## COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 19.11.1999 COM(1999) 596 final

## REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Interim Report according to Article 6.3 (a) of Directive 94/62/EC on packaging and packaging waste

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#### I. INTRODUCTION

#### The legal context

Article 6.3(a) of Directive 94/62/EC<sup>1</sup> on packaging and packaging waste indicates that the European Parliament and the Council shall, on the basis of an interim report by the Commission, and four years from the date referred to in paragraph 1 (a) on the basis of a final report, examine the practical experience gained in the Member States in the pursuance of the targets laid down in paragraphs 1(a) and 1(b) and 2 and the findings of scientific research and evaluation techniques such as eco-balances.

Article 6.1(a) sets out a recovery target of 50-65% to be achieved by 30 June 2001. Recovery includes both material recycling (including composting) and incineration with energy recovery. Article 6.1(b) sets out a specific target of 25-45% for material recycling with a minimum of 15% per packaging material, to be achieved by the same date.

Article 6.2 refers to the encouragement of the use of materials obtained from recycled packaging waste for the manufacturing of packaging and other products.

Article 6, paragraph 5, of Directive 94/62/EC establishes that *Greece, Ireland and Portugal may, in view of their specific situation, i.e. the large number of small islands, the presence of rural and mountain areas and the current low level of packaging consumption respectively, decide to:* 

- attain by 30 June 2001 lower targets than those fixed in Article 6(1) but shall at least attain 25% recovery;
- attain the targets fixed in Article 6(1), but with a supplementary delay of maximum four years (that means, until 31 December 2005).

The exceptions for Greece, Ireland and Portugal are limited to the targets fixed in paragraphs (a) and (b) of article 6(1).

The review by the European Parliament and the Council, referred to in Article 6, paragraph 3a, shall be made on the basis of:

- an interim report by the Commission and,
- by 30 June 2005, a final report.

There is no specific date set for the Commission for producing the interim report.

Member States which have, or will, set programmes going beyond the targets of Article 6.1 (a) and (b) and which provide to this effect appropriate capacities for recycling and recovery, are permitted to pursue those targets in the interest of a high level of environmental protection, on condition that these measures avoid distortions of the internal market and do not hinder compliance by other Member states with the Directive, according to Article 6.6. Austria, Belgium and the Netherlands have applied this measure and so far the Commission has confirmed the measures notified by Austria<sup>2</sup> and Belgium<sup>3</sup>.

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OJ L 365, 31.12.1994, p.10

OJ L 14, 19.01.1999, p.24

Article 12 of the Directive 94/62/EC requires the establishment of databases on packaging and packaging waste following the formats set by Commission Decision 97/138/EC<sup>4</sup> of 3 February 1997 establishing the formats relating to the database system pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste, in order to monitor the implementation of the objectives set out in the Directive. The first set of data covering the calendar year 1997 was to be provided to the Commission before 30 June 1999. It has to include data concerning the quantity of packaging material placed on the market, reused (data provided on a voluntary basis), recycled, recovered and disposed of (on a voluntary basis as well). Furthermore, these data are also intended, according to Article 7 of the Commission Decision 97/138/EC, to serve for information purposes and as a basis for future decision-taking.

Article 17 of Directive 94/62/EC establishes a reporting obligation of the measures of implementation of this Directive. In conformity with Council Directive 91/692/EEC<sup>5</sup> on standardising and rationalising reports on the implementation of certain Directives relating to the environment, a questionnaire to be used as a basis for this reporting exercise was adopted on 27 May 1997 (Commission Decision 97/622/EC<sup>6</sup> concerning questionnaires for Member States reports on the implementation of certain Directives in the waste sector (implementation of Council directive 91/692/EEC)).

According to this questionnaire, Member States shall inform the Commission about the application of the articles 4 (prevention), 6 (recovery and recycling), 7 (return, collection and recovery systems), 9 (essential requirements), 11 (heavy metals), 12 (information systems), 13 (information for users of packaging), 14 (management plans), 15 (economic instruments) and 16 (notification).

Although the legal obligation to report covers the period 1998-2000, the Commission has invited Member States to provide, where possible, information of the implementation of the Directive at an earlier stage. Reports were submitted by Denmark and the Flanders Region of Belgium which were also used in preparing this interim report.

