



Plastics Recycling. According to a recent study, the acceptance of plastics recycling among consumers is, contrary to expectations, very high. The survey nevertheless revealed a major deficit as regards people's knowledge about using recycled plastics.

High Market Potential

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As long as the quality is satisfactory, consumers would prefer to buy products made of recycled plastics. This was one of the facts to emerge from a recent study carried out by Ecology Integrated Marketing & Research based in Heidelberg/Germany, which specialises in market surveys dealing with ecological products. Between September 2003 and January 2004, the company questioned a total of 498 decision-makers from the plastics industry and 1400 private households. The study, entitled "Understanding loops – closing loops", was commissioned by the Deutsche Gesellschaft für Kunststoff-Recycling mbH (DKR). Its aim was to analyse why recycle had not managed to achieve greater penetration of the plastics market and what possibilities existed for exploiting the market potential.

High Level of Acceptance among Consumers

The level of acceptance of plastics recycling among consumers is very high. With a figure of 5.19 on a scale from 1 (lowest value) to 7 (highest value), those ques-

tioned said that, when buying a product, they would give preference to one containing recycle over one that did not. For them, the most important criterion is quality. When they purchase a recycled product, the feeling of making a personal contribution to the conservation of natural resources plays an almost equal role. More than half the consumers asked would even accept a small surcharge of, on average, twelve percent, for products made with recycled plastics. For the other consumers, the products would need to be cheaper. In the immediate environ-

ment of those questioned, the other family members exert the greatest influence on a purchasing decision. In addition, the vast majority of the population make a habit of separating their refuse and do not regard it as a nuisance. Most people consider the recycling of plastics worthwhile and better than disposing of it by other means.

Stephan Götze, Ecology Integrated Marketing & Research, explains: "Compared with the results of our other studies, the figures show that plastics recycling is the most popular environmental

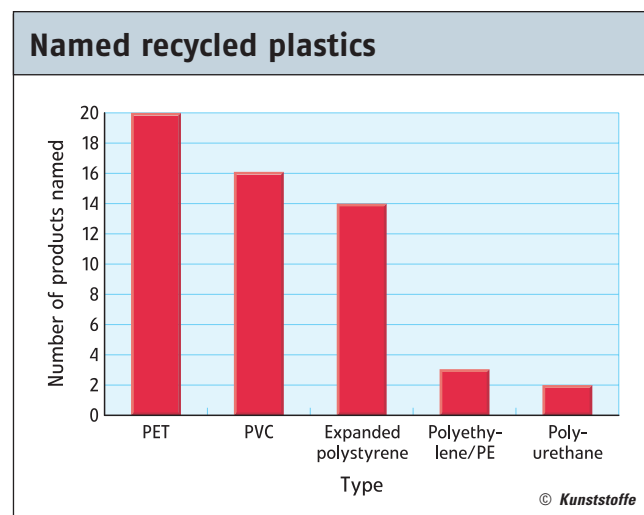


Fig. 1. Recycled plastics named by the interviewees

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technology. The industry did not reckon with this positive image or the high level of acceptance of recycling.”

The survey does, however, also show that there is a considerable lack of knowledge among the population regarding plastics recycle, and the majority of those questioned were unable to name any plastics that are recycled. The best-known fact was that PET, PVC and EPS – more commonly known as “Styropor” or expanded polystyrene – can be recycled (Fig. 1). A significant majority of the consumers would welcome the labelling of plastic products containing recycle. There was a considerable discrepancy when it came to estimating the proportion of recycle in household goods: While experts from the plastics industry put the figure at around five percent, a large proportion of the population believes that the share of recycled material is over 50 %.

Children and Friends also Decide

For representatives of the plastics industry included in the survey, the aspect of quality also tops the list. In particular, the industry also attaches importance to unproblematical processing and functional performance of the recycle. It is not clear, says the study, whether the industry is referring to technical problems or whether it sees an image problem with

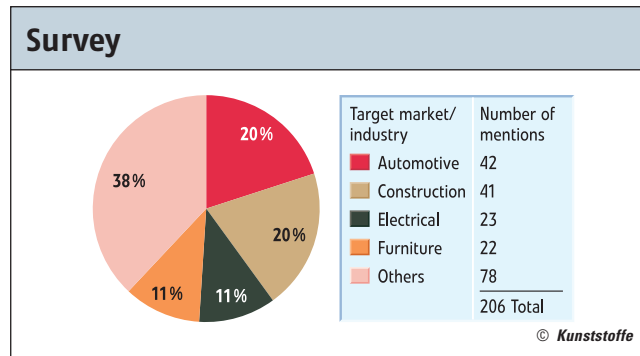


Fig. 2. 206 decision-makers from the plastics industry provided information on the target markets for recycles

recycled plastics. Surprisingly, the second-most important criterion for those questioned is the opinion of their children and friends. If this group is in favour of using recycled plastics, then this becomes one of the most important reasons for processing recycle. Almost as many decision-makers also believe they are making a contribution to environmental protection by using recycled material, but consider it unlikely that they have a better image among end-users as a result.

