



# **PACKAGING DELIVERING RESOURCE EFFICIENCY**



EUROPEN

---

The European Organization for Packaging and the Environment

**This brochure has been prepared for  
The European Organization for Packaging and the Environment (EUROPEN)**

© EUROPEN 2013  
Packaging – Delivering Resource Efficiency

**The European Organization for Packaging and the Environment (EUROPEN) aisbl**  
Avenue de l'Armée 6, 1040 Brussels, Belgium  
[packaging@europen-packaging.eu](mailto:packaging@europen-packaging.eu)  
[www.europen-packaging.eu](http://www.europen-packaging.eu)

**Disclaimer:**

While every effort has been made to ensure the accuracy of the contents of this brochure up to the time of publication, The European Organization for Packaging and the Environment (EUROPEN) aisbl cannot accept any responsibility or liability for any errors or omissions.

EUROPEN—The Voice of Industry for Packaging and the Environment—is an industry and trade organization open to any company with an economic interest in packaging and packaged goods. It presents the opinion of its members on issues related to packaging and the environment.

# EUROPEN'S VISION FOR A RESOURCE EFFICIENT EUROPE

“ I much appreciate EUROPEN's efforts over the past 20 years to bring together and motivate the whole packaging supply chain to continuously improve its performance, deliver better packaging solutions and minimise its environmental footprint, across the whole life cycle of packaging. Over the past decades much has been achieved, but, as always, challenges remain and new opportunities are to be seized.

**Janez Potočnik,**  
European Commissioner  
for the Environment



“ Packaging is part of the solution for overall sustainability. EUROPEN members will continue efforts to deliver resource efficiency across the packaging supply chain, promoting the transition towards a circular and competitive economy.

**Virginia Janssens,**  
Managing Director, EUROPEN



Packaging plays an essential role towards transitioning to a green economy. It helps reduce product and food waste and protects resources across the value chain. As a driver of resource efficiency, packaging is critical for achieving the EU's environmental ambitions.

EUROPEN supports EU action geared towards placing the European economy onto a resource efficient path, bringing increased competitiveness and new areas for growth and jobs. Our industry has been working towards this by investing in the commercialisation of innovations across the packaging supply chain and ensuring the sustainable management of resources across the life-cycle of packaging and packaged goods.

EUROPEN members continuously strive to improve the environmental performance of packaging and packaged products based on life-cycle thinking. Today, industry efforts have led to significant progress in optimising packaging and its end-of-life management, as well as helping reduce food waste through continued innovation in packaging solutions and technologies. For example, this progress is reflected in an overall recovery rate of 76% and recycling rate of 63% for all packaging materials (according to latest Eurostat 2010 data).

Critical packaging and material innovations, such as barrier properties and intelligent and active packaging, have extended the life of perishable foods and contributed to reducing food waste, while more efficient opening and resealing systems have made packaging more convenient and have reduced spoilage and spillage. The packaging supply chain has continuously invested in improving the design of packaging to minimise material use without compromising product protection and safety. Technological progress has also enabled faster filling line speeds which has driven down both costs and energy use, whereas optimising packaging dimensions has allowed for greater space-efficiency and contributed to reducing transport movements.

Packaging innovation and efforts towards greater resource efficiency are not only market-driven. Existing policies and regulations for packaging and packaging waste influence significantly packaging design, the amount and nature of on-pack communications, and end-of-life responsibilities and opportunities.

For our industry to continue on a path towards greater sustainable consumption and production, it will be important that the EU continues to recognise and enable the positive contribution of packaging towards resource efficiency through transparent, effective, and proportionate legislation on packaging and packaging waste.

EUROPEN hopes that the ongoing review of EU waste legislation will provide an opportunity for the EU to reaffirm its commitment to resource efficiency and the vital role of packaging in protecting and distributing goods and food.



# PACKAGING'S CONTRIBUTION TO RESOURCE EFFICIENCY

Packaging has played an integral role throughout the ages facilitating everyday life. The packaging supply chain is continuously improving its performance by delivering better packaging solutions and minimising its environmental footprint.