### Scope of the interim report, data sources and structure

The scope of this interim report relates to the need to provide the Council and European Parliament the appropriate information in order for them to examine the practical experience gained in the Member States and the findings of scientific research and evaluation techniques such as eco-balances. As there is no relevant information currently available on these last topics, this interim report focuses primarily on the "practical experience gained in the pursuance of the targets".

Overall, this is a broad issue, since one may include in it both the quantitative targets set by Member States and the organisational, legislative and administrative infrastructure set up in order to pursue those targets.

Detailed data on the practical experience gained, in particular in relation to the "infrastructure" set up in pursuing the targets, are not yet available in a complete way for all Member States. It should be taken into account that there has been a general delay in

<sup>&</sup>lt;sup>3</sup> OJ L 257, 2.10.1999, p.20

<sup>4</sup> OJ L 52, 22.2.1997, p. 22

<sup>&</sup>lt;sup>5</sup> OJ L 377, 31.12.1991, p. 48

<sup>&</sup>lt;sup>6</sup> OJ L 256, 19.9.1997, p. 13

transposing the Directive into national legislation, therefore it is not always possible to draw some conclusions about the experience gained. The delay in transposing the Directive relates mostly to the complexity of the issues to be regulated, in particular to the various conflicting interests of the concerned stakeholders, which made it often difficult for national legislators to adopt the transposing measures within the timing foreseen by the Directive itself.

Data concerning the targets set out by Member States and also data on the recycling and recovery rates achieved so far are available. Therefore this interim report focuses primarily on this available information related to Articles 6(1)(a) and 6(1)(b) of Directive 94/62/EC. However, additional useful information is provided, for instance as regards the reuse of packaging as well as regards the applications made so far of Article 6(6) concerning the possibility to exceed the targets set out in Articles 6(1)(a) and 6(1)(b).

In compiling the available data, the Commission has relied both on data which has been officially communicated by some Member States and on other sources such as data published by economic operators, studies carried out by or for industrial associations and data presented at conferences on Directive 94/62/EC. The Commission has made use, in particular, of the data presented in the studies "Eco-balances for policy-making in the domain of packaging and packaging waste" (RDC and Coopers and Lybrand, May 1997) and "Management systems for packaging waste" (Pricewaterhouse Coopers, 1998, carried out for ERRA).

The figures presented in this report are the most recent which the Commission has been able to obtain. Some statistics on recycling may suffer from the fact that figures in certain countries are calculated by referring to "reuse and recycling" as a unique concept. However, the overall picture resulting from the available data is thought to be a fair description of reality. It gives already some clear indication, in particular about the feasibility of the targets set out for the first five-year phase (1996-2001). This information is also deemed to be useful in light of the obligation, set out by article 6(1) (c), to substantially increase such targets.

It is relevant to note that some figures contained in this report are partially based on working documents on which the Member States, via the Committee established by Article 21 of Directive 94/62/EC, were consulted and were given the opportunity to comment on, in order to correct mistakes and fill possible omissions. As the Member States concerned have not reacted, the Commission considers the figures presented in this report to be realistic and appropriate for this interim report.

Concerning the final report referred to in Article 6.3(a) of Directive 94/62/EC to be prepared by 2005, it is important to note that only official data in conformity with the approved reporting requirements will be taken into account at that time.

## II. QUANTIFIED TARGETS SET OUT IN THE MEMBER STATES FOR RECYCLING AND RECOVERY OF PACKAGING WASTE

Member States have the right to set their own specific more detailed targets, measures and time limits providing they are in accordance with the Directive. This is why targets stated below differ greatly by country.

