

BV GLAS OPPOSES THE EXTENSION OF PRODUCT RESPONSIBILITY TO FLAT AND SPECIAL GLASS

BMUB OVERESTIMATES RECYCLING POTENTIAL

The longstanding and successful container glass recycling model will be extended to the flat and special glass segments if the Federal Ministry for the Environment's (BMUB) plans go ahead. The ministry's current draft for the continuation of the German ProgRess II resource efficiency programme focuses on these two segments. It believes that they offer considerable potential for the recovery of waste glass that has not been recycled in the past. However, it has overlooked the fact that almost all flat glass waste is already recycled today – except it isn't recycled in the flat glass segment, but in the container glass and glass wool segments. It also fails to consider that the container glass recycling principle cannot be transferred as it is to other glass segments.



Container glass, which includes bottles, jars, pharmaceutical and cosmetic containers, has been recycled in Germany since the 1970s. Germany's recycling quotas of over 87 percent are some of the highest in Europe. Glass manufacturers, consumers and recyclers all work together very efficiently in the container glass recycling system. Now, according to the BMUB's most recent ProgRess II draft, this same system will be introduced for flat glass and special glass. For example, according to the BMUB, around two million tonnes of flat glass waste is lying around in construction rubble

or scrapped cars. It suggests that if 10 percent of this waste glass were used in the production process, three percent energy savings per year could be achieved. However, the Federal Association of the German Glass Industry (BV Glas) calculates an entirely different figure on the basis of German Statistics Office data on production and foreign trade: only a fraction of the two million tonnes of flat glass that the BMUB is talking about is actually available as recyclable material every year, and almost all of it is already recycled.

EDITORIAL



Current political developments show just how important it is to be diligent about keeping up to date on glass

manufacturing and recycling processes. A recent example is the Federal Ministry for the Environment's draft for the German Resource Efficiency Programme (ProgRess II), which also covers the topic of flat and special glass recycling. In particular, the ministry's proposals relating to flat glass recycling show a complete lack of understanding about the glass industry's material flows. This is something that we hope to change with our leading article. Before you read it, we can tell you that almost 100 percent of waste flat glass is already recycled – but in the container glass segment.

Energy is another issue that still concerns us. Energy policy developments are heralding even more costs for the energy intensive industries. The return to the physical path method of calculating electricity grid charges considerably adds to the burden that the glass industry already has to bear in rural regions. However, we also have some positive news. A study conducted by the Wuppertal Institute on behalf of BV Glas has revealed that glass cosmetic jars are no worse, from an ecological perspective, than plastic jars.

I hope you find the newsletter informative!

Kind regards,
Dr Hans-Joachim Konz

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Recycling cycles are not comparable

According to Dr Johann Overath, Director General of the Federal Association of the German Glass Industry, the first mistake that the BMUB makes relates to the comparability of recycling cycles. "Bottles and glass jars are fast-moving consumer goods. The consumer buys them, consumes the content and then disposes of the glass container in the bottle bank. Soon after that, the glass is processed and melted down again. Building windows and car glass are an entirely different matter. Once installed, they remain outside the recycling cycle for several years, if not decades."

Environment ministry figures are not reliable

BV Glas also criticises the figures published by the BMUB. The distribution of manufactured flat glass is easy to comprehend on the basis of data relating to the year 2013. In 2013, 587,800 tonnes of flat glass was manufactured for window glass. Around 60 percent of that (352,657 tonnes) was installed in renovated buildings and 40 percent (235,105 tonnes) in new buildings.¹ Based on the quantity of new glass for building renovation, it is easy to estimate the quantity of waste glass. "When windows are replaced, single and double glazing is usually replaced with triple glazing. The windows are often also enlarged, so it can be assumed that every new pane replaces an old pane that is 60 % the size of the new one. This means that the quantity of new glass exceeds the quantity of waste glass," said Overath.

