

bvse market report: plastics, May 2023

1 The 25th International Conference on Plastic Recycling, Dresden, 6/7 June 2023

“Plastic Recycling in Trouble” is the title of the 25th International Conference on Plastic Recycling. Although everyone talks about the importance of the closed loop economy, when push comes to shove only the cheapest offer counts. This is the experience of many plastic recyclers at the moment. Cheap virgin grade with a huge CO₂ rucksack is pushing out climate-friendly recyclates.

Plenty to talk about at the Central Forum, which will start on 6 June with the opening speech by bvse Chief Executive Eric Rehbock. Prof. Dr. rer. nat. Rainer Dahlmann from the Institute for Plastic Processing at RWTH Aachen will describe the requirements of plastic recycling from the point of view of research.

This will be followed by podium discussions with panellists of the highest calibre. The first podium led by bvse plastics expert Dr. habil. Thomas Probst will deal with quantities, markets and prices. The discussion partners are: Martin Bäcker, PIE – Plastic Information Europe, Christian Hündgen, Hündgen Entsorgung GmbH and Sebastian Kremer, silver plastics GmbH.

Then, in the main round of the second podium discussion, the focus is on the revision of the PPWR – Packaging and Packaging Waste Regulation, moderated by Dr. Martin Engelmann, Chief Executive IK Industrievereinigung Kunststoffverpackungen e.V.; MinDirig. Dr. Christoph Epping, Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection, Gunda Rachut, Zentrale Stelle Verpackungsregister Foundation, Dr. Fritz Flanderka, Reclay Group GmbH and Antoine Stilo from the European Association of the Recycling Industry (EuRIC) are the participants in the discussions.

The Workshop “New Impetus for Plastic Recycling” and, in parallel, the BKV workshop will take place subsequently.

The particular highlight is the traditional BBQ, this time by the Elbe, from 19:00 hrs on 6 June 2023.

On the second day of the event, 7 June 2023, the participants are once again spoilt for choice: after 9:30 hrs they can either take part in the meeting of the Working Group on International Plastic Markets on “International Waste Shipping” or attend the workshop “Interdisciplinary Dialogue: Product Design Packagings”.

At the conference, there are also two exhibitions, one a forum on plastic recycling presenting machines, installations and services and the other a forum of recycled products you can touch.

2 Primary markets - standard plastics

Demand for standard plastics remains low in nearly all areas of plastic processing. Short peaks in demand can be served immediately. Processors have an adequate supply of plastics, in spite of cuts in production. Virgin grade is available cheaply on the markets. No improvement to the current situation is expected before the summer break.

In April 2023 the EUWID average price of 1,541 €/t was therefore 28 €/t lower than in the previous month (1,569 €/t). The price fall for standard plastics has continued after the interim stops in February, March and April, see Tab. 1. In a year-on-year comparison, it can be seen that the average quotes from April 2023 (1,541 €/t) were 714 €/t lower than those of the previous year (2,255 €/t), see EUWID, www.euwid-recycling.de. The quotes for plastics fell on average by 50 €/t for LDPE, 35 €/t for LLDPE, 30 €/t for HDPE, 40 €/t for PP and 30 €/t for PVC. The price of PS is unchanged.

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The overall situation for standard plastics (Plastixx ST) and technical plastics (Plastixx TT) is portrayed well by the relevant price indices of PIE – Plastic Information Europe, see Fig. 1.

