



Packaging optimisation

INTRODUCTION

Packaging plays a key role for all the actors in the consumer goods supply chain because optimum packaging reduces waste, protects against damage and theft, makes logistics more efficient, makes products shelf-ready, preserves their quality, and serves as a communication medium for consumer information. Serving at best all these purposes at the same time is not always an easy task. Packaging is one part of the overall life-cycle of the packed product and it should not be evaluated in isolation from the product.

For eight in ten EU citizens the product's environmental impact is important when deciding which products to buy (39% "very important" and 41% "rather important").¹ Thus, innovative packaging as part of the product can influence consumer choice. Specifically the environmental impact of packaging waste is of great importance to consumers. A 2009 Eurobarometer survey shows that 30% of EU citizens consider that minimising waste and recycling would be actions having the greatest impact on solving environmental problems².

Retailers and producers have put in place and are studying innovative solutions because they realise that packaging optimisation translates into less impact on the environment (e.g. less transport and less waste), reduced operational costs and, for food packaging, it avoids contamination of food, which all together improve competitiveness and enhance the benefits for consumers.

Retailers are cooperating with their suppliers, with packaging producers and with recycling companies both individually and through ad-hoc fora. Such collaboration can be best illustrated by the new Global Protocol on Packaging Sustainability (GPPS)³ of the Consumer Goods Forum, a partnership between the major retailers in Europe and North-America and global consumer goods manufacturers, plus many of the world's leading packaging manufacturers and industry bodies⁴.

The following paragraph shows that the general packaging optimisation trend is positive but that there are still margins of improvement.

Trends in packaging production, consumption and waste

Retailers and producers participate in collective recovery systems such as the Green Dot⁵ systems. Furthermore collection at households contributes to reach the EU recycling targets. As a result, in the last decade there has been a relative decoupling of packaging consumption and packaging waste for final disposal from economic growth. Figures differ between Member States, but the EU-15 trend indicates that while GDP grew, packaging consumption grew at a much slower pace than GDP growth and packaging disposal to landfill reduced significantly. Nevertheless, there is still room for further improvements.

¹ Flash Eurobarometer: Attitudes of Europeans towards resource efficiency - Analytical report, March 2011 http://ec.europa.eu/environment/pubs/pdf/eurobarometer/FL316_Summary.pdf

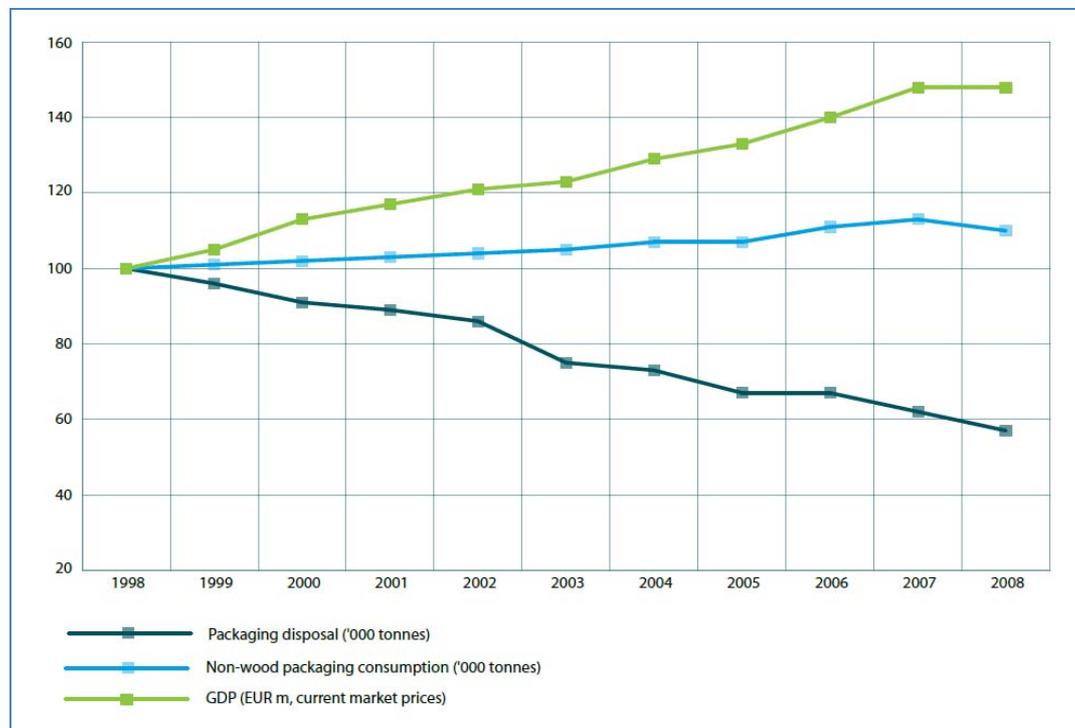
² Eurobarometer survey on the attitudes of Europeans to sustainable consumption and production, July 2009, http://ec.europa.eu/public_opinion/flash/fl_256_en.pdf