Based on this estimate, building renovation work generates around 211,600 tonnes of waste glass, and another 14,600 tonnes are generated by building demolition work. This brings the total of waste glass in the construction sector to 226,200 tonnes. It cannot be used in the flat glass industry for quality-related reasons. "The most important requirement for a new window is complete transparency," explained Overath. "The slight discoloration that recycled glass has is not acceptable to customers. That's why most of the waste glass goes to the container glass segment for recycling,



where it can be used to product brown, green and blue bottles." With some transparent glass products a slight green tinge is acceptable.

The figures from the automotive sector are also unsuitable as a basis for the German government's draft. According to a BV Glas estimate, around 16,000 tonnes of waste glass was derived from scrapped cars in 2013. According to the Federal Environmental Agency 1,185 tonnes of waste glass is obtained by dismantling facilities.² The remaining approximately 14,500 tonnes is shredder light fraction and so heavily contaminated that it is not economically viable to recover the glass.

High diversification in the special glass industry

The special glass industry is the glass segment that manufactures the broadest spectrum of products, extending from

pharmaceutical containers and lighting systems to ceramic hobs. All these products are made by the special glass industry. It is obvious that smartphone display glass is different to ceramic hob glass, and this is the main problem in special glass recycling. Special glass applications and formulae are so different that the practical difficulties and costs of recycling them are disproportionate to the result – energy savings and resource conservation.

The glass industry therefore concludes that although the Ministry for Environmental Affairs attempt to increase the recycling quotas in the glass industry is fundamentally commendable, the BMUB bases its assumptions on unrealistic scenarios because only a fraction of the quantity of recyclable waste glass that it suggests actually does exist, and it is already almost entirely recycled by the container glass industry.

¹ The German Federal Flat Glass Association [Bundesverband Flachglas]

² Annual report on scrapped car recycling quotas in Germany in 2013 (UBA 2015)

TOP THEME

PHYSICAL PATH PUTS GLASS INDUSTRY COMPANIES IN RURAL REGIONS AT A DISADVANTAGE

Glass industry company lodges an objection against the Federal Network Agency.



A series of amendments have been made to the Electricity Grid Charges Ordinance in recent years. Since the last amendment in 2013, grid charges have been calculated individually again on the basis of the so-called physical path. This involves calculating the amount that a grid user – e.g. a company in the glass industry – would have to spend each year if it were to install the infrastructure connecting it to the nearest power station itself (fictive direct line). If these costs are lower than the annual grid usage fees, they can be taken as the basis for an individual grid usage fee. However, a defined lower threshold cannot be undercut. Although this initially sounds like a fair method of grid fee calculation – after all, Germany is an industrial nation with an extensive electricity grid – it actually puts some companies in the glass industry at a distinct competitive disadvantage. This is because the glass industry is traditionally located in rural regions such as Franken-

wald or Thuringia Forest. Their nearest base load plant or nearest network node might be so far away, that an individual grid fee is out of the question because the fictive costs would be higher than the regular grid fees. This practically rules out any grid fee reduction. Competitors in the same sector of industry with similar electricity consumption rates which are located in conurbations, on the other hand, can achieve grid fee reductions of up to 90 percent. Dr Johann Overath, Director General of the Federal Association of the German Glass Industry (BV Glas), thinks that this is an unfair situation. "Rural regions, in particular, are often structurally weak and urgently need the glass industry companies as employers. Putting these companies at a disadvantage will have a negative impact on their competitive strength and jeopardise local jobs." A company in the glass industry has lodged an objection against the use of the physical path method of calculation to the

Federal Network Agency – without success to date.

BV Glas is concerned about energy policy developments. "The energy-related political decisions are currently moving in a direction that suggests increasing burdens for the energy-intensive industries," said Overath. "But industries such as the glass industry, which have long investment and planning cycles, depend on stable political frameworks and at least the minimum of planning security. Grid usage fees currently account for between 5 and 25 percent of the electricity price, depending on the consumption scenario. The glass industry's constant consumption levels put no burden on the grid and this should be reflected in individual grid usage fees that don't put glassworks in rural locations at a disadvantage."