The Permanent Materials Concept

Definition of ‘Permanent Materials’

Materials in general can be classified as renewable or non-renewable or as permanent or non-permanent.

Renewable materials such as wood, paper/card or bioplastics are made from natural resources that can be re-built by biological processes.

Permanent materials are classified as materials that once produced can be recycled or reused without the loss of quality, regardless of how often the material is recycled.

Why are ‘Permanent Materials’ important?

Permanent materials now have a greater focus because of increased consumption and growing populations. This brings the need for materials that are infinitely recyclable in order to serve these demands and this concept is known as a ‘Circular Economy’.

(Source: British Standard Institution (BSI) standard 8905:2011)
How does the ‘Permanent Materials’ Concept work?

Different materials can be recycled in different ways. Some materials become degraded during recycling and so quality is lost during the process. This is known as an ‘Open Loop’ material cycle. Ardagh Group’s steel, aluminium and glass packaging is recycled by melting processes and can be re-used for packaging or other applications. This process is referred to as a ‘Closed Loop’ material cycle, as the material can be recycled repeatedly - without loss of quality or functionality.

The Relevance of the Permanent Material Concept in European Legislation

One integral part of the ‘Europe 2020’ strategy of the European Commission is the ‘Roadmap to a Resource Efficient Europe’. This aims to stimulate growth needed to provide jobs and well-being to its citizens and ensure that the quality of this growth leads to a sustainable future.

The roadmap explicitly refers to a ‘circular economy’ of metals, where waste metal becomes a resource and this closed material loop supports the idea of a circular economy (paragraph 4.3).

The importance of a circular economy and this concept of ‘Permanent Materials’ is also acknowledged in the Roadmap by not only distinguishing between non-renewable and renewable materials but now between permanent materials too.

Lastly, the Waste Framework Directive (Directive 2008/98/EC) introduces the so-called ‘waste hierarchy’, outlining the most important ways of treating waste. In this waste hierarchy, material recycling is regarded as a key solution (after ‘prevention’ and ‘re-use’) for treating waste. Again, this adds relevance to the concept of permanent materials and their inherent recyclability as an ideal base for a circular economy.