³ Detailed information on the GPPS including clear guidance on the application of the metrics can be found by going to <http://globalpackaging.mycgforum.com/>. The GPPS will be officially launched in June 2011

⁴ See the 'Best practices' section.

⁵ <http://www.pro-europe.info>

Trends in GDP, packaging consumption and packaging disposal in EU-15, from 1998 baseline.
Source: EUROOPEN.



The table below⁶ shows the growth rates of the overall packaging placed on the market in the EU:

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
All packaging										
EU-15 total	+0.79%	+3.14%	-0.04%	+2.62%	+4.05%	+1.05%	+1.07%	+2.85%	+1.48%	-1.95%
EU-NEW (11)								+3.82%	-4.49%	+1.82%
All packaging except wood										
EU-15 total	+1.31%	+1.13%	+0.05%	+1.74%	+1.12%	+1.16%	+0.59%	+3.44%	+1.62%	-2.24%
EU-NEW (11)								+2.70%	-8.86%	+10.59%

In EU-15, the amount of non-wood packaging placed on the market between 1998 and 2008 grew by 10.25%, an average of 0.9% per annum. This trend is linked to the continued economic growth, the rise in the number of single-person households and an ageing population. These elements contribute to an increased demand for packaged goods. These data suggests that average per capita consumption of non-wood packaging in EU-15 increased by 4,8 % between 1998 and 2008.

Concerning packaging waste, full quantitative data are available for all Member States only for 2005, 2006, 2007 and 2008. Recycling rates for 2008 are available for all Member States except Malta. In 2008 2,626 million tonnes of total solid waste has been generated, of which 215 million tonnes was from households (known as municipal solid waste). Packaging waste is generated both by households and industrial actors, and for 2008 3% of all waste generated is packaging waste⁷. Eurostat figures show that packaging waste is still increasing in several European countries, it is more or less stabilised in some others and very few countries have significantly reduced the waste

⁶ Source: EUROOPEN

⁷ Source : EUROSTAT <http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/database>

production per capita. Total packaging consumption in EU 27 was 161kg/capita in 2005, 165kg/capita in 2006 and 164kg/capita in 2007⁸. More than two thirds of packaging waste is food packaging⁹.

There are currently no data available at European level on the positive contribution of packaging on the reduction of food waste or other waste or on the environmental footprint of the packed goods, but data from the FAO provide a global overview of the positive impact of packaging: the lack of packaging, inadequate packaging and the related distribution infrastructure in less developed countries cause the decay of higher shares of food before it reaches the consumer compared to Europe¹⁰.

