Joint Statement on the Commission's End-of-Life Vehicles Regulation Proposal

Date: 13 December 2024

The undersigning Parties assert that dismantling automotive glass is an essential step to enhancing the recycling of end-of-life vehicles (ELVs). Flat glass components, including windscreens, side windows, and panoramic sunroofs, are crucial for ensuring user visibility, safety, and comfort. The future End-of-Life Vehicles Regulation should ensure that these functional components are recycled at a much higher rate than today, and a dismantling obligation is a necessary first step to achieve this goal.

1. The case for mandatory glass dismantling

Effective dismantling and sorting of automotive glass at the end of a vehicle's life is a crucial step to enhance the circularity of this sector. This practice can also reduce raw material consumption by 1.2 tonnes for every tonne of used cullet and decreases CO_2 emissions by at least 600 kg for each tonne of cullet produced[1]. Hence it could help reduce the environmental footprint of every car produced.

However, current practices show that Authorised Treatment Facilities (ATFs) dismantle automotive glass parts before shredding vehicles less than 10% of the time[2]. This is detrimental to glass recycling, as shredded materials become entangled , preventing the cullet from being transformed into new glass products. Flat glass products are subject to strict requirements, meaning high-purity cullet is required, which in turn, necessitates that the recovery of automotive glazing takes place before the vehicle is shredded to avoid contaminations by other materials.

Hence, mandating the dismantling of automotive glass is a crucial starting point to enhance the availability of high-quality cullet.

2. Support for the European Commission's Proposal

The undersigning Parties support the European Commission's provisions for glass dismantling in the proposed new ELV Regulation.

These provisions have the potential to significantly increase the availability of high-quality glass cullet, essential for boosting recycled content and promoting circularity and sustainability in glass manufacturing.

[1] Data provided by Glass for Europe, the European flat glass sector's association. See also: Favaro, N., & Ceola, S. (2021). Glass Cullet: Sources, Uses, and Environmental Benefits. *Encyclopedia of Glass Science, Technology, History, and Culture*, *2*, 1179-1189. https://doi.org/10.1002/9781118801017.ch9.9

[2] See calculation and sources in: Glass for Europe (2024). Dismantling automotive glass is a mandatory step to increase recycling of end-of-life vehicles

The undersigning parties acknowledge that the integral recovery (i.e. recuperation) of the glass fraction during pre-dismantling can be too ambitious. Therefore, the removal of a set percentage of the total glass of the car (e.g. 90%) could be more pragmatic and enforceable as a starting point.

3. The need for a mandatory dismantling provision

Contaminated cullet with non-glass components as issued from shredded ELVs, even by application of Post Shredder Technologies (PSTs) poses risks to glass manufacturing equipment and can compromise the safety and properties of future glass products. This is especially the case for flat glass where purity is an essential characteristic to ensure products' transparency and safety. Such contamination of the recovered materials automatically excludes the possibility of closed loop recycling in automotive glass or recycling into container glass. When Authorised Treatment Facilities (ATFs) effectively dismantle and sort glass components, the resulting cullet can be recycled safely, providing a sought-after resource in various glass sectors. Today, there is already a market eager to absorb this glass cullet as on average demand for glass cullet exceeds supply in Europe.

The dismantling of windshields is particularly important as it also enables the recycling of the Polyvinyl Butyral (PVB) layer found between glass layers. This PVB fraction is promising for future applications and has a high value. Many glass recycling facilities are currently investing in PVB recycling lines, in concertation with PVB producers. Recycling the PVB fraction cannot be achieved through post-shredding technologies.

The successful recycling of the PVB fraction will further enhance the overall business case for recycling glass from end-of-life vehicles and highlight the importance of implementing proper storage practices for dismantled windshields. Additionally, establishing good standards for both manual and mechanical dismantling is crucial to ensuring the quality of the glass materials and the PVB.

4. Limitations of a recycled content obligation

The proposed mandatory glass dismantling provision is the most effective means to convert automotive glass waste into a valuable resource. A recycled content target only for automotive glass would not increase the availability of cullet but merely shift limited resources between different glass product types, e.g. from building glass to automotive glass.

The responsibility for dismantling glass could be supported financially by an Extended Producer Responsibility Scheme for the automotive sector, allowing to access and value this resource.

Conclusion

The undersigning Parties urge policymakers to uphold the European Commission's proposal principle of mandatory glass dismantling in the future ELV Regulation. This legislative

evolution is essential for achieving tangible results in automotive glass recycling, significantly contributing to circularity and overall enhanced sustainability in the glass industry.

It is also essential in order to safeguard ongoing investments in PVB recycling and to enable future recycling of PVB in laminated glass of ELVs.

Glass for Europe is the trade association for Europe's flat glass sector. Glass for Europe brings together multinational firms and thousands of SMEs across Europe, to represent the whole building glass value-chain.

FEVE is the Federation of European manufacturers of glass containers for food and beverage and flacons for perfumery, cosmetics and pharmacy markets.

FERVER (AISBL) is a non-profit association that represents the interests of the glass recycling industry at European level.

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