In Austria economic operators (manufacturers, importers, fillers and distributors) which take part in a collection and recycling system agreed by public authorities have to achieve a rate of 25% recycling, with a minimum of 15% for each packaging material. This has to be achieved, starting from 1997, every calendar year. Economic operators not participating in an agreed system have to achieve, every calendar year, the following recycling targets (by weight):

Paper, board, cardboard, corrugated cardboard	90%
Glass	93%
Ceramic	95%
Metals	95%
Plastics	40%
Beverage composites	40%
Other composites	15%

Each economic operator has to collect or take back 90% of the packaging material he has put on the market. If he actually collects or takes back less than 90% but more than 50% of the packaging material he has put on the market, he is obliged to participate for the difference up to 90% in an agreed collection and recycling system, and comply with the corresponding targets. If he collects or takes back less than 50% of the packaging material he has put on the market, he is obliged to participate for the difference up to 100% in an agreed collection and recycling system, and comply with the corresponding recycling targets.

The following ratios of drinks packaging as a proportion of the bottling volume sold on the domestic market shall be met through re-filling, environmentally compatible recycling and energy recovery:

	1993	1994	1997	2000
Mineral water, table water, soda water	90	92	92	96
Beer	90	91	92	94
Alcohol-free refreshment drinks (such as lemonade), including alcohol-free hop and malt drinks	80	80	80	83
Fruit juices, fruit-juice drinks, nectars	40	45	60	80
Milk and liquid milk products	25	40	60	80
Wine	60	65	80	80
Champagne-type drinks and spirits	60	65	70	80

In addition only the following residues of other packaging waste (packaging waste other than drink packaging) may be treated in waste treatment facilities, whenever such facilities do not carry out material recycling or thermal recovery (landfilling, incineration without energy recovery).

Year	1994	1998	2001
Glass	70,000 t	54,000 t	38,000 t
Plastics	160,000 t	90,000 t	60,000 t
Paper, card, cardboard, corrugated cardboard	209,000 t	140,000 t	99,000 t
Metals	55,000 t	36,000 t	17,000 t
Composites	81,000 t	50,000 t	30,000 t

All these targets, combined, lead Austria to exceed the maximum recycling target set by Directive 94/62/EC. Austria has therefore made use of Article 6(6) of this Directive. A Commission Decision (1999/42/EC) was adopted on 22 December 1998 confirming the measures notified by Austria pursuant to this Article.

In Belgium, the following targets have been set by an inter-regional co-operation agreement. In this country, the Federal State has only competence to transpose Directive 94/62/EC as regards product-related issues (such as, for instance, Article 9 and Annex II). The fixing of targets for recovery and recycling of the packaging materials contained in the packaging waste, as laid down in Article 6 of Directive 94/62/EC, comes into the exclusive competence of the Regions. In order to ensure a coherent and consistent transposition and implementation of Directive 94/62/EC and in particular its Article 6, the three Belgian Regions deemed it necessary to conclude the Co-operation Agreement on the prevention and management of packaging waste. This Agreement is a legally binding act and constitutes the transposition measure as regards Article 6 of Directive 94/62/EC.

Year	1996	1997	1998	1999
Recycling	35%	40%	45%	50%
Recovery	50%	60%	70%	80%

By 1 January 1998 levels of recycling of 15% of each material should be achieved. The measures containing targets exceeding the targets of Directive 94/62/EC have been notified by Belgium on 13 July 1996 in accordance with Article 6(6) of the Directive.

**In Denmark**, a new consultation paper on waste strategy includes the following reuse or recycling targets to be achieved by the year 2001.

Paper and board	55%
Glass	65%
Plastics	15%

The national waste plan "Affald" 21 (1998-2004) states that 45% of the packaging waste is expected to be recycled by the year 2001 and the aggregate recovery is expected to exceed 80%.

**Finland** has set a combined reuse and recovery target of 82%, to be reached by 30 June 2001. The following specific targets for recycling and recovery, to be achieved by 30 June 2001, have also been set:

	Recycling	Recovery
Paper and board	53%	75%
Glass	48%	
Metals	25%	
Plastics	15%	45%
TOTAL	42%	61%

**In France**, the targets specified in the Directive are to be achieved by 30 June 2001: In addition, Eco-Emballages<sup>7</sup> has fixed a recovery target for household packaging waste of 75% by the year 2003 with no material recovered at less than 60%.

The overall recycling and recovery targets set by **Germany**, to be achieved by 30 June 2001, are as follows: recovery - 65% recycling - 45%.