SCOPE

This issue paper will focus on the life cycle of packaging as part of a product, as companies neither create nor order packaging if not needed for a product. Here we will focus on packaging optimisation (defined as the trade-off between packaging reduction and packaging requirements and benefits i.e. recyclability, safety, resistance, transportability etc.) as far as all the following type of packaging are concerned:

- Primary packaging (packaging for individual units to be sold): how can packaging be reduced in a way that it still serves its purposes, from production to waste, passing through distribution and consumption?
- Secondary packaging (group packaging, i.e. boxes, family packs): where is the trade off between convenient offer to consumers and 'overpackaging'?
- Tertiary packaging (transport packaging i.e. foil, pallets...): what are the best solutions to reuse and recycle without affecting the safe transportation of products?
- Service packaging (packaging not connected to a specific product, not sold with the product, i.e. shopping bags, wrapping paper...): how to reduce the consumption of single-use shopping bags, especially in those countries where they are still handed out for free?

THE LEGAL FRAMEWORK

Europe

The Packaging and Packaging Waste Directive (PPWD)¹¹ was one of the first waste streams specific directive (adopted in 1994). It has a double objective of preventing or reducing the environmental impact caused by packaging and packaging waste, as well as ensuring the functioning of the internal market to avoid obstacles, distortions or restrictions to trade between Member States. To achieve this, the PPWD promotes prevention of the production of packaging waste as a first priority along with the additional fundamental principles of reuse, recycling and other forms of recovery of packaging waste (such as energy recovery).

All packaging placed on the EU market needs to comply with the Essential Requirements (Article 9 and Annex II of the PPWD). The Essential Requirements specify that packaging weight and volume must be reduced to the minimum necessary for safety, hygiene and consumer acceptance of the

⁸ Generation and recycling of packaging waste EEA, 2010

⁹ EEA/INCPEN, 2001

¹⁰ Global Food Losses and Food Waste, http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf

¹¹ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, 31/12/1994, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1994:365:0010:0023:EN:PDF>

packaged product. The content of hazardous substances and materials in the packaging material and its components should be reduced. In addition, packaging shall be designed, produced and commercialized in such a way as to permit its reuse or recovery, including recycling. Furthermore, the content of heavy metals such as lead, cadmium, mercury and hexavalent chromium may not exceed the concentration limits of 100 ppm (parts per million) by weight (article 11). Member States have the obligation to ensure that all packaging placed into the market complies with these Essential Requirements. Companies can prove compliance with the Essential Requirements by using the CEN Standards for Packaging and Environment or any other equivalent national standards. Standards on packaging prevention, re-use, material recovery, energy recovery and organic recovery were adopted in 2000 and updated in 2004. The full set of “harmonised standards” were published in the OJ on 19 February 2005. Packaging which complies with the standards is deemed to be in conformity with the Essential Requirements. Companies have the responsibility of demonstrating compliance when requested by the competent authority.

The PPWD requires Member States to ensure that appropriate return, collection and recovery systems for packaging waste are set up. Most Member States have adopted national packaging legislation which transfers part, or in some cases, full financial legal responsibility for the collection and recycling of packaging waste to the producers of packaged goods.

The development of ISO Standards (see also Issue Paper on LCA) on packaging and environment, in line with the European Committee for Standardization (CEN) Standards, is currently ongoing. The work commenced in December 2009 and aims to be finalised in spring 2012.¹²

For food packaging, legal requirements are set out to ensure the safety of the packaged food. Regulation (EC) No 1935/2004¹³ establishes the basic requirements for materials that come into contact with food. In addition, there is a wide range of legislation regarding food packaging, which may be relevant to reduce and/or prevent marine litter and its toxicity such as Recycled plastic materials and articles intended to come into contact with foods (Regulation (EC) No 282/2008) and REACH¹⁴.

National initiatives on packaging

The PPWD allows for adoption of market-based instruments at national level to improve the environmental goals without distorting the internal market.

In fact, some Member States have undertaken national initiatives e.g. on beverage packaging and plastic bags. Some Member States imposed mandatory deposit schemes for non-reusable beverage packaging. Others implemented new rules for plastic bags. As of January 2011 Italy has banned single-use plastic carrier bags. In Ireland, since 2002, a law imposes charging shoppers for every plastic bag, while Belgium imposed a tax on single-use plastic bags in July 2007. Other Member States, such as France, Spain and Austria, have been looking at those experiences and discussed such measures at national level.