The amount of knowledge about recycled plastics varies considerably in the plastics-processing industry. Whereas 85 % of those questioned know of PVC recycle, only 39 % are familiar with polyethylene recycle. On the other hand, a large number of products containing recycle were named – 251 in total – together with the formulations (Tab. 1).

The range of applications is very varied. The automotive and construction

industries (each 20 %) and the electrical and furniture segments (each 11 %) process a total of 62 %, or nearly two thirds of the recycled materials (Fig. 2). For the coming year, the plastics-processing companies plan to use approximately the same quantity of recycle. A growth in volume is unlikely in the immediate future, but an increase is expected in the longer term. The structure of the sources of the recycled material is very heterogeneous. Of the 122 suppliers named, those that sprang to mind most frequently were their own companies (just under 20 %), which produce the recycle themselves. Only very few large recycle producers were mentioned.

Conclusions

Stephan Götze, the author of the study, draws the following conclusions:

- In the short term, the volumes of each type of recycle will not change very much. The close connection between familiarity with particular recycles and captive use indicates a lack of market transparency and insufficient knowledge about the types and potential uses. By doing more work to explain the situation to customers, it should be possible to tap considerable sales potential.
- The variety of sources makes it necessary for recycle manufacturers to approach the customers very differently in order to tap wide sales markets. For the individual manufacturers, it also provides a good opportunity to position themselves in the market.
- Among the target markets, some industries have emerged as main customers. Further potential in specific industries, e.g. the furniture industry, needs to be analysed.
- In many cases, the (potential) users doubt that the technical performance of the recycled material is always unproblematical. In such cases, it needs to be ascertained whether genuine

Recyclate type	known [%]	already being used [%]	will be used in future [%]
PVC-R (PVC recycle)	85.3	33.1	32.2
PP-R (Polypropylene regrind)	80.4	45.9	45.2
PET-R-KL (PET recycle clear)	75.7	18.7	18.5
ABS-R (Acrylonitrile butadiene styrene recycle)	73.8	39.5	41.3
PE-LD-R (Polyethylene low-density recycle)	73.6	36.4	36.6
PE-HD-R (Polyethylene high-density recycle)	71.6	35.1	33.1
PET-R-FA (PET recycle coloured)	69.9	10.5	10.8
PS-R (Polystyrene regrind)	68.2	32.8	29.6
PC-R (Polycarbonate recycle)	67.0	27.9	25.2
ST-R (Styrene/polystyrene regrind)	58.4	8.5	8.3
PP-LD-RMG (Polypropylene light-density regrind blend)	56.5	16.7	15.6
G-A-R (Mixed recycle agglomerates)	44.8	9.8	9.9
PO-R (Polyolefin regrind)	39.0	6.9	6.4

Table 1. Recycles known on the plastics market

technical problems are involved or whether it is merely a case of a poor image. The latter could be improved by distributing more information.

- Many companies in the plastics-processing industry recognise the environmental benefit of using recyclate but not the mounting potential resulting from the finite nature of the feedstock, namely crude oil. The recommendation would therefore be to strengthen the image of recyclate by underlining its usefulness in conserving resources.
- Products containing recyclate should be labelled as such.
- The potential derived from the influ-

ence of the private sphere on the purchasing of a product should be exploited through intensive communication work.

This is a point that the DKR also intends to take up. "In future, we will distribute even more information about high-grade recyclates and the relevant finished prod-

ucts", explains DKR Managing Director, Dr. Volker Gibs. All in all, the study comes to the conclusion that the market has not yet been exhausted for the DKR and their partners. Through active marketing work, the promising growth potential could be better exploited. On top of this, plastics recycling will become more economical and competitive due both to the legal conditions (TASi 2005) and to increasing cost effectiveness. ■



Information

The short 20-page version of the study "Understanding loops – closing loops" can be ordered on the Internet or downloaded as a PDF file. Further information at www.dkr.de

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