



The importance of paper and board packaging

Autumn 2003

An input to the debate on the Prevention of Waste

The European Paper and Board Packaging Industry is co-ordinated through the PPCG (Paper and Board Packaging Co-ordination Group) a network of European paper and board packaging associations.
(Secretariat : CEPI)

The participating members are:



ACE
The Alliance for Beverage
Cartons & The Environment



CEPI
Confederation of
European Paper Industries



CEPI Eurokraft
European Kraft Paper Producers
for the Flexible Packaging Industry



CITPA
International Confederation
of Paper & Board Converters in Europe



Groupement Embalpack
European Association
of Makers of Packaging Papers



Eurosac
Fédération Européenne des Fabricants
de Sacs en Papier à Grande Contenance



FEFCO
Fédération Européenne
des Fabricants de Carton Ondulé



Groupement Ondulé
European Association of
Makers of Corrugated Base Papers



ECO
European Containerboard
Organisation



PRO CARTON
Association of European
Cartonboard & Carton Manufacturers



ECMA
European Carton Makers Association

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An input to the debate on the Prevention of Waste in the context
of the Directive on Packaging and Packaging Waste

Introduction

In the context of the debate on improving the environment, the European paper and board packaging industry welcomes this opportunity to address the very important topic of Prevention of Packaging and Packaging Waste.

When preparing this document, the paper and board packaging industry has kept environmental considerations to the forefront. These include the industry's own on-going, positive record on the environment, which is demonstrated by the sustainable method of production, using renewable resources, where more trees are planted than are harvested, and a long tradition of recovery and recycling.

The paper and board packaging industry is pleased to present this document as a position paper. It is not intended to give a complete history or explanation of the concept of prevention, but rather to give a practical account of how the paper and board sector of the packaging industry views prevention from its own perspective.

Overall, the paper and board packaging industry considers that the debate concerning packaging and prevention should be conducted in a wider context. The paper and board packaging industry believes that in the future a holistic approach will apply to the whole issue of resource use and waste management in which the technique of prevention will play an important part. Emerging Thematic Strategies on the Sustainable Use of Natural Resources and on the Prevention and Recycling of Waste will hopefully be demonstrations of this view. Integrated Product Policy (IPP), in turn, is expected to bring more co-ordination in the use of different policy tools and, hence, promote the holistic approach taking account of the chain of supply of packaging and packaged goods.

"The paper and board packaging industry has kept environmental considerations to the forefront"



Executive summary

Prevention of packaging is a complex concept, necessitating a combination of quantitative and qualitative elements.

Focusing exclusively on quantitative prevention is too simplistic in a sophisticated free market.

Packaging performs an essential function by protecting goods from damage, from the point of manufacture through to the final consumer. It prevents wastage of goods and energy. Packaging meets stringent safety, technical and hygienic requirements.

The paper and board packaging industry must respond to the needs and demands of its customers (goods manufacturers, packers and fillers) when providing packaging, as well as taking account of the needs of the whole supply chain and should therefore be seen as a service industry.

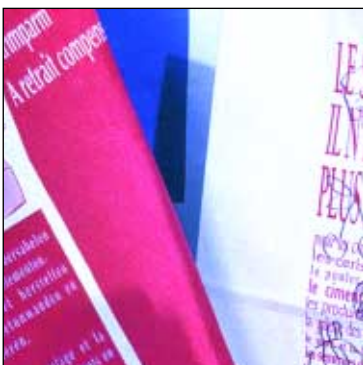
The very strong correlation between society's demand for goods and the need for the benefits of packaging, must not be compromised by a prevention concept which is defined as measures to prevent packaging at source, for example, by means of quotas per capita. The main focus of prevention should be on preventing packaging waste going to landfill rather than reduction at source.

The paper and board packaging industry has to work within a framework of legal and market constraints. Any modifications in the name of prevention must not compromise performance or the importance of these constraints.