¹² For more information, please visit the following webpage:
http://www.iso.org/iso/iso_technical_committee.html?commid=52082

¹³ Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:338:0004:0017:EN:PDF>

¹⁴ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:396:0001:0849:EN:PDF>



OPPORTUNITIES AND BARRIERS

Opportunities

- Optimization of packaging as part of the environmental footprint of a packed good has a positive impact on costs of material, logistics and working hours for both producers and retailers. The benefits that can be passed on to consumer are considerable.
- As packaging is a crossover issue through the entire supply chain, retailers and suppliers can show, as they already do (e.g. GPPS), that collaboration and industry driven approaches can provide improvement of the environmental performance of the supply chain. Both at global and European level initiatives have been taken between retailers and manufacturers to optimise packaging collaboratively e.g. Consumer Goods Forum Global Packaging Project¹⁵ and ECR Europe/EUROPEN Guide¹⁶ and, for paper, cardboard and wood packaging, certification systems such as FSC and PEFC are widely used to ensure the sustainability of virgin resources (while FSC also ensure sustainability of recycled resources).
- Improving the packaging of products requires a life cycle thinking approach and also depends on technological developments. The quest for more efficient packaging systems stimulates innovation.
- Shared solutions (between industry and policy makers) regarding packaging and packaging waste can strengthen the Single Market and safeguard the principles of free movement of goods. Differences at production, infrastructure and consumer behaviour level still exist amongst Member States.
- Move towards a resource-efficient society, as advocated by the European Commission in its Resource-efficiency Flagship initiative¹⁷, by increasing the recycling rates and strive to close the loop of the EU economy, with the aim of reducing waste generation and using waste as a resource.
- Packaging solutions (i.e. intelligent food packaging) can contribute to reduce food waste.

Barriers

- There is a trade-off between packaging reduction, and product protection and logistics requirements.
- Recycling facilities and collection systems differ enormously within Europe by country, by region and by town. As a result the recycling of used packaging is not always available to consumers and retailers.
- Lack of resources within Member States who did not yet establish rules or guidelines for companies to proof compliance with Essential Requirements.

¹⁵ <http://globalpackaging.mycgforum.com>

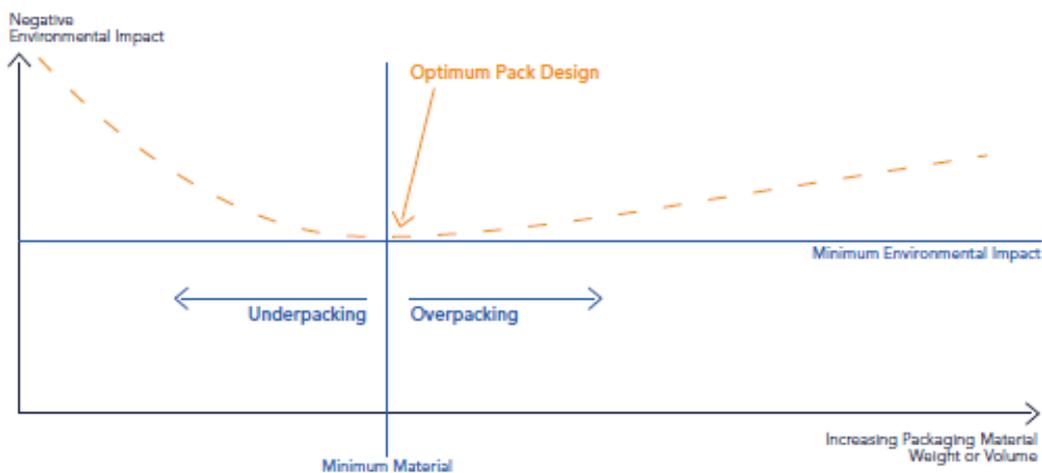
¹⁶ Packaging in the Sustainability Agenda: A guide for corporate decision-makers, www.europen.be

