### News from us

bvse-Bundesverband Sekundärrohstoffe und Entsorgung e.V. – and its specialist association for plastic recycling – would like to cordially invite you to the

22nd International Conference on Plastic Recycling in Bad Neuenahr on 4/5 June 2019.

This time, the conference, cf. <u>https://www.bvse.de/recycling/termine-recycling/4229-04-05-06-2019-22-internationaler-altkunststofftag-des-bvse.html</u>, will start with the podium discussion "Plastic recycling controversial", Tuesday , 4 June 2019, 1.30pm. The subjects "The image of plastics", "Design for recycling" and "Plastic recycling" will be discussed controversially in pairs.

This will be followed by two workshops in parallel. The title of Workshop A, under the auspices of Dr Probst, is "Science and plastic recycling: The future of plastic recycling". Workshop B, under the auspices of Rainer Mantel, has the title "100 per cent recycling for plastic waste?".

Following on from the workshops, there will be the traditional barbecue evening at 7.00pm – BBQ on the terrace of the Kurhaus (assembly rooms) garden. This is a good opportunity for networking in a friendly atmosphere.

At 10.00am on Wednesday, 5 June 2019, there will be a workshop on packaging design, led by Dr Bosewitz and, in parallel to this, the public meeting of the Working Group on International Plastics Markets. The Working Group on International Plastics Markets will debate the current situation on the export of plastics to the Far East.

The International Conference on Plastic Recycling is the industry's central meeting on plastic recycling, which is supplemented by an exhibitors' forum and a product exhibition. The Conference on Plastic Recycling is the biggest plastic recycling event in Europe. An average of 450 delegates attend this conference.

## **1** General economy with reference to the plastics industry

The monthly ifo business climate index gives a detailed picture of the current economic situation, cf. <u>www.cesifo-group.de</u>. The mood in German board rooms has taken another turn for the worse. In April, the ifo business climate index fell from 99.7 (seasonally corrected) to 99.2 points. Companies were less satisfied with their current business situation. March's slight optimism about the months ahead has dissipated again. The German economy is weakening further.

The business climate has deteriorated markedly in the manufacturing sector. The companies again assessed their current situation as worse. And pessimism has also increased with regard to the months ahead. Capacity utilisation fell by 0.8 percentage points, to 85.4 per cent. But it is still above the long-term average of 83.7 per cent.

Never before have plastics, and thus plastic recycling, been at the centre of attention as they are today. The range of subjects concerning plastic recycling extends from the EU plastic strategy, including SUP - Single Use Plastic, marine litter, chemical recycling, the use of recyclates right up to implementation of the new German Packaging Act. And plastic recycling is changing rapidly; acquisitions, takeovers and restructuring have been seen. Plastic recycling in Germany is booming. The amount of statistically recorded plastic waste in Germany is 6.15 million tonnes.<sup>1</sup> From the total amount of plastic waste, 1.76 million tonnes of recyclates are recovered, but only 0.81 million tonnes of this are p.c.<sup>2</sup> recyclates.

<sup>&</sup>lt;sup>1</sup> All figures from the Conversio Study; Material Flow Snapshot Plastics Germany 2017. Published 2018; Ed. BKV GmbH et al.

<sup>&</sup>lt;sup>2</sup> p.c.: post consumer;

The focus of recycling is on packagings (3.08 million tonnes p.c.) and in particular sales packagings with the aim of satisfying quotas set in the Packaging Act. Furthermore, some attention is being paid to plastics from industry and commerce, especially as a result of the requirements of the Commercial Waste Ordinance. But plastics from other sources are barely considered, including construction and demolition (495,000 tonnes p.c.), electrical appliances and electronics (307,000 tonnes p.c.), agriculture (277,000 tonnes p.c.), scrap vehicles (232,000 tonnes p.s.) and household goods with sports, games and leisure (158,000 tonnes p.c.), for which recycling is still in its infancy. The plastic waste from electrical appliances and electronics and scrap vehicles would be particularly suitable for chemical recycling. And it is precisely here that the chemical methods fall short.

## 2 The primary plastics market -standard plastics

The standard plastics price index, March 2019, has average quotes of  $1240 \notin/t$ . And the average quote has therefore fallen by  $28 \notin/t$  in comparison to the previous month, see. Table 1. In a year-on-year comparison, it can be seen that the average quotes from March 2019  $(1240 \notin/t)$  were  $103 \notin/t$  lower than those of the previous year  $(1343 \notin/t)$ . Supply and demand are largely balanced; only PS experienced a clear jump in prices of  $60 \notin/t$ . Packaging PET was quoted at an average price of  $1285 \notin/t$  in March 2019, thus  $5 \notin/t$  higher than in the previous month. Experts are expecting further rising prices for PS and PET.

