The GOB

Study reveals:
Glass Recycling and separate Waste collection are key drivers towards a circular economy

A study of the Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+) for the European Container Glass Federation (FEVE) has found that separated waste collection schemes should be widely supported if we are to build a circular economy for glass packaging.

The report “Good Practices in collection and closed-loop glass recycling in Europe” comes to the conclusion that Europe needs to use its resources much more sparingly by recycling more, meaning we need higher collection rates and higher quality of collected glass.

Only glass bottles and jars collected separately will result in both a higher quantity and quality of post consumer glass availability that can save resources to make new packaging.

Glass stands out as one of the best examples of the closed loop production model because it is one of the most effectively recycled materials in Europe (67% on average). This is not only because of its natural characteristics - it is 100% and infinitely recyclable - but also because of well established separate collection schemes.
8 Case Studies

Eight case studies were selected for the purpose of the study. The Authorities chosen were: Intradel – Liège Province (Belgium), Municipality of Graz (Austria), LIPOR, Greater Porto Intermunicipal Waste Company (Portugal), Municipality of Maastricht (Netherlands), Municipality of Lippe (Germany), Canton of Geneva (Switzerland), City of Grand Besançon (France), Municipality of Odense (Denmark).

In separate collection systems the processed material is of better quality to meet the specifications necessary for the bottle-to-bottle production and is cost competitive in relation to the use of virgin raw materials. Other systems, like co-mingled collections can be either too costly or provide glass only suitable for low-grade applications (e.g. as aggregate). These applications are literally a waste – because the material is lost forever from the circular economy.

“We need a more integrated approach with all the stakeholders along the chain, including citizens, and make more sustainable waste collection decisions in the future,”

Olivier De Clercq, Secretary General of ACR

The study also recommends more and clearer communication to citizens about the benefits of glass collection and recycling in a bottle-to-bottle system, and the role they can play. Municipalities can work on this aspect too, as can industry.
Results

The research demonstrates single stream glass collection provides a high quantity and quality of recycled glass for recycling.

In the study, the post consumer glass selectively collected varies from case to case: 13 kg/inhabitant/year (in Porto) to 47 kg/inhabitant/year (in the Canton of Geneva), underlying the differences not only in performance but also in glass packaging use as well as the existence of deposit schemes competing with municipal collection.

“The better the quality of the glass collected the more we can recycle in a bottle to bottle system. This type of glass recycling is not only a local industry but also brings major economic and environmental benefits. We strongly support the findings of this timely study which underpins the importance given to recycling in the EU’s waste hierarchy.”

Adeline Farrelly, Secretary General of FEVE

Separate collection schemes and glass recycling are key drivers in a circular glass “bottle-to-bottle” production.

The following factors are considered as key for effective collection and recycling:

- Accessibility and high number of bottle banks (e.g. Maastricht)
- Cleanliness and maintenance of bottle banks (e.g. Intradel)
- Clear and Simple communications to residents (e.g. Graz)
- Frequent rate of collection to avoid over filling of bottle banks (e.g. Canton of Geneva)
- Separate glass collection by colour type (e.g. Lippe)
- Glass bottle banks placed/located in ‘popular’ central areas (e.g. Porto)
- Higher quality directly dependent from better handling at collection source (e.g. Odense)
- Local and Regional Authorities (LRAs) to introduce advanced systems: underground street bottle banks (e.g. Intradel)

Communication material plays a key role in the effectiveness of the glass selective collection schemes and additional illustrations and photos on guides and brochures ensure for better quality of the glass waste collected on a local level. The municipalities have also been focusing on communicating the importance of glass recycling to schools (i.e. ‘Bottle Recycling Heroes’ in Austria) and community groups.
Become a ‘Friend of Glass’

The Friends of Glass movement, a European wide consumer forum supported by FEVE, and its thousands of followers, offers an established social media platform for the exchange of new ideas.

For the latest news and updates please join us at European ‘Friends of Glass’

Join us at Facebook: www.facebook.com/friendsofglassuk

FEVE – Fédération Européenne du Verre d’Emballage - is the Federation of European manufacturers of glass packaging containers and machine-made glass tableware. The member companies manufacture glass bottles, jars and/or tableware items such as drinking glasses in the European Union, Switzerland and Turkey. Europe is the largest producer of glass containers world-wide.

For more information please visit the FEVE website www.feve.org