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

Prices in €/t	April 2023	March 2023	Feb. 2023	Jan. 2023	Dec. 2022
LDPE film grade	1410- 1520	1460- 1570	1450- 1570	1440- 1540	1540- 1640
LLDPE film grade	1340- 1480	1370- 1520	1350- 1520	1300- 1520	1400- 1620
HDPE injection moulding	1300- 1410	1320- 1450	1320- 1450	1320- 1420	1420- 1520
HDPE blow moulding	1280- 1420	1300- 1460	1300- 1460	1280- 1430	1380- 1530
PS crystal clear	1720- 1850	1720- 1850	1800- 1900	1850- 1900	1750- 1800
PS high impact	1850- 1950	1850- 1950	1900- 2000	1900- 2000	1800- 1900
PP homopolymer	1470- 1640	1510- 1680	1500- 1680	1500- 1600	1600- 1700
PP copolymer	1520- 1690	1560- 1730	1550- 1730	1550- 1650	1650- 1750
PVC tube grade	1380- 1480	1410- 1510	1410- 1510	1460- 1510	1510- 1610
PVC film/cables	1500- 1600	1530- 1630	1530- 1630	1580- 1630	1630- 1730
Average Price	1541 ± 190	1569 ± 180	1578 ± 200	1569 ± 205	1624 ± 141

PET: The demand for packaging PET in Germany has hardly improved to date; it is still relatively low and supply is readily available. The Easter break, cool weather and low consumption have led to weaker demand than usual. The experts are expecting the PET markets to pick up strongly in June.

Packaging PET was quoted at an average price of 1,300 €/t in April 2023, thus unchanged since the previous months of February and March, also see. PIE – Plastic Information Europe <https://piweb.plasteurope.com/>.

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 May 2023 here; they will not become definitive until early June 2023. The two quotes stated for May 2023 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

3.1 plasticker: Standard plastics

The standard plastics were quoted at an average 674 €/t in April 2023 and were thus 26 €/t lower than the average quote for March 2023 of 690 €/t, see Tab. 2. The average price for April 2023 (674 €/t) was about the same as that of the previous year (665 €/t). Looking ahead to the May quotes, we have to ask ourselves whether we have reached the record lowest price in 2023 with the April quotes.

There were significant price changes of greater than ±40 €/t only for: HDPE regrind -70 €/t and PP regranulates -50 €/t. The April price index is characterised by low demand for plastic, also due to public holidays.

The probable average price in May 2023 (716 €/t) is thus 42 €/t higher than in the previous month (674 €/t), see Tab. 2. The price index of 11.05.2023, shows adequate demand for plastic.

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

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	May ⁶	April 23	March 23	Feb. 23	January 23	April 22
HDPE regrind ¹	640	660	730	750	760	630
HDPE regranalates ⁵	1070	990	1020	1030	1020	1090
LDPE bale goods ²	280*	190*	200*	400*	270*	260*
LDPE regrind ¹	730*	410*	390*	470*	480*	640*
LDPE regranalates ⁵	960	870	900	890	850	910
PP bale goods ³	240	280	320*	400*	510*	340*
PP regrind ¹	760	750	740	760	780	780
PP regranalates ⁵	1050	1000	1050	1170	1070	1370
PS regrind ⁴	990*	810*	780*	810*	690*	780*
PS regranalates ⁵	1190	1250*	1220	1170	1210*	1350
PVC_P regrind ¹	690*	760*	800*	830*	850*	660*
PVC_U regrind ¹	510*	730*	740*	640*	640*	0
PET bale goods	320*	230*	220*	340*	470*	140
PET regrind mixed colours	590	550	550	700	610	360
Average Price	(716)	674	690	740	729	665

*: 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 2023, there was an average price of 1,883 €/t, which was 133 €/t lower than that of the previous month (2,016 €/t), see Table 3. The April quotes indicate a trend towards further falling prices. The average price for April 2023 (1,883 €/t) was 90 €/t below that of the previous year (1,973 €/t).

Clear price falls can be seen. The price of regranulates in particular fell markedly once again. There were significant price changes of greater than ±70 €/t for: ABS regrind -110 €/t, ABS regranulates -140 €/t, PC regrind +90 €/t, PC regranulates -360 €/t, PBT regrind -100 €/t, PBT regranulates -670 €/t, PA 6 regrind +120 €/t, PA 6.6 regranulates -160 €/t and POM regranulates -210 €/t. The April 2023 price index is characterised by still adequate demand for plastic in spite of the Easter holidays.

