

How to keep a sustainable PET recycling industry in Europe

Executive summary

The European PET Bottle Platform is a voluntary industry initiative that provides PET bottle design guidelines for recycling, evaluates PET bottle packaging solutions and technologies and facilitates understanding of the effects of new PET bottle innovations on recycling processes. This initiative fully supports the economic and environmental sustainability of the European PET value chain. EPBP assessments are performed ensuring strict business confidential information protection and the opinions are fully recognized by decision makers that source PET bottle packaging solutions.

About rPET

- PET is the most recycled plastic packaging material in Europe.
- 1.68Mt PET bottles were collected in 2012 for recycling. This is an increase of 5.6% compared to 2011.
- The PET resin recycling rate in 2012 was 52.3%; approximately half of the available rPET resin is either incinerated or landfilled.
- rPET demand for textile applications declined from 39.3% in 2011 to 35.3% in 2012, but is still the major end market use, rPET for bottle-to bottle applications has grown from 25.3% in 2011 to 28.4% in 2012.
- The average recycled content in PET bottles in Europe is now 10.6%.

Regulatory Framework

The European Commission is currently undertaking a "fitness check" of five waste directives, including the Packaging and Packaging Waste Directive (PPWD). The process has involved consultation of stakeholders and the publication of a Green Paper on plastic waste. The current recycling target for plastic packaging is 22.5% and PET recycling provides a significant contribution towards the achievement of this target in EU Member States. It is likely that the PPWD revision will bring increased recycling targets for packaging waste. At the same time the European Union is actively promoting the "circular economy" and "green development" models for the future sustainability of the EU. Recycling plays a significant role in both, providing valuable raw materials to the European industry and generating green jobs in the recycling value chain.

Challenge for the PET recycling industry

The challenge for the PET value chain is to support the achievement of present and future plastic packaging recycling targets in the EU Member States whilst taking into account the shift in rPET

demand from textile to bottle-to-bottle and other packaging applications. This implies maintaining the availability of high quality rPET material that will, in turn, enable the industry to use recycled content in bottles without processing issues, discoloration and other visual defects. Innovation in PET bottle design and performance is essential, nevertheless it is also crucial that the quality of recycled material over time is not allowed to deteriorate through the indiscriminate use of additives, barrier materials, glues, sleeves and other components or materials. The EPBP initiative was created to support companies with their bottle design and innovation developments without disrupting the existing PET recycling industry.

Recommendation for the PET users

In order to support this initiative it is essential that packaging designers follow the **EPBP guidelines for recycling** which are available on the web site of European PET Bottle Platform¹. The design guidelines have been developed over many years and cover specifications and recommended design options for the body, label and cap of the bottle. All materials used must meet the legal requirements for materials and articles intended to come into contact with food.

The EPBP design guidelines are freely available to individuals, designers and manufacturing companies. They are a reflection of the average recycler capability and try to strike a balance between resource efficiency, the need for innovation and shelf differentiation and recycling practices in Europe. The purpose of the guidelines is to encourage companies that design and market materials and components, intended to be used in PET bottles, to apply the principle of due diligence.

Companies are encouraged to bring their bottle packaging solutions to the European PET Bottle Platform to obtain an **objective third party assessment** of the impact on recyclability and hence sustainability of their products. Packaging solutions are assessed by the EPBP technical expert panel whilst **protecting applicant's confidential information**, thus allowing the evaluation of novel packaging solutions when they are still in the R&D phase and changes are possible to avoid negative recycling issues.

About EPBP

The European PET Bottle Platform (EPBP) is a **voluntary initiative** supported by the European Federation of Bottled Waters (EFBW), the European Association of Plastic Recycling and Recovery Organizations (EPRO), Petcore Europe, Plastics Recyclers Europe (PRE) and the European non-alcoholic beverages association (UNESDA).

The Platform consists of technical experts in the field of PET production, design and recycling, whose only objective is the evaluation of new technologies and providing an independent and confidential assessment of their impact on the PET recycling processes across Europe.

EPBP has established several test procedures in order to assess the impact on recycling of new packaging technologies. Products that pass the tests should not cause any problems during recycling.

¹ http://www.petbottleplatform.eu/ Online contact form: http://www.petbottleplatform.eu/contact.php