Prices in €/t	March 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018
LDPE film grade	1150- 1250	1120- 1220	1120- 1220	1150- 1260	1220- 1330
LLDPE film grade	1140- 1250	1110- 1220	1110- 1220	1140- 1260	1200- 1320
HDPE injection moulding	1230- 1290	1200- 1260	1200- 1260	1240- 1300	1300- 1360
HDPE blow mould- ing	1230- 1290	1230- 1290	1230- 1290	126- 1320	1320- 1380
PS crystal clear	1350- 1410	1290- 1350	1270- 1320	1270- 1330	1380- 1440
PS high impact	1450- 1510	1370- 1420	1370- 1420	1370- 1430	1480- 1540
PP homopolymer	1350- 1420	1330- 1390	1330- 1390	1350- 1410	1410- 1470
PP copolymer	1400- 1470	1380- 1440	1380- 1440	1400- 1460	1460- 1520
PVC tube grade	850-910	840- 900	840- 900	860-920	900-960
PVC film/cables	900- 950	890- 940	890- 940	910- 960	950- 1000
Average Price	1240 ± 201	1212 ± 189	1207 ± 185	1230 ± 183	1297 ± 198

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

## 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 April 2019; they will not become definitive until early May. The two quotes stated for April 2019 below only an interim situation, see the left-hand column in Table 2 and Table 3.

## 3.1 Standard plastics:

In March 2019 the standard plastics were quoted at  $531 \in /t$  and thus  $22 \in /t$  higher than in the previous month, see Table 2. The average price for March 2019 ( $531 \in /t$ ) was only  $6 \in /t$  below that of the previous year ( $537 \in /t$ ). The following price changes were more than  $\pm 40 \in /t$ :

HDPE regranulate +50  $\in$ /t, LDPE regrind +60  $\in$ /t, PS regranulate +80  $\in$ /t and PET bale goods +50  $\in$ /t. The March price index records continued subdued demand for plastic in comparison with the previous month.

At 556  $\in$ /t, the preview of the April quotes shows an average price that is 25  $\in$ /t higher than in the previous month (531  $\in$ /t). The April price index, 15.04.2019, shows a slightly better demand for plastic than in the previous month.

	April <sup>6</sup> 19	March 19	Feb. 19	January 19	Dec. 18	March 18
HDPE regrind <sup>1</sup>	580	550	540	550	590	590
HDPE regranu- lates⁵	860	890	840	900	800	930
LDPE bale goods <sup>2</sup>	210*	220	180	150	230*	240
LDPE regrind <sup>1</sup>	560*	530*	560*	610	590	660
LDPE regranu- lates <sup>5</sup>	730	750	690	690	700	780
PP bale goods <sup>3</sup>	150*	230	220	200	200	200
PP regrind <sup>1</sup>	590	580	560	540	550	550
PP regranulates <sup>5</sup>	930	830	830	780	960	800
PS regrind <sup>4</sup>	640	610	600	620	660	580
PS regranulates <sup>5</sup>	1120	980	900	910	1090*	960
PVC_P regrind <sup>1</sup>	450*	270*	250*	320*	400*	270
PVC_U regrind <sup>1</sup>	400*	390*	390*	460*	390*	470*
PET bale goods	210*	240	190	180	200*	170
PET regrind mixed colours	360	370	380	380	400	320
Average Price	(556)	531	509	521	554	537

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

\*: Supply figure too low to attain statistical significance; <sup>1</sup>: equivalent to the grade "post-industrial mixed colours"; <sup>2</sup>: equivalent to K49; <sup>3</sup>: equivalent to K59; <sup>4</sup>: equivalent to "standard, mixed colours"; <sup>5</sup>: equivalent to the grade "regranulates, black"; <sup>6</sup>: preview (may be amended by additional quotes)

## 3.2 Technical plastics:

In March 2019 the average price for technical plastics in plasticker is  $1311 \notin t$  and thus  $28 \notin t$  lower than in the previous month  $(1339 \notin t)$ , see. Table 3. A comparison of the average prices from March 2019  $(1311 \notin t)$  with those of the previous year  $(1185 \notin t)$  shows a current price that is  $126 \notin t$  higher. The March price index shows a continued subdued demand for plastic. The following price changes were more than  $\pm 70 \notin t$ : PC regrind  $-120 \notin t$ , PBT regrind  $-100 \notin t$ , PBT regranulates  $-160 \notin t$ , PA 6 regranulates  $-1140 \notin t$  and POM regranulates  $-150 \notin t$ . ABS regranulates is at a low at  $1190 \notin t$ , which was also reached in October 2016 at  $1160 \notin t$ . PC regranulates are constantly racing up and down on a roller-coaster ride. And PA 6.6 regranulates reached a 5-year high at  $2550 \notin t$ .

