



PACKAGING AND SOCIETY

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KEY FACTS

Paper and board based packaging, including folding cartons, comprises 42% of European packaging



Packaging prevents waste - food waste in developed countries is in the range 2-3%. United Nations surveys have shown wastage rates from 10% - 90%, in underdeveloped countries

Cartons contribute very little to the price of products at the point of purchase. Less than 5% for most products and can be as low as 0.1%

FMCG companies' surveys show many key advantages for folding cartons: product protection, graphics and design, merchandising in store, environmental credentials and provision of information





What is meant by packaging and why society needs it. Why choose folding cartons?

What is “packaging”?

To most people “packaging” means the carton, sachet, jar etc. which contains a product at the point of sale, and during storage, transportation and use.

However, to all involved in the producing and marketing of food and all types of goods for sale, the term “packaging” includes all types of containers and wrappers used to protect, transport and distribute goods - including corrugated cases, trays, crates and pallets.

What role does packaging play in society?

Packaging is indispensable in modern society. It allows a multitude of goods to reach the consumer undamaged, in a safe and hygienic condition and to communicate important brand and product information.

Packaging maintains quality and protects the consumer from perished goods through the display of “sell by” and “use by” dates. It also deters tampering and pilfering.

Without packaging it would simply not be possible for consumers to have access to, and use most of the products, which are available today.

Is packaging wasteful?

If there was no packaging, food and other goods would be lost because of poor distribution, handling damage, lack of hygiene and insufficient information on product use. The truth is, packaging prevents waste.

FAO (Food and Agricultural Organisation of the United Nations) has at various times from the mid-1970s to the present day, expressed concern about post-harvest food waste in the less well developed parts of the world. Case studies have shown that wastage is highly variable and between 10-90% depending on the product and the location. This is due to the absence of an infrastructure which includes adequate packaging. By contrast, food wastage in more developed countries is as low as 2-3%.

Food packaging also prevents waste by extending product shelf life.

The principle for specifying packaging today is that it should be the minimal amount commensurate with providing adequate protection for the product.

Isn't packaging expensive?

No! The cost of packaging is only a small proportion of the price of a packed product.

Cartons, in particular, contribute a very small percentage of the price paid by

the consumer at the point of purchase - less than 5% for most products and for some products, such as medicines, less than 0.1%.

Would prices fall if there was no packaging?

No - prices would rise! Without the benefits of modern packaging, supermarkets could not handle, store and display the range of products they now offer and the cost of transportation and storage together with handling at the point of sale would inevitably rise.

Without packaging the amount of product waste would rise and this would have to be paid for in higher selling prices.

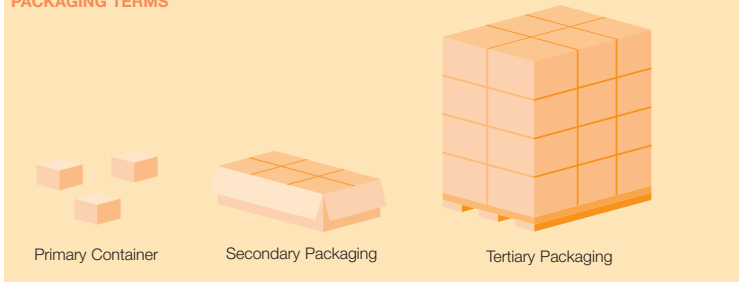
What are the costs of packaging?

The packaging cost is much more than the cost of the primary pack, handled by the consumer.

In addition to the cost of the primary pack, the total packaging cost must also include the cost of the secondary and tertiary packaging, the storage and transportation costs and the production cost of the packaging operation.

The way in which these different components interact determines the overall cost of packaging the product.

PACKAGING TERMS



What do the terms primary, secondary and tertiary packaging mean?

Primary packaging surrounds the product as received by the consumer.

Secondary packaging surrounds multiples of primary packs such as shrink wrapped trays or cases for cans of processed foods and dining packs for cans and bottles of beer.

Tertiary packaging is the transport packaging unit - usually a pallet.

Is carton packaging bad for the environment?

Although carton packaging can be perceived to be bad, mostly because it is discarded when the product contained by the packaging has been used, it actually prevents product waste and hence the loss of the resources used to grow or manufacture the product.

The environmental impact of packaging as a result of its manufacture and use, together with the implications of its ultimate disposal, must be balanced against the benefits it provided in preventing the waste of more expensive resources, especially of food.

Depending on the product, severe environmental damage can occur if the product as a result of inadequate packaging escapes or leaks into the environment.