¹⁷ Communication from the Commission: A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, Brussels, 26.1.2011 COM(2011) 21, http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf

- Innovation to optimise packaging may be hindered by the characteristics of the different packaging materials (e.g. there is a trade-off between packaging weight reduction and packaging performance).
- Innovation to optimise packaging (new techniques to seal in freshness, extend longevity etc.) may be hindered by national laws that favour exclusively traditional techniques.
- Whereas single material packaging helps with the ease of recycling and the purity of the material stream, there may be trade-offs with resource conservation, legibility, durability and safety.
- Insufficient statistics on the impact of packaging disposal, recycling and re-use from an environmental, social and economical point of view and a lack of data of positive contributions by packaging on the environmental footprint of the packed goods.
- The different speed of the implemented environmental sustainability measures for packaging optimization: e.g. companies design their packaging from biodegradable bioplastic but the packaging can't be properly recycled due to a lack of composting facilities.
- Absence of sufficient methodologies to assess certain environmental impacts and lack of accurate data may make it difficult to identify areas for genuine improvement.

CONCLUSIONS

A systematic life-cycle approach that addresses the entire packed product system is essential in order to ensure that individual improvements contribute to the overall product sustainability. The environmental impacts occur throughout the whole chain from primary production to processing, distribution, retail, consumption and end-of-life. The Innventia AB model¹⁸ below, illustrates that an optimum quantity of material usage in packaging ensures the most sustainable balance between reducing wastage/resource loss of the product and reducing packaging.



¹⁸ The Soras Curve was developed by Innventia AB, a major Sweden-based R&D company in the fields of pulp, paper, graphics media, packaging and bio-refining.



Key challenges

- To convert barriers to opportunities via innovation and a more consistent single market approach for packed goods.
- To combine all the purposes of packaging (e.g. safety, protection, conservation, information, marketing, shelf-readiness, use and disposal of products) in innovative and sustainable solutions, taking into account the whole life cycle (including the choice of materials). This means finding the balanced trade-offs.
- To involve and educate consumers to play their vital role in opting for less packed products where appropriate, using packaging appropriately and helping to collect and sort used packaging for recycling.
- All the above requires the gathering of solid data on the environmental impact of material, which are not always easily accessible.
- To balance an EU-wide harmonised approach with differences in consumer awareness and existing recycling infrastructure.

What can retailers do?

- Use industry-wide packaging sustainability metrics (i.e. GPPS) to integrate environmental criteria in purchasing requirements and supplier evaluation questionnaires as a means to incentivise suppliers to make environmental improvements and reward those who do.
- In cooperation with their suppliers, adapt the packaging design in order to reduce the use of material (when applicable considering all the product requirements) and enhance recovery and recyclability for primary, secondary and tertiary packaging.
- Explore the possibility of using refill systems in stores, depending on the product and safety conditions and as well as the consumer acceptance.
- Implement material and space saving measures/design in transport, in order to place more products on the pallets.
- Check the opportunity to use re-usable tertiary packaging, reduce secondary packaging, optimise discarding options (sorting at source, promoting recyclability, EPR-schemes ...), use an LCA approach to reduce the environmental impact of primary packaging.
- Reduce the amount of single-use plastic bags free of charge, improve the environmental footprint of bags and offer environmentally friendlier alternatives to consumers.
- Promote the market for secondary raw materials by increasing the demand for recycled packaging material.
- Offer a take back of used packaging in store where collective take back systems are not available in the country.
- Promote the recyclability of packaging material and avoid the distortion of the recycling process e.g. by mixed materials which cannot be easily recycled.

What can others do?