In the context of the paper and board packaging industry, a contradiction exists in applying the two objectives of achieving higher recycling targets and prevention. This is because, at a given packaging performance, higher recovered paper utilisation in a paper substrate is generally equal to greater weight.

Levels of re-use are not a useful yardstick to measure prevention.

A holistic approach to waste management as an integrated part of resource policies is necessary. This approach would more easily be able to balance the environmental and economic elements of prevention of packaging within a wider context, which would include minimisation, recovery and recycling and the demands of the market.



"A holistic approach to waste management in an integrated waste policy is necessary"

1

What is prevention? View of the paper and board packaging industry

Prevention of packaging is a complex concept, necessitating a combination of quantitative and qualitative elements.

In this context, the qualitative elements of packaging cannot easily be measured. For example, good runnability on packaging machines, and good handling and stacking characteristics (See Annex 1) can prevent waste. The qualitative aspects of 'harmfulness' i.e. the aspects of prevention relating to the presence of 'noxious and other hazardous substances' are comprehensively covered in the two parts of a CEN* Report on this subject and an appropriate methodology is well presented in the standard EN 13428 and thus the topic is not further discussed here.

One aim of the Directive on Packaging and Packaging Waste is to reduce the environmental impacts of packaging throughout its life cycle, from production through to final disposal, including recycling, without compromising its essential functions.

Prevention is one method of achieving this aim but focusing exclusively on quantitative prevention is too simplistic in a sophisticated free market. In our view, prevention should aim at a reduction of the global impact of packaging on the whole life cycle of the product, while guaranteeing the same performance.

The Directive's definition of prevention is: "prevention shall mean the reduction of the quantity and the harmfulness for the environment of: Materials and substances contained in packaging and packaging waste, at the production process level, at the marketing, distribution, utilisation and elimination stages, in particular by developing "clean" products and technology."

While the paper and board packaging industry takes due consideration of prevention at the "production process level," we believe that packaging performs an essential function by protecting goods from damage, from the point of manufacture through to the final consumer.