The main raw material resource used in carton manufacture is wood, which is naturally sustainable. The paper and board industry does not use wood from tropical rainforests. In the forests from which the wood for cartonboard is derived more trees are planted than are cut down. In addition, the annual growth of new wood in these forests exceeds the amount harvested by a large margin - around 45%. These forests are sustainable, they are managed according to the best environmental practices, they help to reduce the greenhouse effect, they benefit wildlife and provide opportunities for people to work and enjoy their leisure.

Nearly 50% of the fibre used to make cartonboard is derived from recovered paper and board. Roughly the same proportion of the energy, another major resource used in manufacture, is derived from the wood itself and is, therefore, largely sustainable.

The local environmental effects of manufacture are minimal and water consumption has been reduced. When carton packaging has completed its function its inherent resources can be recycled as fibre, or, through composting or energy recovery.

Hence looked at from the point of view of its use of resources, manufacture, use and ultimate disposal, folding cartons have a low environmental impact.

What is the “packaging chain”?

The “packaging chain” describes all those companies involved in making and using packaging. They are: raw material providers, such as cartonboard manufacturers, converters, who print cartonboard and make folding cartons, packer/fillers, such as the manufacturers of food and other products, who use packaging, such as folding cartons, and, finally, retailers and other distributors who provide packaged products to consumers.

What is meant by the “packaging industry”?

The packaging industry is usually understood to comprise manufacturers of packaging materials, converters who print and make packaging and packaging components, ink and adhesive makers, packaging machinery suppliers and companies providing contract packaging services.

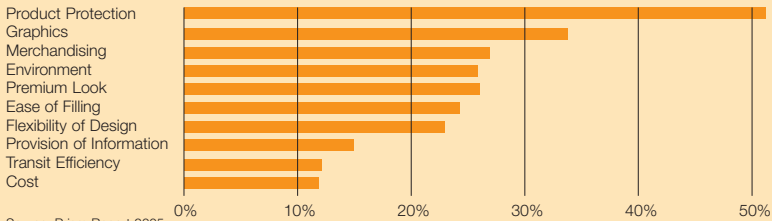
Packaging in terms of its value is one of the leading manufacturing industries. It also plays an important role in the manufacturing industry, where packaging is used to deliver food and other products to their markets, customers and consumers.

What are the different types of packaging material?

The main packaging materials are paper and board, plastics, metals, glass and wood.

KEY ADVANTAGES OF FOLDING CARTONS

% of FMCG Companies



Source: Prism Report 2005

Paper and board based packaging as a whole is the most important packaging material. It accounts for 42% of European packaging by value - a larger proportion than any other material. It is the only material based on a naturally renewable raw material.

What is the main issue to consider when specifying packaging?

The main issue in specifying packaging - in other words, choosing the most appropriate packaging for a product - is to ensure that it is "fit for purpose". The packaging must fulfil its functions of protecting the product throughout the life of the product, ensuring an efficient packaging operation, efficiency in storage and distribution, in providing product information, display features at the point of sale or use, product and consumer safety, consumer convenience etc. as appropriate to the specific product and its market.

The type of packaging therefore differs from product to product. Manufacturers need to prioritise the functions they need the packaging to achieve in order to choose the most appropriate type of packaging.

Packaging in Europe has to comply with "The Essential Requirements of the European Packaging and Packaging Waste Directive, 94/62/EC". Guidance in achieving these requirements is provided by CEN, the European

Committee for Standardisation, in EN 13427:2004, "Packaging - Requirements for the use of European Standards in the field of packaging and packaging waste". This is supported by 5 Standards referring, respectively, to Source Reduction (minimisation), Reuse, Material Recycling, Energy Recovery and Composting and Biodegradation. ISO Standard 14021:1999 provides further guidance on environmental labels and declarations.

EUROPEN has issued "Essential Requirements for Packaging in Europe - A Practical Guide to Using the CEN Standards". (<http://www.europen.be>)

Specifiers of packaging are well aware that packaging must be functionally adequate in providing protection, identification etc., that it must be cost effective and never excessive or deceptive.

Why choose folding cartons?

Folding cartons are the most versatile of packs in design, both structurally and graphically, and are used for an extremely wide range of products. This is because they meet market needs for protection, they are easy to adapt for a wide range of products, they are light in weight and disposal and recovery is easy.

In addition, they are convenient to handle in production, distribution and

merchandising, they have consumer appeal, they are cost effective and eco-friendly.

Pro Carton has commissioned research involving the users of cartons, i.e. representatives of fast moving consumer goods (FMCG) companies, who were asked, in an unprompted way, to record the advantages of cartons. See the histogram above for the results.