

"RECYCLED CONTENT AND GLASS PACKAGING"

EUROPEAN CONTAINER GLASS INDUSTRY POSITION

Brussels 03 July 2019

ABOUT FEVE - THE EUROPEAN CONTAINER GLASS FEDERATION

FEVE is the Federation of European manufacturers of glass containers. Its members produce over 20 million tonnes of glass per year. The association has some 60 corporate members belonging to approximately 20 independent groups. Manufacturing plants are located across 23 European States and include global blue chip and major companies working for the world's biggest consumer brands.

ABOUT GLASS PACKAGING

Glass packaging guarantees the long-time preservation of taste and flavour, safe delivery and attractive presentation of a vast array of consumer products, supplied to European and global markets. Whether used for drinks, food, cosmetics, perfumes or pharmaceuticals, glass packaging plays a vital role in supporting European trade and commerce. Glass is 100 percent and endlessly recyclable in a closed loop, it is inert and it preserves the nutritional qualities and original taste of the products it contains – no matter how many times it is recycled. Glass is the number one packaging preferred by consumers. Visit the Friends of Glass movement on www.friendsofglass.com and become a friend of glass.

GLASS PACKAGING AND RECYCLED CONTENT - THE FEVE POSITION

The recycled content has been conceived as a market driver for materials which today are not effectively recycled due to technical and market limitations directly linked to their inherent properties. **This is not the case for glass packaging.**

Technically, glass bottles can be produced with up to 100% recycled glass, and so endlessly. Glass is a very simple material that can be endlessly and easily recycled into new glass applications, and without any degradation of its quality. It always remains safe even when recycled. That is one of the reasons why glass is used to produce packaging solutions for consumer food and beverages, perfumery and cosmetics, and pharmacy goods. Post-consumer recycled glass is the most important ingredient we use to produce new glass packaging solutions.

In Europe, **market demand for quality recycled glass exceeds the supply**. Glass packaging manufacturers are keen to use recycled glass because it brings major environmental benefits and lowers production costs. Its use as main resource for new production brings major environmental and economic benefits ⁽²⁾. All good quality recycled glass goes back in a closed loop to a production facility to meet the demand of different product applications with different quality standards and different colours. Glass which is not recycled in a bottle for market reasons is however recycled into other ones. It is not lost.



According to the last FEVE LCA study, the average recycled content of glass containers produced in Europe is of 52% as unspecified colour, 80% as green glass, 50% as brown glass, 40 % as flint glass. The increase of the average recycled content is directly linked to the availability of more, better-quality, and colour-separated cullet that can be used for bottle-to-bottle recycling on the European market ⁽³⁾.

Therefore, at the European Container Glass Industry we have one major priority: to increase the availability of good quality and colour separated cullet for bottle to bottle production. Today, 74% of glass packaging put on the market is collected. In many countries this is largely through single-stream colour separated collection schemes. We want to maintain and to improve the performance of these systems to increase the collection and recycling of glass and achieve the perfect closed loop that the material enables us to do. A better performance of the glass bring-back systems will also result into better quality and more colour-separated cullet and therefore increased possibilities to use it into new glass packaging applications. If we do not increase quantity and quality of recycled glass and ready to use cullet, we will not increase the overall environmental and market benefits of glass recycling.

The recycled content of a specific glass packaging solution is linked to the colour and quality grades that only manufacturing companies and customers can agree upon. They decide whether to communicate on the recycled content of a bottle or jar put on the market in agreement. Technically, bottles and jars can be produced with up to 100% of recycled glass, but colour and quality specifications will always drive its use into a specific bottle. Some customers may decide to communicate on the recycled content of a green bottle and not for an extra-white flint bottle. The type of product and market will prevail.

END NOTES

- (1) Coca-Cola Co. wants to see its plastic bottles contain an average of 50% recycled content by the end of the next decade https://www.plasticsnewseurope.com/article/20180125/PNE/180129939/coca-cola-seeking-50-recycled-content-by-2030
- (2) Glass manufacturers are keen to use more cullet because this translates into major environmental and economic benefits:
- on average, a 10% increase of cullet in the furnace decreases its energy use by 3% and CO2 emissions by 5%.
- Cullet use also reduces reliance on newly extracted raw materials and the energy, and emissions associated with this. One ton of cullet replaces 1.2 tons of virgin raw materials.
- The use of cullet results in less costs for virgin raw materials, energy consumption and emission taxation. Cullet market is very stable, and it is generally more convenient to produce glass with recycled glass than with virgin raw materials. This makes glass recycling also economically sustainable.
- (3) Today, most glass packaging in Europe is green glass or amber providing for very high volumes of green and amber recycled glass. But green or amber glass cannot be added to flint (white) glass. That is why separate collection by colour is important but not possible everywhere. Flint glass on the other hand is extremely adaptable and can be added to any colour. There are also quality grades for example extra white flint grade this grade would be one of the highest quality glass packaging grades on the market today. While such glass is fantastic to recycle only extra white flint glass can beget an extra white flint bottle! Incorporating a lower grade of recycled glass into an extra white flint batch will reduce the aesthetics and transparency of the final product. Ideally, it would be great to have separate collection everywhere by colour, and quality grade but it is just unreasonable as it would be a whole lot more demanding for consumers and to an untrained eye it is not easy to tell the difference between the different glass grades.