TV programme "Panorama" shows: even this goal will be missed by a wide margin. In 2024, the total was less than 100,000 tonnes. And no marked increase is possible for 2025.

There are many reasons for this: Currently, "still very little plastic" is manufactured by chemical recycling, admits Christine Bunte, CEO of Plastics Europe Germany, to Panorama. This was due to the costs and a "demand deficit", but also "technological setbacks".

In fact, across the world there are so far only a few, mostly small, plants for chemical recycling in operation, most of them in Europe. Large plants are "very, very difficult to realise – in fact, so difficult that we have not managed to do it yet," says Kerstin Kuchta, Professor of Waste Management at Harburg Technical University. The waste that is destined to be decomposed in the reactor is often damp, dirty and inhomogeneous. The chemical processes are therefore never completely identical. In large plants this was not technically "controllable and, I would also say, will not be for the next 20 years," assesses Kuchta.

MR – Mechanical Recycling: There are repeatedly hotspots for plastic recycling in these difficult times. The hotspots change quickly and are often only stable for a short time, for around three months, say. On the one hand, hotspots can be seen for rigids made of HDPE or PP. And, on the other hand, plastics processors often suffer from shortages of high-quality film, which, as a consequence, is in high demand throughout Europe and worldwide.

In this connection, the reports from PRE - Plastics Recyclers Europe is also of interest, see <u>https://www.bvse.de/dateien2020/2-PDF/06-Publikationen/07-Branchenjournal/</u>2025/2505 HDPE REPORT 2023 .pdf. The previous strong growth in the recycling of HDPE and PP in the EU started to falter in 2023. We note with concern that the recycling capacities in the approx. 300 plants in the EU27+3 are remaining static at 1.7 m tonnes HDPE and 1.8 m tonnes PP, according to the bvse, see <u>https://www.bvse.de/gut-informiert-kunststoffrecycling/pressemitteilungen-kunststoffrecycling/11798-markt-fuer-hartkunststoffe-stagniert-branche-warnt-vor-rueckschritten-beim-recycling.html. The reasons for this are weak demand, a worldwide oversupply, high energy prices, inflation and the price pressure from cheap imports of new and recycled plastic. Moreover, only 42 % of the collected wastes were sorted to be suitable for recycling – a weakness that threatens the ambitious goals of the EU Packaging Regulation.</u>

"Key challenges, such as inadequate collection, the unregulated import of plastic materials and no enforcement measures continue to hamper the expansion of the recycling sector. The plastic recycling sector urgently demands measures to reduce the pressure of the current market situation on recyclers and to ensure that the European legislative goals are met," emphasises Herbert Snell, byse Vice President and CEO of the PRE working group on HDPE.

The associations therefore demand consistent import controls, mandatory recycling-friendly product design, higher collection rates and the use of modern sorting technology.

4.1 Recycling standard plastics

To put it very clearly, the recycling of standard plastics is in trouble. The upheavals affect the entire plastics industry, in other words the plastics manufacturers, compounders, plastics processors and plastics recyclers.

EUWID: in the April price index there were only a few, one-sided changes in the commodities. The one-sided changes affect the upper price racket at 10 €/t. Or, in other words, there is hardly any movement on the markets for secondary plastics. Easter is bound to have contributed to the fact that plastics recycling took a break.

plasticker: The price index for April shows good demand and for May only low demand for standard plastics. In April 2025, standard plastics were quoted at an average price of $556 \notin t$ and thus $21 \notin t$ higher than in the previous month ($535 \notin t$). The lower price range may have been found with prices around $520 \notin t$.

PIE – Plastic Information Europe, regranulates: In April 2025, almost all regranulates of standard plastics were higher in comparison to the previous month. The average price rises are in the range of 5 €/t to 30€/t. Some recyclers are in a position to pass on their much higher costs for regranulates. Further price rises for regranulates could be effective. The demand for recyclates is stable, however at a low level. Hotspots are served. Recycling plants are usually running on part load, see https://pieweb.plasteurope.com/.

4.2 Recycling technical plastics

The recycling of technical plastics is also suffering from the low demand. Markets still haven't stabilised. Political measures, such as increases in tariffs and levies or for fuel mostly have a negative impact on the economy - stagnation.

plasticker: The continuing fall in prices shows that the lower price level has not yet been found. For April 2025, there was an average price of $1,408 \notin t$, which was was $65 \notin t$ lower than that of the previous month ($1,473 \notin t$). Although the April price index shows improved demand, the May price index has returned to lower demand.

PIE – Plastic Information Europe, regranulates: Technical plastics are quoted as barely changed. Some commodities show slight price rises of around 5 €/t to 10 €/t. Although technical plastics stabilised somewhat, demand is still relatively low, see<u>https://pieweb.plasteurope.com/</u>.

4.3 PET recycling

Unlike the primary markets, PET recycling held its own in April. And PET differs positively from the upheavals in plastic recycling described above. In PET recycling, the world is grounded and in order. A constant demand for recycling PET results from the requirements of the SUPD and PPWR.

Spring and early summer: The warmer days are starting and the consumption of beverages therefore rises. And this also has an impact on the volumes of used beverage bottles and on the demand for PET recyclates. Moreover, there is strong demand for food-safe recyclates for trays and films.

In April 2025, the relevant price changes for used PET single-use deposit bottles were: PET transparent +20 €/t, PET mixed +15 €/t and PET coloured +10 €/t, see EUWID.

For virgin grade, in this case granulates, the average value in PIE – Plastic Information Europe is 1,075 €/t. Regranulates are valued at 1,640 €/ on average in PIE – Plastic Information Europe. Clear, food-safe flakes are quoted at an average 1,350 €/t in PIE – Plastic Information Europe.

Reporting on PET markets is of central importance in EUWID and PIE – Plastic Information Europe. Detailed monthly reports on the PET prices for virgin grade, and for used beverage bottles and market assessments 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 <u>www.euwid.de</u>. 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 <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

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 <u>www.kiweb.de</u>. 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 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.

Bonn, Friday, 4. July 2025

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