- Use industry-wide packaging sustainability metrics (e.g. GPPS) in order to improve packaging and sustainability.
- In cooperation with their suppliers, adapt the packaging design in order to reduce the use of material (when applicable considering all the product requirements) and enhance recovery and recyclability for primary, secondary and tertiary packaging.
- Avoid using chemicals substances e.g. in glues which hinder the recycling of the materials.
- When there is necessity of using different materials, make sure that the separation is not difficult, both for consumers and for recycling facilities.
- Use packaging as a medium through which to communicate to consumers on environmental issues that are not dependent on local circumstances to demonstrate responsible sourcing policies (e.g. FSC, PEFC, percentage of renewable or recycled content etc.).
- Packaging suppliers should provide packaged goods manufacturers and retailers with the information they need to facilitate environmentally responsible packaging choices.
- Continue to develop and support industry-led packaging waste collection and recovery schemes to bring overall collection rates up to the level of the highest-performing Member States.
- Consumer organisations and consumer co-operatives should continue informing and educating consumers on the fact that unnecessary packaging represents a huge burden for the environment and an unwarranted cost for consumers; informing consumers on how to lower their negative impact on the environment.

What can policy makers do?

- In order to be able to work in a coordinated manner and along the whole supply chain, an improvement of EU reporting by EUROSTAT is necessary (i.e. with a standardization of methodologies for calculating quantities of food and packaging waste).
- Ensure that packaging policies are life-cycle based and do not cause burden shifting of environmental impacts from packaging to products or discriminate unfairly between packaging systems.
- Consider holistically the value chain including the end-of-life of the selected packaging and its structural costs. A long term and across the life-cycle vision in economical, social, ethical and political decisions with a case by case approach seems the optimal solution.
- Support voluntary initiatives by businesses (e.g. GPPS, the Retail Forum, the EU Food Sustainable Consumption and Production Roundtable¹⁹, etc).
- Ensure that the principles of the PPWD are properly implemented in Member States, ensuring a high environmental protection and avoiding distortions and restrictions of competition within the EU and to allow free circulation of packaged goods.
- Ensure monitoring of compliance with the Essential Requirements in Member States as an existing tool for packaging optimization and packaging waste prevention.

¹⁹ <http://www.food-scp.eu/>



- Monitor technological developments and best practices and, in view of these, ensure that Essential Requirements always provide the appropriate instruments for implementation of the PPWD, in consultation with stakeholders.
- Integrate science-based and life-cycle thinking in future EU packaging and packaging waste provisions.
- Enhance the level of technical expertise on packaging within the responsible public administrations in the Member States.
- Promote legislation that sets targets and leaves flexibility for economic operators on the instruments for achieving them, supports efficient collection and recycling infrastructures and promotes closed loop recycling or sustainably sourced renewable materials.
- Set the right framework for efficient recycling facilities and systems all across Europe and the economic efficiency of these systems.
- Sensitize citizens towards understanding packaging's role in society and their possible contribution to recycling.
- Define criteria for biodegradable and compostable packaging.
- Promote the exchange of best practices between Member States. Especially support new Member States in building up new collective take back schemes by learning from successful systems in other countries.
- Support further harmonization of packaging regulation in the single market and avoid national legislation which contributes to a distortion of the community market such as national mandatory labelling schemes.

Best Practices

Retailers

Mercadona - Respecting the environment is an important factor to consider when carrying out the company's activities. To do so, we use the type of packaging that adds more value to the process, so waste produced by the stores and warehouses is managed in the most efficient manner. The reusable packaging along with the cardboard, plastic and expanded polystyrene produced in the daily activity of stores, is returned by reverse logistics to the warehouses and the logistics blocks applying the Estrategia del Ocho (by using the same trucks that carry the goods to the stores which otherwise would have returned empty). All of these materials are later recycled and recovered, preventing them from ending up in a dump.