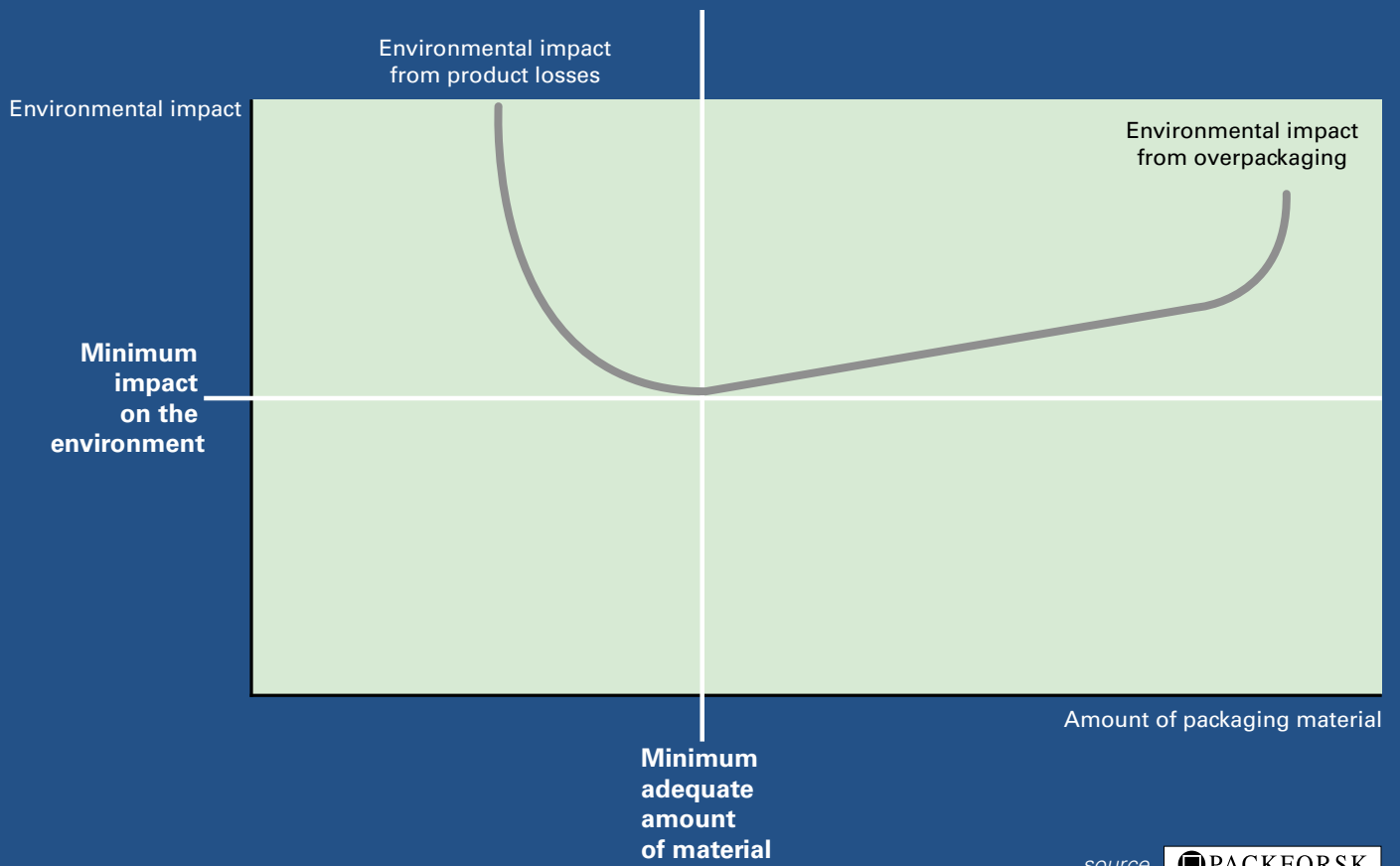
Packaging prevents wastage of goods, most notably food and safety-critical goods, and also energy consumed in producing goods. Therefore, the view of the paper and board packaging industry is that the main focus of prevention should be on preventing packaging waste going to landfill.

The main function of packaging is to help the products fulfil their intended utility. Few people know that without efficient packaging we would have a considerably higher load on the environment from damaged and wasted products.

* European Committee for Standardisation

"Prevention should involve a reduction of the global impact of packaging on the whole life cycle of the product, while guaranteeing the same performance"

Balance between product losses and the necessary amount of packaging material



source 

2

The paper and board packaging industry: A service industry

In order for goods which require packaging to reach their point of usage in perfect condition, the packaging must provide appropriate protection and functional performance .

This is fully acknowledged in the Packaging Directive. The packaging industry has the expert knowledge to design and produce this packaging and should therefore be seen as a service industry, within the overall packaging chain. (See Annex 2).

Changes in society, for example, demographic shifts, lead to changes in the way goods are produced and therefore in packaging demands. Studies have shown that 63% of total intra-EU trade in goods is in packaged goods, while within manufacturing, packaged goods account for 67% of intra-EU trade.

The very strong correlation between society's demand for goods and the need for the benefits of packaging, must not be compromised by a narrow prevention concept. For example, the paper and board packaging industry rejects any measures to prevent packaging at source, using such methods as setting quotas per capita.¹

¹ i.e. by setting an artificial limit on the consumption of packaging so that only X kilos of packaging per capita per annum is allowed to enter the market.

The paper and board packaging industry supports the aims of the Packaging Directive to protect the environment. However, the paper and board packaging industry is a service industry which responds to the needs and demands of its customers (goods manufacturers, packers and fillers) when providing packaging, as well as taking account of the needs of the whole supply chain.

