

PREVENTION AT SOURCE AS FIRST PRIORITY

Nowadays, packaging wastes represent an important volume in the whole of wastes generated by enterprises and consumers. Each inhabitant of the EU Member States produces between 250 and 620 kilograms of household waste per year. About 25 to 30 percent of this is packaging waste, whose management requires a high environmental cost.

As a consequence of this situation and integrated in the actions for the environment of the Fifth Framework Programme, whose main objective is the encouragement of the sustainable development in the EU, the Directive 94/62/EC on Packaging and Packaging Waste was published, which established some targets of recovery and recycling of packaging wastes that the Member States of the EU shall attain to prevent and reduce the impact on the environment of the packages and the management of its wastes throughout its life cycle.

For this purpose, the Directive established as a **first priority** the **prevention of the production of packaging wastes**, and as additional fundamental principles, the reusing of packages, its recycling and other forms of recovering packaging wastes, to reduce the final disposal of such waste.

In order to assure the correct management of the packaging wastes, there is in most of the European countries one nationally recognised collection and recovery system, dealing mainly with household packaging and working on a non-for-profit basis.

The packages included in this system must be identified with a symbol known as Green Dot. In such a way dealers and consumers clearly recognise that these products pay to be managed as wastes by the responsible system and, so that, they must be properly managed after its use.



As an example, the next tables show the Green Dot costs in some European countries by weight of material, as well as some examples of packages.

Green Dot fees	2003 France	2004 Germany	2004 Spain
Material	Cent.€/Kg	Cent.€/Kg	Cent.€/Kg
Steel	2,06	28,60	5,1
Aluminium	4,12	76,60	8,1
Plastics	16,17	150,80	19,1
PET	16,17	150,80	19,1
Beverage cartons	11,10	86,40	15,6
Paper / cardboard	11,10	20,40	5,1
Wood	11,10	10,20	1,9
Composite materials	11,10	107,30	19,1

Green Dot fees for several package types (cents of Euro) year 2000							
Package	g	Austria	Germany	Belgium	Portugal	Spain	France
Glass bottle (1 l)	350	305,2	284,6	67,7	5,2	2,4	7,5
Tetrabrick (1 l)	27	54,7	252,8	61,4	2,7*	22,5	29,9*
PET bottle (1 l)	30	329,0	451,2	104,4	12,0	35,3	34,7
Aluminium can (33 cl)	15	69,2	136,5	24,0	5,2	7,6	4,5
Steel can (33 cl)	30	119,7	116,1	17,4	5,2	9,3	4,2
Cardboard box	1.000	2.027,6	1.906,4	376,8	99,8	154,7	740,9

* Paper/cardboard tariff is applied (main material)

Font: European Packaging Waste Management Systems. Final report. February 2001. European Commission DGXI.E.3

To facilitate collection, reuse and recovery including recycling of the packages, there is a voluntary identification system, defined by the legislation and applicable to all countries of the EU:

Material	Abbreviations	Numbering
Polyethylene terephthalate	PET	1
High density polyethylene	HDPE	2
Polyvinyl chloride	PVC	3
Low density polyethylene	LDPE	4
Polypropylene	PP	5
Polystyrene	PS	6
Other plastics	-	7
Corrugated fibreboard	PAP	20
Non-corrugated fibreboard	PAP	21
Paper	PAP	22
Steel	FE	40
Aluminium	ALU	41
Wood	FOR	50
Cork	FOR	51
Cotton	TEX	60
Jute	TEX	61
Colourless glass	GL	70
Green glass	GL	71
Brown glass	GL	72
Composites	*	80-99

* Composites: C plus abbreviation corresponding to the predominant material (C/)

Materials may be identified by the numbering system and/or abbreviation. The identification marks shall appear in the centre of or below the graphical marking indicating the reusable or recoverable nature of the packaging.



To inform consumers about the products and services more eco-friendly, the concept of Ecolabel was created.

Ecolabelling is a voluntary method of environmental performance certification and labelling that is practised both in Europe and in other countries around the world.

The purpose of ecolabelling is to highlight those products that have a reduced environmental impact enhancing thereby those products' marketing appeal. In principle, ecolabelling follows a comprehensive, multi-criteria and life-cycle approach.