The targets for recycling of specific materials, to be achieved by 1 January 1999, are as follows:

Glass	75%
Tinplate	70%
Aluminium	60%
Paper/board	70%
Composites	60%
Plastics	36% (mechanical recycling)

A recovery target for plastics of 60% is also set at for the same date.

**Greece** aims at achieving the targets specified in the Directive (executing its right according to Article 6 paragraph 5 of the Directive).

**Ireland**, executing its right according to Article 6 paragraph 5 of the Directive, has set the following recovery targets, to be achieved by 30 June 2001:

Paper	31%
Glass	45%
Plastic	10%
Aluminium	25%
Steel	5%
Metals	10%
TOTAL	27%

Eco-Emballages - French organisation in charge of a scheme for the collection, recycling and financing of packaging waste

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**Italian** legislation on packaging waste contains the target ranges set by the Directive (recycling 25-45% - with a minimum 15% per material – recovery 50-65%), to be achieved by March 2002. The general programme on waste prevention and management of packaging waste, elaborated in the context of this legislation, establishes for the year 2001 a recovery target of 49% and a recycling rate of 42%. However, these targets do not seem to be mandatory.

The following recovery and recycling rates are expected in relation to the specific waste materials:

Material	Recycling 2001	Recovery 2001	Recycling 2002	Recovery 2002
Steel	38%	38%	51%	51%
Aluminium	35%	35%	51%	51%
Paper	45%	50%	46%	52%
Wood	58%	63%	61%	66%
Plastic	17%	37%	21%	50%
Glass	48%	48%	53%	53%
Total	42%	49%	46%	55%

**Luxembourg** has set a target of 45% recycling, with at least 15% for each material, and a recovery target of 55%. Both targets are to be achieved by 30 June 2001.

In **The Netherlands**, the maximum recycling (45% with at least 15% for each material) and recovery (65%) targets laid down in Directive 94/62/EC have been included in a regulation and are to be achieved by August 1998. A "packaging Covenant" lays down an overall target for material recycling of 65% to be achieved by 30 June 2001 as well as specific targets, in the following way:

Glass	90%
Paper/board	85%
Metals	80%
Plastics	27%
Wood	15%

A target of 9% for the chemical recycling of plastic has also been established. Finally, it is aimed at reducing the generation of packaging waste of 10% compared to the level of 1986.

**Portugal** aims at reaching the targets specified in the Directive (executing its right according to Article 6 paragraph 5 of the Directive).

**Spain** has fixed a target specified in the Directive. Additionally, by April 2000, a 15% recycling rate shall be achieved, with a minimum rate of 10% for each packaging material. A 10% reduction rate of the generation of packaging waste has also been set.

**In Sweden**, reuse and recycling targets for 1 January 1997 have been set as follows:Reuse and recycling (excluding biological treatment)

Aluminium (beverage containers)	90%
Aluminium (other than beverage containers)	50%
Steel	50%
PET (beverage containers)	90%
Plastics (other than PET beverage containers)	30%
Paper/non corrugated cardboard	30%
Corrugated cardboard	65%
Returned glass bottles for wine and spirits Filled in Sweden	90% (reuse)
Returned glass bottles for beer and soft Drinks filled in Sweden	95% (reuse)
Glass	70%

By 30 June 2001, the following targets shall have to be achieved in Sweden:

	Recycling	Recovery
Aluminium (beverage containers)	90%	
Aluminium (other than beverage containers)	70%	
Steel	70%	
PET (beverage containers)	90%	
Plastics (other than PET beverage containers)	30%	70%
Paper/non corrugated cardboard	40%	70%
Corrugated cardboard	65%	
Glass	70%	
Wood	15%	70%
Other materials (% per material)	15%	30%

The following targets have been set in the United Kingdom:

Year	1999	2000	2001
Recycling per material	10%	13%	16%
Recovery	43%	43%	52%

**Table II.1**: Summary table of the **targets established** by the Member States for 2001 [%]

	Recovery (1)								
			material	paper and board	aluminium	steel	glass	plastics	beverage composites
Targets in directive (2)	50-65 (25)	25-45	15	15	15	15	15	15	15
Austria (3) 1997		25	15						
Austria (4) 1997				90	95	95	93	40	40
Belgium (1999)	80	50	15 (1998)						
Denmark				55	15	15	65	15	
Finland	82 (reuse and recovery)			53 (recovery 75)	25	25	48	15 (recovery 45)	
France	50-65	25-45	15						
Germany	65	45		70	60	70	75	36 (recovery 60)	60
Greece	50-65 (2005)	25-45 (2005)	15 (2005)						
Ireland	50-65 (2005)	25-45 (2005)	15 (2005)	31 (2001)	25 (2001)	5 (2001)	45 (2001)	10 (2001)	
Italy	50-65 (2002)	25-45 (2002)	15 (2002)	45 (recovery 50)	35	38	48	17 (recovery 37)	
Luxembourg	55	45	15						
Netherlands	65 (1998)	45 (1998)	15 (1998)	85 (2001)	80 (2001)	80 (2001)	90 (2001)	27 (2001)	
Portugal	25 (2001) 50 (2005)	25 (2005)	15 (2005)						
Spain	50-65	25-45 (15 by 4/2000)	15 (10 by 4/2000)						
Sweden				40 (paper, 70 recovery) 65 (board)	90 (beverage) 70 (other)	70	70	30 (70 recovery)	15 (30 recovery)
United Kingdom	52		16						

<sup>(1)</sup> Recovery includes recycling but not reuse (except in Finland which set the common target for recovery and reuse).

<sup>(2)</sup> Greece, Ireland and Portugal can set lower targets but shall at least attain 25% for recovery, and shall attain the other levels before 1 January 2006

<sup>(3)</sup> Operators taking part in an agreed system

<sup>(4)</sup> Other operators

# III. TARGETS ACHIEVED BY MEMBER STATES FOR RECOVERY, RECYCLING AND REUSE.

The data presented in Table III.1 was collected from the reports on packaging and packaging waste according to the Commission Decision 97/138/EC, for the year 1997. Data related to the population have been taken from Eurostat source.

	Qty pckg			rials in %	als in %			
	placed on the	Qty in kg/hab	paper and	me	tals	glass	plastics	composites / wood /
	market in ktonnes	by year	board	steel	Al			textiles
Austria	1269	159	52	7		20	14	2/4/
Belgium								
Denmark	971	187	48	6		21	19	-/6/0.4
Finland	418	84	58	8		12	22	
France	11069	191	35	6		30	14	- / 15 / -
Germany	13731	168	40	7.5 8.	1 0.6	27	11	- / 14 / 0.1
Greece								
Ireland								
Italy								
Luxembourg								
Netherlands	2745	178	53	8		17	22	
Portugal								
Spain								
Sweden	923	105	57	8		19	16	
United Kingdom	7755	133	39	10	10		17	/ 10 / 0.2

**Table III.1**: Summary table of the quantity of packaging placed on the market according to the different materials by Member States

The data presented in Table III.2 was collected in different years so only a general comparison can be made based on this data. About half of the Member States have sent their reports on packaging and packaging waste according to Article 12 of the Directive 94/62/EC and the derived Commission Decision 97/138/EC.

More detailed information on recycling and recovery targets achieved (including dates and sources) are provided below in Tables III.3, 4 and 5 with regard to municipal and non-municipal waste.

			Recycling targets for packaging materials						
	Recovery	paper metals glass	glass	plastics	composites / wood /				
			and board	steel		Al			textiles
Targets in Directive (1)	50-65 (25)	25-45	15		15		15	15	15 / 15 / 15
Austria	66	61	75		34		77	20	29 / 14 / -
Belgium	70	62					75		
Denmark	83	37	47		4		61	6	-/0/0
Finland	54	42	57		8		48	10	
France	50	35	40		44		41	5	- / 42 / -
Germany	65	63	59	82	82	72	75	45	-/55/0
Greece	25	25	48	17		35	26	5	
Ireland	18	18	19	2		20	38	4	
Italy	35	32	37	7		12	36	10	
Luxembourg		33	27	5			59	2	
Netherlands	78	55	65	72	67	15	75	12	
Portugal	15	3				17	44		
Spain				17		20	37		
Sweden	65	58	66		45		76	14	
United Kingdom	34	30	53	26	26	24	25	7	