In close co-operation with producers and manufacturers in the whole supply chain, the paper and board packaging industry is working continuously on improvements to the design of paper and board packaging, taking into account both economic and ecological considerations. Design considerations include using the minimum amount of material consistent with all the performance requirements.

In this context, what is often deemed to be "over-packaging" can in fact be "over-specification," and an approach which builds waste management into all decisions concerning the use of packaging, is required to prevent waste.

The paper and board packaging industry helps its customers to optimise and to minimise packaging

in order to prevent waste, by carefully evaluating the amount of packaging specified, the type of performance required and the weight of material. For example, demands for extended shelf life for products require more sophisticated, sometimes heavier, packaging. The environmental impact of this must be weighed against the impact of a shorter shelf life which could, for example, involve more frequent transportation of goods.

"In close co-operation with producers and manufacturers in the whole supply chain, the paper and board packaging industry is working continuously on improvements to the design of paper and board packaging, taking into account both economic and ecological considerations"

3

Applying the principles: Prevention in the paper and board packaging industry

In common with other packaging sectors, the paper and board packaging industry has to work within a framework of constraints, including:

- legislation (food safety, transport, etc.)
- consumer demands (easy to handle, easy opening, etc.)
- customer demands (cost reductions, good shelf appeal, optimum use of space, etc.)
- cost / benefit analysis

In the context of prevention of packaging, any modifications made must not endanger performance and aspects such as those listed above should be of primary importance.

One of the principal aims of the Packaging Directive is to set up ambitious levels of recovery and recycling. Alongside this is the goal of prevention of packaging. In the context of the paper and board packaging industry, a contradiction exists in applying these two objectives.

The majority of paper and board packaging is easy to recycle and as an overall percentage, contains more recycled material than any other packaging material. The paper and board packaging industry has, over very many years, made enormous efforts to recycle paper and board and therefore reduce to the minimum, the quantity of paper and board that goes to landfill. Besides this, the paper and board packaging industry, working together with other industries in the packaging chain, is continually seeking opportunities to minimise the use of materials, due to the constraints of the market, competition and cost.

However, at a given packaging performance, more recovered paper utilisation in a paper substrate is generally equal to higher weight. This is particularly true if higher targets require higher levels of collection of paper and board from the domestic waste stream. The resulting lower quality of recovered paper mix has a direct impact on the weight of paper and board packaging required to achieve the desired performance.

Additionally, as more paper and board is recovered from the domestic waste stream, the processing of this recovered paper leads to an increase in the by-products that may not be usable. If these materials, such as metal, plastics and sludge, cannot be recovered then they create the problem of industrial waste which must be landfilled or possibly incinerated.

The promotion of reuse is often also seen as a method of prevention. The paper and board packaging industry acknowledges that reuse can be an important tool in resource conservation, but is of the opinion that the benefits of reuse can only be judged on a case-by-case basis. Reuse of packaging involves many factors which impact on the environment and therefore, levels of reuse are not a useful yardstick to measure prevention.

In the view of the paper and board packaging industry, the contradictions in the Directive, described above, would be resolved by a holistic approach to waste management as an integrated part of resource policies. This approach would more easily be able to balance the environmental and economic elements of prevention of packaging within a wider context.