Today, as a result of industry efforts the packaging supply chain has been able to:

## 1 Minimise waste by treating used packaging as a resource

Over the past twenty years, considerable progress has been achieved in the end-of-life management of packaging largely because of the contribution of extended producer responsibility (EPR) schemes for packaging waste. EPR schemes have successfully driven higher recovery and recycling rates for packaging.

EUROPEN member companies are part of the obliged industry and include founding members and shareholders of EPR schemes. They have been actively involved in these schemes for over 20 years as well as worked to fulfil EPR requirements at national level. Industry's commitment to EPR is reflected in estimated annual fees up to €3.1 billion paid by producers to EPR schemes in Europe.

For more information please see [EUROPEN's position paper on EPR for packaging waste](#) available on our website.

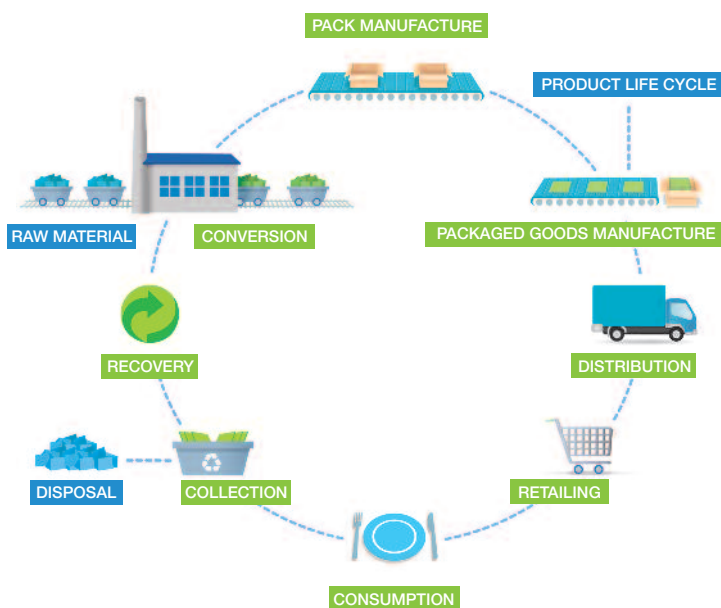


## 2 Continue optimising packaging throughout its product life-cycle

A packaged product goes through many stages in its life-cycle, and packaging must meet critical requirements and constraints at each stage. Well-designed packaging will meet the requirements of the product and consumer while minimising the environmental impacts of both the product and its packaging.

Throughout its life-cycle, the packaging supply chain contributes to resource efficiency by ensuring packaging:

- is designed holistically to optimise overall environmental performance
- is made from responsibly sourced materials
- is designed to be effective and safe throughout its life-cycle
- meets market criteria for performance and cost
- meets consumer choice and expectations
- is recycled or recovered efficiently after use



**12 000 BC**  
First trace of packaging in Japan, made of natural materials like wicker, wood, animal skin and hair

**1000 BC**  
Flasks made of glass appear in Egypt

**6000 BC**  
Cups, bowls and pots made of metals (gold, silver) start being used

**105 AD**  
Modern paper invented during the Han dynasty in China

**16<sup>th</sup> century**  
Development of coloured glass bottles to better protect bottled content

**1746**  
First branded product packaged in cardboard launched in England

**1810**  
Nicolas Appert invents method to preserve food in metal cans prolonging shelf life



“An appropriate regulatory framework is needed to accelerate EU efforts towards greater resource efficiency. The contribution of packaging is important for achieving this transition. Packaging helps minimise food waste while industry itself has invested in minimising its environmental footprint by setting up schemes promoting the effective waste management of packaging materials. I hope industry will continue in this path and accelerate efforts to become more resource efficient.”