<sup>(1)</sup> Greece, Ireland and Portugal may set lower targets but shall at least attain 25% for recovery, and shall attain the other levels before 1 January 2006

**Table III.2**: Summary table of the **targets achieved** by the Member States [%]

Table III.3: Recycling [%]

	TOTAL	Municipal	Non municipal	Year
Austria	(61)*	58	40	1997
Belgium	62	61	63	1997/98
Denmark	(37)*			1997
Finland	(42)*			1997
France	(35)*	29		1997
Germany	(63)*	86		1997
Greece	25			1996
Ireland	18	6	26	1995
Italy	32			1998
Luxembourg	33	33		1995/96
Netherlands	(55)*	41	61	1997
Portugal	3			1998
Spain		21		1997
Sweden	(58)*			1997
United Kingdom	(30)*	13	37	1997

"Management systems for packaging waste" Pricewaterhouse Coopers 1998 **Source:** for ERRA;

## except:

Programma generale di prevenzione e gestione dei rifiuti di imballaggio-Italy:

CONAI – 1999.

## and the following ones marked ()\*:

A, D, DK, FIN, FR, NL, SW, UK: Reports on packaging and packaging waste according to the Commission Decision 97/138/EC, for the year 1997.

Table III.4: Recovery [%]

	TOTAL	Municipal	Non municipal	Year
Austria	(66)*	67	40	1997
Belgium	70	77	65	(1997/98)
Denmark	(83)*			1997
Finland	(54)*			1997
France	(50)*	45		1997
Germany	(65)*	92		1997
Greece	25			(1996)
Ireland	18	6	26	(1995)
Italy	35			(1998)
Luxembourg		33		(1995/96)
Netherlands	(78)*	71	73	(97)* 1996
Portugal	15			1998
Spain		31		
Sweden	(65)*			1997
United Kingdom	(34)*	23	38	1997

**Source:** "Management systems for packaging waste" Pricewaterhouse Coopers 1998

for ERRA;

## except:

Programma generale di prevenzione e gestione dei rifiuti di imballaggio-Italy: CONAI – 1999

## and the following ones marked ()\*:

A, D, DK, FIN, FR, NL, SW, UK: Reports on packaging and packaging waste according to the Commission Decision 97/138/EC, for the year 1997.

Table III.5: Recycling per fraction [%]

	Total	Paper/Board	Met	als	Glass	Plastics
			Steel	Aluminium		
Austria	61	75 <sup>L</sup>	3.	4 <sup>L</sup> 50 <sup>C</sup>	77 <sup>L</sup>	20 <sup>L</sup>
Belgium	62				75 <sup>B</sup>	
Denmark	37	47 <sup>M</sup>	4	M	61 <sup>M</sup>	6 <sup>M</sup>
Finland	42	57 <sup>I</sup>	8	8 <sup>I</sup> 82 <sup>C</sup>	48 <sup>I</sup>	20 <sup>I</sup>
France	36	40 <sup>N</sup>	4	4 <sup>N</sup>	41 <sup>N</sup>	5 <sup>N</sup>
Germany	63	59 <sup>G</sup>	82 <sup>G</sup> 8	32 <sup>G</sup> 72 <sup>G</sup>	75 <sup>G</sup>	45 <sup>G</sup>
Greece	25	48 <sup>D</sup>	17 <sup>D</sup>	35 <sup>C</sup>	26 <sup>B</sup>	5 <sup>D</sup>
Ireland	18	19 <sup>D</sup>	$2^{\mathrm{D}}$	20 <sup>C</sup>	38 <sup>B</sup>	4 <sup>D</sup>
Italy	32	37 <sup>F</sup>	7 <sup>F</sup>	12 <sup>F</sup>	36 <sup>F</sup>	10 <sup>F</sup>
Luxembourg	33	27 <sup>A</sup>	5 <sup>A</sup>		59 <sup>A</sup>	2 <sup>A</sup>
Netherlands	55	65 <sup>K</sup>	72 <sup>K</sup> 6	7 <sup>K</sup> 15 <sup>K</sup>	75 <sup>K</sup>	12 <sup>K</sup>
Portugal	3			17 <sup>C</sup>	44 <sup>B</sup>	
Spain			17 <sup>E</sup>	20 <sup>C</sup>	37 <sup>B</sup>	
Sweden	58	66 <sup>H</sup>	4.	5 <sup>H</sup>	76 <sup>H</sup>	14 <sup>H</sup>
United Kingdom	30	53 <sup>J</sup>	26 <sup>J</sup> 2	.6 <sup>J</sup> 24 <sup>J</sup>	25 <sup>J</sup>	7 <sup>J</sup>