The probable average price in May 2023 (1,878 €/t) is thus almost identical to that of the previous month (1,883 €/t). The price index of 11.05.2023 shows subdued demand for plastic.

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

	May ⁶ 23	April 23	March 23	Feb. 23	January 23	April 22
ABS regrind	940	930	1040	1100	1020	1020
ABS regranulates ⁵	1560	1640	1780	1990	1810	2500
PC regrind	1440	1410	1320	1410	1480	1120*
PC regranulates ⁵	2690	2620	2980	3320	2710	3010
PBT regrind	750	760	860*	1000*	900*	520*
PBT regranulates	2670	2620	3290	3400	3560	2730
PA 6 regrind	1140*	1080*	960	1010	1120*	960*
PA 6 regranulates ⁵	2930	2860	2930	3140	3090	2650

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PA 6.6 regrind	1300	1310	1350	1380	1370*	960
PA 6.6 regranalates ⁵	3460	3620	3780	3890	3770	3980
POM regrind	870*	1020*	970*	990*	990*	790*
POM regranalates ⁵	2790	2720	2930	3270	2930	3440
Average Price	(1878)	1883	2016	2158	2063	1973

*: 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

If the overall economic situation were decided by plastic recycling we would be in a deep recession. The cheap virgin grade is now replacing the traditional uses of recyclates almost everywhere. Moreover, the plastic recyclers are suffering under high processing costs, in this case for energy, transport and wages. The recyclers are left sitting on their recyclates. And the processing input is piling up in the warehouses because hardly any is going out to production.

We are not only seeing this desolate situation in Germany, but almost everywhere in the European Single Market. Plastic recyclers are reacting to this difficult situation with plant shut-downs, shutting down production or, at best, with greatly reduced operations. No change to this situation is in sight. The situation could only improve after the summer break - hopes are resting on the autumn.

4.1 Standard plastics and technical plastics

Standard plastics: There is hardly any demand for plastic wastes from recyclers these days. Generally binding statements on prices are therefore extremely difficult. In April, EUWID continues to report falling prices for waste plastics. The quotes for PE production wastes by 18 €/t on average, PP production wastes by 19 €/t and PVC production wastes by 14 €/t. Only PS production wastes are quoted unchanged. plasticker also shows just low demand for standard plastics with an average price drop of 26 €/t.

Technical plastics: The sheer drop for regranulates is extremely fast, see plasticker and Pieweb. The plasticker platform reports sharp price falls for technical plastics, in this case of an average 133 €/t. Demand remains subdued. Although PIE – Plastic Information Europe . can see a certain degree of market stabilisation for technical plastics, the situation remains difficult. The experts from Pieweb are even expecting regranulate prices to fall further.

4.2 PET Recycling

The difficulties of plastic recycling are piling up for PET. A first PET recycler is shutting down his facility at the end of the year. An example of the difficult situation is the closure of the Veolia's PET recycling site in Rostock. Sales of flakes and regranulates are stagnating – the long-term economic operation of the PET recycling facility is no longer possible, see the bvse e.V. press release of 16 May 2023, <https://www.bvse.de/gut-informiert-kunststoffrecycling/pressemitteilungen-kunststoffrecycling/9738-ueberaus-prekaere-situation-beim-pet-recycling.html>.

The recyclate prices, in this case flakes and regranulates, are coming under strong price pressure from virgin grade. And what's more, there is a good supply of virgin grade. For the PET recyclers, no change to the tense situation is in sight in May or June. A hot summer would further increase the supply of bottles and the price of the processing grades would fall

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even further as a consequence. But none of this is any use if the sales of recyclates are not secured.

Due to the still low demand for processing material, there is good availability of beverage bottles. In April, the prices for used PET single-use bottles have fallen further. The relative price changes are: PET transparent -25 €/t, PET mixed -35 €/t and PET coloured -35 €/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 www.euwid.de, or in EUWID Plastics www.euwid-recycling.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

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. For virgin grades, the indices for standard plastics (Plastixx ST) and technical plastics (Plastixx TT) provide a good overview of the price trends. Piweb 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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