Gaston Franco, Member of the European Parliament and rapporteur for the EU Environment Action Programme to 2020

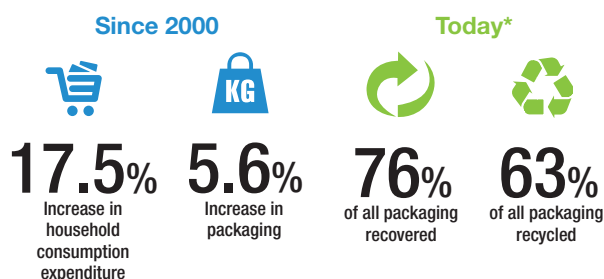


### 3 | Decouple economic growth from resource use

Despite a 17.5% per capita increase in household consumption expenditure on food and non-alcoholic drinks between 2000 and 2010, an ageing population and a trend toward smaller households, all leading to the purchase of a greater number of packaged goods, the amount of non-wood packaging placed on the market in the original EU-15 member states rose by just 5.6% over the same period.

In 2010, just under 18.7 million tonnes of used packaging were sent for final disposal in the EU. To put this into context, a 2011 study for the European Commission estimated that 89 million tonnes of food were wasted in the EU in 2006.

For more information see EUROPEN report on: “Packaging and Packaging Waste Statistics, 1998-2010”.  
\*2010 Data



#### Packaging and the Environment in practice

**Glass** containers can be infinitely recycled in a closed loop without any loss of properties in preserving food. 7 in 10 bottles are recycled today. One ton of recycled glass saves 1.2 tons of raw materials and avoids 700kg of CO<sub>2</sub> emissions; for each 10% of recycled glass, 30% of energy is saved. Glass bottles have been light weighted by 30% in 20 years.

As both **aluminium and steel** are materials with permanent properties, they can be infinitely recycled back into packaging or other valuable products without any loss of quality. Independent verification confirms 70% of rigid metal packaging was recycled in 2010, saving between 70 and 95% of the original energy used to produce it.

While over 50% of all European goods are packaged in **plastic**, it accounts for only 17% of all packaging weight. Furthermore, this weight has reduced by 28% over the last 10 years. By using plastic packaging minimised food loss of 10-20%, results in 4-9 time savings in CO<sub>2</sub> emissions than those generated during the production of plastic packaging.

The **beverage carton** industry takes a product life-cycle approach to resource efficiency. Carton manufacturers ensure that the forests from which the main raw material is sourced are responsibly managed and secure 3rd party verified traceability (88% in 2012) of the wood used in beverage carton packages.