#### **Sources:**

- A "Eco-balances for policy-making in the domain of packaging and packaging waste" (RDC and Coopers and Lybrand) May 1997 European Commission (data from 1994/95)
- B Glass Gazette September 1998 (FEVE, data from 1997)
- C EEA (data from 1997)
- D ERRA, AIM, CIAA (December 1998 Report, data from Greece: 1995/96)
- E APEAL News October 96 (data from 1995)
- F Programma generale di prevenzione e gestione dei rifiuti di imballaggio CONAI 1999 (data from 1998).
- G Report of Germany on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- H Report of Sweden on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- Report of Finland on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- J Report of UK on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- K Report of Netherlands on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- L Report of Austria on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- M Report of Denmark on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).
- N Report of France on packaging and packaging waste according to the Commission Decision 97/138/EC (data from 1997).

Table III.6 presents the targets achieved for reuse of various beverage packaging.

Packaging	Soft drinks + juices packaging		Beer packaging		Mineral water packaging	Wine packaging		Milk packaging
EU total consumption		litres 196)		<sup>9</sup> litres 96)	26 10 <sup>9</sup> litres (1997)	12 10	<sup>9</sup> litres	37 10 <sup>9</sup> litres (1996)
Packaging material	Glass	PET	Glass	Metal kegs	Glass and PET	Glass	Barrels	Glass and PC
EU total reuse	13	2.2	12	10	10	2.1	1.3	9
EU total reuse	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres	10 <sup>9</sup> litres
Austria	47	8	58	32	89	83		19
Belgium			53	39		9		6
Denmark	81		92	8	96	27		0
Finland	44	45	71	25	94	71	1	0
France	3	0	14	24	2	10		0
Germany	61	11	60	21	88	29		6
Greece	9	0	73	6		0		
Ireland			4	80	9	0		
Italy			12	16	17	5	30	1
Luxembourg			34	52				
Netherlands			69	31				15
Portugal	39	0	54	30	10	50	20	0.5
Spain	15	0	33	34	12	32	10	0
Sweden	31	29	28	13	86	55		0
United Kingdom	3	0	3	66		0		32

Source: Reuse of primary packaging. Final report 1999 (Abfallberatung Müllvermeidung & Recycling, Andreas Golding D-72074 Tübingen)

In addition to these data, Finland has provided the Commission with the following information concerning reused packaging materials.

Material	Total use (in tonnes)	Reuse (in tonnes)	Quantity placed on the market (in tonnes)	Reuse rate (%)
GLASS	378 500	328 600	49 900	87
PLASTICS	294 100	201 700	92 400	69
FIBREBOARD	256 800	13 300	243 500	5
METALS	239 400	206 900	32 500	86
Total	1 168 800	750 500	418 300	64

#### IV. EVALUATION OF THE AVAILABLE FIGURES

#### Reuse

Looking at the available figures on the rates of reused packaging in the Member States, the following conclusions can be drawn.

On average in the EU, about one-third of packaging for soft-drinks, mineral water and wine is reused. However, reuse systems are available to a much greater extent in northern Member States than in southern Member States. Packaging materials concerned by reuse are mainly glass (all drinks) and PET<sup>8</sup> (mineral water, soft drinks).

The highest reuse rates are achieved in the mineral water sector in Denmark, Finland, Austria, Germany and Sweden, where reuse approaches or exceeds 90% of the volumes bottled (glass and PET). On the contrary, very low reuse rates are achieved in the other Member States. Austria and Finland achieve a very high reuse rate beyond 70% in the wine sector<sup>9</sup>, but also Sweden and Portugal achieve considerably high reuse rates above 50% in this sector.