<http://www.mercadona.es/corp/ing-html/noticias.html>

IKEA - Smart packaging is the most effective way to reduce the environmental impact from goods transport. Our flat packages are part of our ambition to increase efficiency in all aspects, including transport. IKEA continually innovates in other types of packaging to maximize the use of space. Already at the drawing table, designers and product developers include considerations to packaging solutions as part of their assignment. Product packaging is adapted to fit exactly onto pallets. New furniture is only brought into the range if they can be flat packed and optimised on the pallet.

http://www.ikea.com/ms/en_GB/about_ikea/pdf/ikea_ser_2010.pdf

Tesco - Over the past three years, Tesco has been working with more than 300 suppliers and is on track to save over 100,000 tonnes of packaging this year. We have set ourselves the target of reducing all product packaging by a quarter on food and non-food goods – such as electrical items and homeware – and on branded products too.

http://www.tesco.com/greenerliving/greener_tesco/what_tesco_is_doing/eco_friendly_packaging.page?

ANCC-Coop/Coop Italy- For more than 10 years now ANCC-Coop/Coop Italy has been changing the packaging in line with the so-called "3R", ("risparmio, riutilizzo and riciclo") strategy, which stands for reducing the use of raw material at the production stage, re-use bottles and containers thanks to the recharges and the sale of bulk products and use recycled materials instead of virgin ones. Also, with the objective of eliminating disposable plastic bags, ANCC-Coop/Coop Italy proposes to its consumer members many alternatives: reusable bags in different materials (cotton, jute, bags produced using Fair Trade coffee bags...) and biodegradable plastic bags that can be also used for the separated waste collection at home. It finally indicates on the label of own brand products how to dispose packaging. More information (in Italian) at:

http://www.coopambiente.it/guest?action=visualizza_articolo&id=2570.

Coop Norway – Coop Norway indicates on the label of own brand products how to dispose packaging and uses of deposit schemes for beverage packaging. In addition to that, it offers of a wide range of degradable bags and "bags for life". More information (in Norwegian) at: http://coop.no/PageFiles/11512/Coop_%C3%A5rsrapport_net.pdf.

S Group Finland – The S Group uses deposit schemes for beverage packaging and offers a wide range of degradable bags and "bags for life" as well as particular bags made for 60% of recycled plastic. Also, packaging of fragile products has been improved in co-operation with suppliers so that the product survives the logistics chain and does not end up as waste too soon. The S Group counts



269 recycling stations, where customers can take their sorted, recyclable package fractions. More information at: <http://www.digipaper.fi/sok-yhtyma/66607/>.

The Co-operative Group – The UK consumer co-operative is signatory to the Courtauld Commitment since 2005, thereby committing to design-out packaging waste growth and deliver absolute reductions in packaging waste. In addition to that, the Group signed an agreement with 500 own-brand suppliers to reduce own-brand packaging 15% by 2010 based on 2006 levels and reached such target already in 2009. The Group is also on track to respect the commitment undertaken to send less than 50% of total waste to landfill by 2013. Like other consumer co-operatives in Europe, the Co-operative Group offers a wide range of degradable bags and “bags for life”. More information at: http://www.co-operative.coop/Corporate/sustainability/2010/downloads/FINAL_Sustainability_Report_2009.pdf.

Coop Jednota Slovakia – The Slovak consumer co-operatives work in co-operation with ENVI-PAK, a company authorised to provide licences to use the registered trademark “Green Dot”. The “Green Dot” symbol, which Coop Jednota applies on the packaging of its private label products, is used to express support within the cooperative sector for waste recycling and educate consumers in this respect. Coop Jednota is also actively involved in recycling waste packaging material used in the distribution of goods to its stores and since the first half of 2009 it offers in its stores only environmentally-friendly bags. More info (in Slovak) at: <http://bweb.coop.sk/index.php?id=1149>.