Annex 1

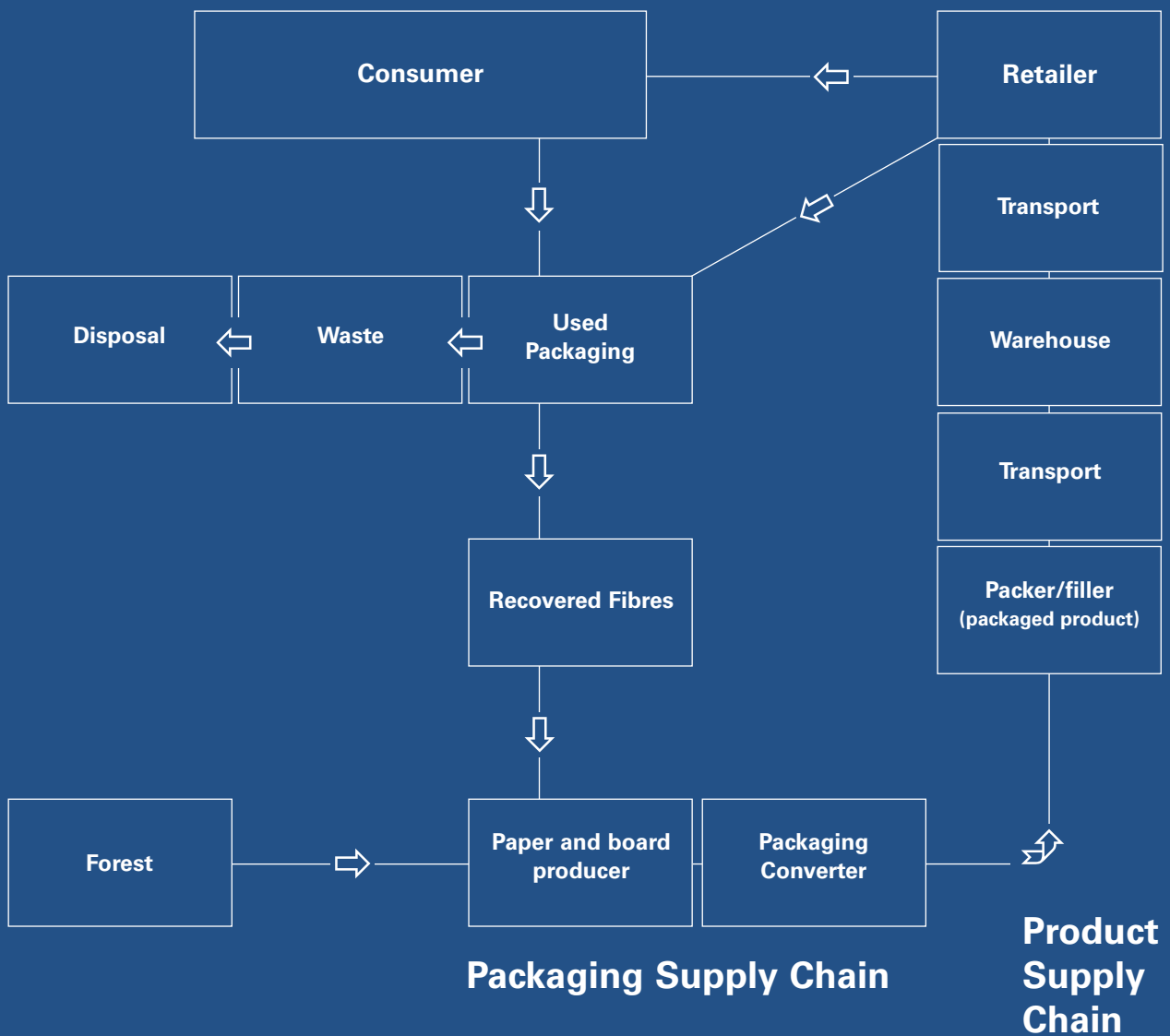
Matrix for paper and board packaging performance

Illustrating the critical points of performance for paper and board packaging, which should not be undermined by a theoretical concept of prevention, meaning only reduction at source.