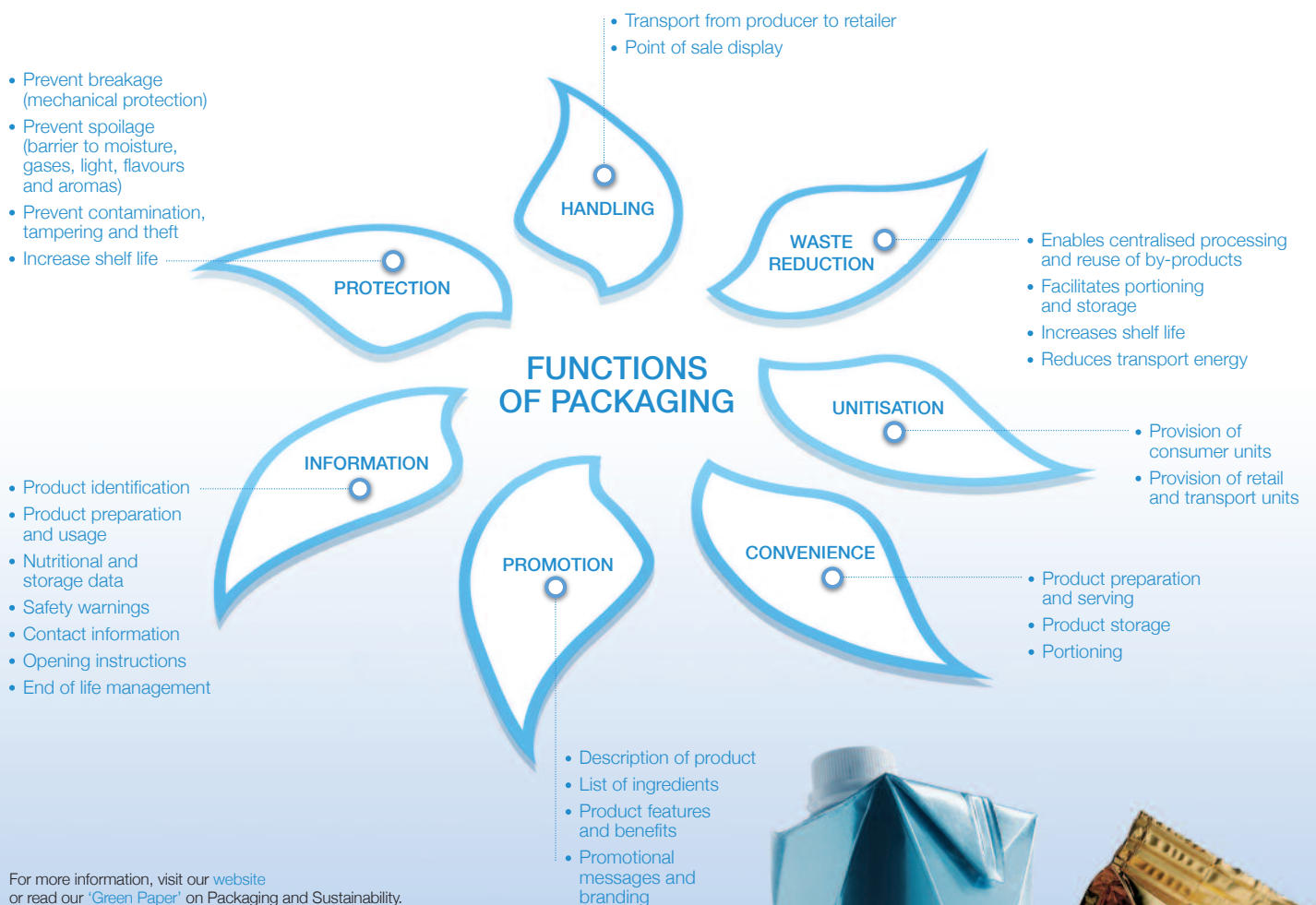
**Corrugated board packaging** can be precisely tailored to fit the products it carries, achieving up to 98% use of space in storage and transport. It is fully recyclable, with 85% of corrugated board packaging in Europe produced of recycled material.



# ABOUT PACKAGING

Packaging exists to deliver products to consumers in perfect condition. Well-designed packaging meets the requirements of the product and consumer while minimising environmental impacts of both the product and its package. Optimal packaging uses only as much of the right kind of material as necessary to perform this task.

The unique contribution of packaging to sustainable consumption and production should be considered in line with the multiple functions of packaging. These are:



For more information, visit our [website](#) or read our 'Green Paper' on Packaging and Sustainability.



# ABOUT EUROPEN

EUROPEN - The European Organization for Packaging and the Environment- is a unique cross-sectoral industry organization open to any company with an economic and sustainability interest in packaging and packaged products. It presents the voice of the packaging value chain on topics related to packaging and the environment. Since 1993, EUROPEN unites corporate members ranging from raw material suppliers, packaging manufacturers to brand-owners, who have the common objective to improve the environmental performance of packaging and packaged products in a fully accessible European market for packaging and packaged goods.



Founded in

1993



44

Corporate Members



5

National Member  
Organizations



Members present in all

28

EU Member States



## EUROPEN

The European Organization for Packaging and the Environment

Le Royal Tervuren  
Avenue de l'Armée 6 Legerlaan  
B-1040 Brussels  
Belgium

### Contact details:

Tel: +32-(0)2-736 3600

Fax: +32-(0)2-736 3521

Twitter: @europenpackaging

Email: [packaging@europen-packaging.eu](mailto:packaging@europen-packaging.eu)

Website: [www.europen-packaging.eu](http://www.europen-packaging.eu)



### Our Corporate Members



### Our National Members

