

Towards a life-cycle driven circular economy

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Striving for a resource-efficient and competitive Europe

In January 2018, the European Commission published its strategy for plastics in a circular economy. While this strategy clearly focuses on measures necessary to improve the recycling of plastics, it is important to reiterate that in order to become truly sustainable, overall resource efficiency must be maintained as one of the driving forces behind both waste and product-related measures.

The importance of life-cycle thinking for a truly sustainable Europe

Product-related measures, including requirements under Extended Producer Responsibility schemes, should not only focus on recyclability and reusability at the end-of-life, but also on the benefits for the environment provided during the entire life-cycle. For example, packaging is designed to use less raw materials for its production (thus also producing less packaging waste), to protect goods from damage during transport, and, when it comes to food, to increase shelf life – thus maximising the resource efficiency of packed goods throughout their life while also taking end-of-life recovery into account. Targeting 100% recyclable packaging by 2030, as recently proposed by the European Commission, requires to check that it does not negatively impact the environmental performance of the packed product from a broader life-cycle perspective. With this in mind, in January 2018, PlasticsEurope published its voluntary <u>commitment</u> to reach 60% recycling and reuse of packaging by 2030.

Optimum level for plastics recycling needs to be increased

The Vision for Europe's new plastics economy recently published by the European Communication targets more than 50% plastics waste generated in Europe being recycled by 2030. A study by denkstatt (2014) shows that there is an optimum level for plastic recycling which provides a positive balance between economic and environmental costs and benefits. It has also estimated this optimum level to range from 29 to 45%, depending on collection, sorting and recycling conditions. Eco-design with plastics for sustainable products and recyclable packaging is a driver for innovation. This requires a value chain approach and further support in order to make ambitious recycling targets both economically and environmentally viable.

Key recommendations:

1. Ensure that measures follow a life-cycle approach

The benefit of redesigning a product with the sole aim of pushing it up the waste hierarchy at its end-oflife should be assessed on a case-by-case basis. Indeed, improvements in the environmental impact of a particular phase of a product should not be made without first verifying that the overall environmental impact is indeed positively affected.

2. Ensure that all packaging is separately collected

As a precondition to achieving the challenging plastic packaging recycling targets, all plastic packaging needs to be collected separately from residual waste. In addition, in order to optimise the economics and only where this does not jeopardise high-quality recycling, co-mingled collection of plastic packaging with other packaging materials or recyclables is recommended.

3. Ensure that decisions to include recycled content in products remains a market choice The use of recycled content in a product is not always environmentally beneficial, economically viable or technically feasible, and due account also needs to be taken of product safety rules as well as consumer health. The possibility to use recycled material varies greatly from one application to another and it is therefore impossible to have a general rule imposing a defined level of recycled content.