In the soft drink sector Austria, Germany, Sweden, Finland and Portugal reuse between one-third and two-thirds of glass packaging. Denmark exceeds 80%, whereas in the other countries for which data are available, reuse rates do not exceed 10-15%. Finland and Sweden also achieve significant reuse rates for PET packaging for soft drinks.

As regards beer, the north-south differences are less evident: only Italy, the United Kingdom, Ireland and France do not reach 20% of reuse, whereas all the other countries reuse between 30% and 50% (Sweden, Spain) or even above 70% of packaging, with Denmark reaching almost 100%.

Finally, United Kingdom, Austria and the Netherlands and to a lesser degree Belgium and Germany, maintain reuse systems in the milk sector.

Although Directive 94/62/EC has not set any specific quantitative target for the reuse of packaging, reuse is – as stated in Article 1(2) of the Directive, a fundamental principle of packaging management. Article 5 of the Directive encourages reuse systems of packaging, which can be reused in an environmentally sound manner, in conformity with the Treaty. Furthermore, Article 3(5) of the Directive establishes that packaging which is reused is not to be considered waste until it is no longer reused.

#### Recycling

The conclusion that can be drawn from the available figures (see tables III.2 and III.3) is that the recycling targets set out in 1994 in the packaging Directive have proven be capable of being reached. The general target of 25% recycling has already – four years in advance of the compliance date - been achieved by all the Member States which were to comply with this target. Ireland, Portugal and Greece benefit from the clause set out in Article 6(5) of the Directive, allowing for lower targets to be achieved or the same targets at a later stage. Greece and Ireland have already achieved a recycling targets of 25 and 18% respectively.

<sup>8</sup> PET – Polyethylene Terephthalate

These figures refer to the year 1994, therefore they should be taken with some precaution.

The maximum target of 45% recycling has been exceeded by Austria, Belgium and the Netherlands, which have in fact applied Article 6(6), although the statistics available seem to indicate that also Sweden and Germany, which have not applied Article 6(6) so far, have exceeded the maximum recycling target. Denmark and Finland are not far from the maximum recycling target, whereas Italy, Luxembourg and the United Kingdom have reached a recycling rate which is above the minimum target of the Directive, although not by a very considerable amount.

Concerning the minimum recycling target of 15% by material, where statistics are available they show that this figure is largely exceeded in the majority of Member States (see tables III.2 and III.5). The recycling rate for steel and aluminium far exceeds 50% in the northern countries. Southern countries lag behind, although recycling is also increasing in these countries.

Glass and paper are the materials where the figures show the lowest geographical differences. Recycling rates for glass are between 70 and 90% in Austria, Germany, Belgium, the Netherlands, and Sweden. France, Italy, Finland, Portugal the United Kingdom, Spain and Greece all recycle more than 25%, in several cases approaching 50%. These figures are also confirmed by statistics published by the European Federation for Glass Packaging. For paper, high recycling rates are not only to be found in countries, which have a consolidated recycling tradition but also in other countries such as Luxembourg and Italy.

The only material for which the recycling rate is still, in several countries, below the rate set by the Directive, is plastic. The 15% recycling rate for plastic was exceeded by Germany (45% inclusive the so-called "feed stock recycling") and Austria (20%). However, the Netherlands, Italy, Sweden and Finland are – four years in advance of the target date of 30 June 2001 – not far from this rate. The Commission does not have figures on the recycling of composite materials, such as beverage and milk cartons, for the majority of Member States. The recycling of beverage cartons is often included in figures on the recycling of paper and board, although composite beverage packaging should obviously not be considered paper packaging.

### **Recovery**

The minimum target of 50% has already been achieved by most of the Member States which were to comply with this target by June 2001.

The maximum recovery target of 65% was exceeded in Austria, Belgium, Denmark and the Netherlands. In addition, the available statistics seem to indicate that Sweden, Germany and Denmark might also be under the obligation to apply Article 6(6) of the Directive as regard the recovery rate achieved. Germany and Sweden are not far from the maximum recovery target, whereas Italy and the United Kingdom could not reach the minimum recovery rate of 50% although reporting substantial recycling rates.