| | Quantitative | Qualitative |
|--------------------------------------|---|---|
| Material supplier | Cost Volume/weight Strength | Quality of raw material Quality of finish |
| Packaging manufacturer | Cost Volume/weight Size of design | Quality of finish Runability on machinery Printability |
| Transport | Volume/weight Truckfill/modularity Use of energy | Fit on Pallet Protection |
| Product manufacturer | Modularity Size of design Strength Cost Mechanisation (erecting, filling etc.) | Hygiene Protection (e.g. barrier properties) Compatibility with filling lines Storage Market trend |
| Logistic service providers | Space Weight Modular/non modular | Strength Handling facility Protection (e.g. shelf life) Stacking issues |
| Distribution centres/ Wholesalers | Modularity Space Volume/weight | Protection Handling Strength of packaging |
| Retail Shops | Space/size of unit Weight Modular/non modular Strength | Ease of opening Ease of disposal Shelf appeal Hygiene Stacking issues Protection Collapsing after use |
| Consumer | Size of unit | Protection Hygiene Perfect goods delivery Ease of opening Ease of disposal |
| Paper and Board collector | Cost Volume | Quality Easy access |

Annex 2

The paper and board packaging supply chain





THE ALLIANCE FOR
BEVERAGE CARTONS
AND THE ENVIRONMENT



PPCG members & contact details

ACE

The Alliance for Beverage Cartons
& the Environment
Rue Belliard 15-17
Box 6
B-1040 Brussels
Tel: +32 2 504 07 10
Fax: +32 2 504 07 19
Information@ace.be
www.ace.be

CEPI

Confederation of European
Paper Industries
Avenue Louise 250
B-1050 Brussels
Tel: +32 2 627 49 11
Fax: +32 2 646 81 37
mail@cepi.org
www.cepi.org

CEPI Eurokraft

European Kraft Paper Producers for
the Flexible Packaging Industry
Linnégatan 22
S-114 47 Stockholm
Tel: +46 8 665 07 25
Fax: +46 8 665 39 44
info@cepi-eurokraft.org
www.cepi-eurokraft.org

CITPA

International Confederation of
Paper & Board Converters in
Europe
Strubbergstrasse 70
D-60489 Frankfurt A/Main
Tel: +49 69 78 50 40
Fax: +49 69 78 50 41
info@citpa-europe.org

GroupeMENT Embalpack

European Association of Makers
of Packaging Papers
Hilpertstrasse 22
D-64295 Darmstadt
Tel: +49 6151 445 01
Fax: +49 6151 421 702
BGDarmstadt@compuserve.com
www.paperonline.org/paperorg/
embal.html

EuroSAC

Fédération Européenne des
Fabricants de Sacs en Papier à
Grande Contenance
Rue Galilée 42
F-75116 Paris
Tel: +33 1 47 23 75 58
Fax: +33 1 47 23 67 53
info@eurosac.org
www.eurosac.org

FEFCO

European Federation of Corrugated
Board Manufacturers
Avenue Louise 250
B-1050 Brussels
Tel: +32 2 646 40 70
Fax: +32 2 646 64 60
information@fefco.org
www.fefco.org

GroupeMENT Ondulé

European Association of Corrugated
Base Papers
Boulevard Haussmann 154
F-75008 Paris
Tel: +33 1 53 89 24 91
Fax: +33 1 45 62 45 27
GroupeMENT-ondule@wanadoo.fr
www.paperonline.org/paperorg/
ondule.html

PRO CARTON

Association of European Cartonboard
& Carton Manufacturers
Avenue Louise 250
B-1050 Brussels
Tel: +32 2 640 49 55
Fax: +32 2 640 49 59
info@procarton.com
www.procarton.com

ECO

European Containerboard
Organisation
Avenue Louise 250
B-1050 Brussels
Tel: +32 2 627 49 07
Fax: +32 2 640 49 59
md@ecbo.be

ECMA

European Carton Makers Association
Laan Copes Van Cattenburch 79
NL-2585 EW Den Haag
Tel: +31 70 360 38 37
Fax: +31 70 363 63 38
mail@ecma.org

Brussels office
Chaussée de Waterloo 715
Box 25a
B-1180 Brussels
Tel: +32 2 343 64 74
Fax: +32 2 344 86 61
Jan.cardon@ecmabel.be