The symbol of the European Ecolabelling is the flower, in such a way European consumers will be able to identify easily the services and products with reduced environmental impacts



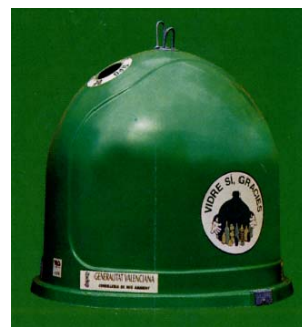
Recommendations to consumers:

To help to the prevention, consumers must demand not over-packaged products, that is, not wearing superfluous packages that only serve as a presentation element of the product, but do not protect it.

Citizens must get used to different types of packaging wastes bins, to collaborate with the selective collection, and so help to their correct management. They must never throw the packages where their proper management is not possible: in the countryside, on the street, in the wrong bins, etc.



Yellow bin: Metallic and plastic packages

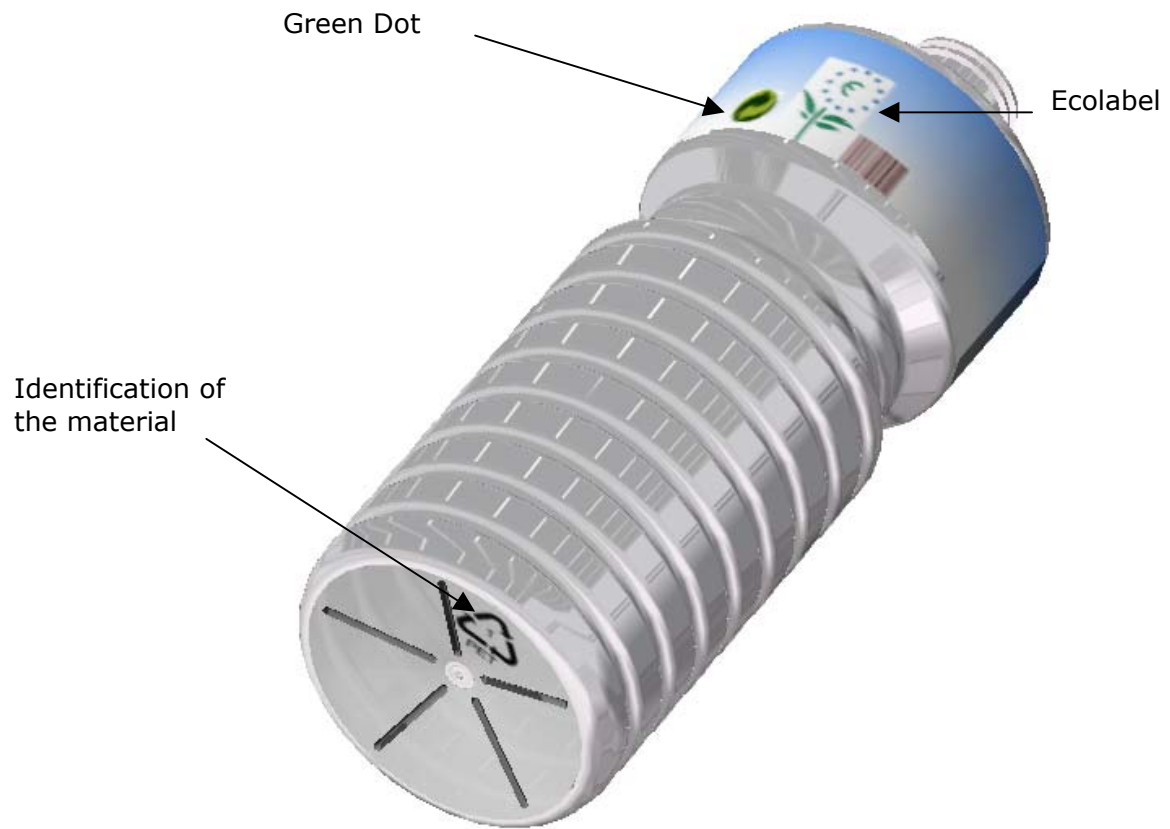


Green bin: glass packages



Blue bin: paper and cardboard packages, newspapers and magazines

Consumers must recognise and get used to the symbols that appear in the packages: Green Dot, Ecolabel, identification of the material, etc. and understand their meaning.



Authors: Carlos Enguix and Victor Sanchez-Barcaiztegui. Packaging Department, AINIA, Eco-Pac member