At 1278 €/t, the preview of the April quotes shows an average price that is 33 €/t lower. The general downwards trend in the quotes for technical plastics is clear. In the trend from December 2018 to April 2019, the average quotes nevertheless fell by 126 €/t. The April price index reveals a slightly improved demand for plastic over the previous month.

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

A	April <sup>6</sup> 19	March 19	Feb. 19	January 19	Dec. 18	March 18
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ABS regrind	670	660	630	630	700	650
ABS regranu-						1240
lates <sup>5</sup>	1240	1190	1200	1280	1460	
PC regrind	780	850	970	1000	960	870
PC regranulates <sup>5</sup>	1680	1950	2000	1870	2100	2130
PBT regrind	470	450	550	500	590	440
PBT regranulates	1720	1750	1810	1860	1940	1530
PA 6 regrind	850	880	900	860	880	780
PA 6 regranu-						1750
lates <sup>5</sup>	1840	1890	2030	2030	2000	
PA 6.6 regrind	940	910	910	870	990	820
PA 6.6 regranu-						1920
lates <sup>5</sup>	2590	2550	2260	2210	2420	
POM regrind	630	680	690	690	660*	650
POM regranu-						1440
lates <sup>5</sup>	1920	1970	2120	2120	2150	
Average Price	(1278)	1311	1339	1327	1404	1185

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

## 4 Evaluation of the secondary plastic markets

In a comparison of the information for standard plastics from EUWID and plasticker, it can be seen that plasticker reported price rises of an average 22  $\in$ /t for March 2019. EUWID also reported price rises for PE post user films in the range of 8  $\in$ /t to 25  $\in$ /t. Demand for plastic wastes was assessed as satisfactory in EUWID, whereas plasticker viewed March demand as subdued.

#### **Plastic wastes**

In the March 2019 price index, EUWID reported price changes for PE post user films. The film types concerned are thin film, LDPE agricultural film and commercial mixed film. The price rises for film waste stated here will only last for a short time. For films, in particular, there is oversupply; buyers are sought, recyclers are demanding higher supplementary payments to compensate for the losses incurred by processing films. All of the quotes for PE, PP, PS and PVC production waste are more or less unchanged.

Many press and radio reports and televisions programmes are concerned with the marine pollutions from plastic waste. In particular, German sales packagings found in the coastal waters of south-east Asia are discussed, cf. SZ, 23.04.2019 and Welt am Sonntag, No. 147, April 2019. The focus is on Malaysia, Vietnam, Thailand, Indonesia and India. EUWID shows that in 2018 Germany still exported 1.04 million tonnes of plastic waste, cf. RE 8.2019, p. 22. Only 13,000 tonnes of plastic waste were supplied directly to the People's Republic of China. The proportion of direct export from Germany to the various countries in the Far East was 38%, or 395,000 tonnes. And this means that exports to the Far East are falling rapidly. The export restrictions to countries in the Far East are working and will be extended. But the Far East markets as a whole are not taking in the amounts that were previously exported to the People's Republic of China. New export opportunities are being sought; for example, plastic waste exports to Turkey are increasing.

However, as a consequence, much more plastic waste is remaining in Germany than in previous years. The additional amounts are estimated at between 420,000 and 640,000 tonnes. Moreover, Germany and the Netherlands have become the hub for European plastic waste. It will therefore be interesting to see how the increased volumes of plastic waste will be recovered in Germany in future. Although the sorting capacities and recycled quantities have

been considerably expanded, the volume of plastic waste overall in Germany is much higher than the available recycling capacities. The opportunities for the thermal use of plastic waste are limited or largely exhausted.

Although the volume of PET bottles fell in the first quarter, but it was still much higher than in the comparable period of the previous years. Or, to put it another way: the trend towards drinks in PET bottles is continuing. The PET processors' warehouses are still replete with stocks. Demand for flakes and regranulates is high. And thus the prices achieved for flakes and regranulates are stable. Flakes are quoted in same range as virgin grades and regranulates much higher. The prices in the March quotes for use PET returnable bottles remain unchanged in comparison to the previous month once again. There is still very strong demand for PET recyclates.

### 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>, or in EUWID Plastics <u>www.euwid-kunststoff.de</u>. 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 <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

Bonn, Monday, 6. May 2019 bvse Dr Thomas Probst,