Eroski - In Spain, Eroski is reducing the environmental impact of its containers and packaging, with the help of a computer tool developed in cooperation with the AZTI-Tecnalia Technological Centre. An example is the substitution of PE labels by new paper, linerless FSC with which EROSKI has managed to make a total saving of 43 tons of CO₂ in 2010. Using this tool, the effect of different formats of packaging can be compared, both in costs arising (materials, productive process, transport, final management) and as regards the overall environmental impact and emissions of greenhouse effect gases, and throughout the whole life cycle of the packaging, thus giving rise to solutions for the packaging analysed. More information at: <http://www.eroski.es/es/conoce-eroski/memoria-eroski-2010/implicados-con-nuestro-entorno/veteranos-en-responsabilidad-social-corporativa/>

Stakeholders

Global Protocol on Packaging Sustainability 2.0 (GPPS)²⁰, a partnership between the major retailers in Europe and North-America and Global Consumer Goods Manufacturers, plus many of the world’s leading packaging manufacturers and industry bodies. The protocol aims to optimise the packaging supply chain by providing a common framework and measurement system addressing sustainability in a comprehensive suite of metrics.

<http://globalpackaging.mycgforum.com>

UNESDA, the European non-alcoholic beverages association, has introduced a Code of Conduct on PET bottles recyclability. It will bind members to adhere to stringent quality standards for the packaging material which they place in the market thereby maintaining the quality and economics of recycled PET in Europe.

<http://www.unesda.org/blog/code-conduct-pet-bottles-recyclability>

²⁰ Detailed information on the GPPS including clear guidance on the application of the metrics can be found by going to <http://globalpackaging.mycgforum.com/>. The GPPS was officially launched on 6 September 2011.



The Green Dot - 'Green Dot' systems have become internationally recognised models that contribute to the successful implementation of producer responsibility by the companies involved. When you see the 'Green Dot' on packaging it means that for such packaging, a financial contribution has been paid to a qualified national recovery organisation, set up in accordance with the principles defined in EU Directive 94/62 on packaging and packaging waste and the respective national laws.

Today, the 'Green Dot' is the most widely used trademark in the world. More than 170,000 companies are licensees of the 'Green Dot' trademark, while over 460 billion packaging items are labeled annually with the symbol. Industry in twenty-five nations is now using the 'Green Dot' as the financing symbol for the organisation of recovery, sorting and recycling of sales packaging. Those countries using the 'Green Dot' are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and Turkey.

- Since its foundation PRO EUROPE has been organising the exchange of experience and know-how between 34 systems in 34 countries.
- About 170,000 companies are contributing licensees/members of PRO EUROPE member systems.
- About 400 million inhabitants have access to separate collection financed by PRO EUROPE member systems.
- About 32,000,000 tonnes of packaging have been recovered by PRO EUROPE member systems in 2009.
- More than 25 million tones of CO2 equivalent has been saved by the work of PRO EUROPE member systems in 2009.
- About 460 billion packaging items are labelled yearly with the 'Green Dot', a registered trademark in more than 170 countries.

<http://www.pro-europe.info/>

Member States

UK - The Courtauld Commitment is a responsibility deal aimed at reducing the impacts of packaging. The first phase, launched in 2005, committed retailers to design out packaging waste growth by 2008 and deliver absolute reductions in packaging waste by 2010. The results announced in September 2010 show that 520,000 tonnes of packaging have been avoided across the UK between 2005 and 2009. The second phase moves away from solely weight-based targets and aims to reduce the carbon impacts of packaging. Signatories to the commitment pledge to reduce the weight, increase recycling rates and increase the recycled content of all grocery packaging, to reduce the carbon impact of grocery packaging by 10%.

http://www.wrap.org.uk/retail_supply_chain/voluntary_agreements/courtauld_commitment/

Catalunya, Spain - Great Agreement with the regional government, Generalitat de Catalunya, signed on 28 July 2009 and extended to 31 December, 2012. This agreement includes all the organisations with representativeness in Catalonia as well as in Spain. The main objective of the Pact is to reduce with voluntary measures the distribution of plastic bags of one use in shops. The agreement seeks to achieve an effective reduction of 50% in the distribution of plastic bags in 2012. Some measures to reach this objective are the following: Awareness campaigns for reusing bags, to promote the use of the shopping cart, promotional campaigns for the home service, control mechanisms for dispensing bags, to incorporate into the offer reusable bags made of different materials, consumer orientation by cash register.

http://www.confecom.cat/?page_id=23 (only in Spanish)