



Packaging and Packaging Waste Statistics 2002

INTRODUCTION

Within the context of monitoring European developments in packaging and packaging waste ASSURRE regularly analyses Member State data. This paper gives an overview of the reported recovery and recycling figures from twelve¹ EU Member States for the year 2002, compares these findings with 2000 and 1998 data and analyses the trends

CONTENTS

- Key Observations Page 2
- Packaging placed on the market Page 3
- Recycling rates Page 5
- Recovery rates Page 8
- Individual Member State data for 2002 Page 9

¹ All EU Member States, which have to comply with the 2008 deadlines of the Packaging and Packaging Waste Directive without derogations.

KEY OBSERVATIONS:

1. On average the increase in packaging put on the market at less than 1% per annum since 2000, is still moderate, given the fact that changing lifestyles, increases in single person households and a growing population have influenced the evolution of consumption patterns and therefore of packaging use.
2. Some Member States who began slowly have made impressive progress since 1998 with recycling performance levels increasing by 19% in the case of Italy, 16% for the UK and 10% for Spain.
3. The performance of high-achieving countries has levelled out in the 1998 to 2002 period with some countries registering falling or only moderate increases in recycling in this time period, as they focus on cost benefit optimisation.
4. The gap between the highest and the lowest recyclers has decreased from 52% in 1998 to 30% in 2002 and is forecast to narrow to around 15% by 2008.
5. The total tonnage of packaging being recycled has increased by almost 20% between 1998 and 2002.
6. The total tonnage of packaging recovered has increased by 21% between 1998 and 2002.
7. It is worthwhile to point out that packaging going to final disposal has been reduced from 45% of packaging put on the market in 1998 to 37% of packaging put on the market in 2002.
8. The data clearly show that the environmental impact of packaging waste has been decoupled from economic growth in packaging use.

PACKAGING PLACED ON THE MARKET

Growth of packaging put on the market between 2000 and 2002
(Ktonnes)

	Quantities placed on the market in 2000	Quantities placed on the market in 2002	Trend in percentage 2000-2002
Austria	1170	1059	-9.5%
Belgium	1496	1490	-0.4%
Denmark	852	857	+0.5%
Finland	442	451	+2%
France	12499	12275	-1.8%
Germany	15121	15435	+2.0%
Italy	11168	11367	+1.8%
Luxembourg	80	85	+6,2%
Netherlands	2903	3117	+7.3%
Spain	6628	6374	-4.1%
Sweden	977	1029	+5.3%
UK	9180	9897	+7.8%
Total	62516	63436	+1.5%

- The quantity of packaging reported as put on the market has increased by 1.5% since 2000, however trends vary. The UK, the Netherlands, Luxembourg and Sweden have increased packaging put on the market by over 5% compared to 2000, whereas Austria, Spain, France and Belgium show net decreases.
- On average the increase in packaging put on the market is still moderate, at less than 1% per annum since 2000, given the fact that changing lifestyles, increases in single person households and a growing population have influenced the evolution of consumption patterns and therefore of packaging use.

Material share of packaging put on the market²

Material	K/tonnes placed on market	Percentage of total packaging	Member State Highest %	Member State Lowest %
Paper	25,763	47.5%	Sweden 60.5%	France 41.5%
Glass	13,788.1	25.4%	Luxembourg 33.6%	Finland 15%
Plastics	10,359.2	19.1%	Italy 22.3%	Luxembourg 14.1%
Metal	4,321.2	8%	Belgium 10.7%	Denmark 4.8%
Total	54,231.5	100%		

² Excluding wood and "other material" (five Member States report no figures at all for wood in 2002).

Packaging placed on the market per capita

	2002	2000	Difference in percentage
1. France	205.9	211.7	-2.7%
2. Italy	198.3	193.1	+2.7%
3. Netherlands	192.5	181.6	+6%
4. Luxembourg	189.5	180.6	+4.9%
5. Germany	187.0	184.0	+1.6%
6. UK	166.8	153.4	+8.7%
Average³	161.1	159.7	
7. Denmark	159.1	159.3	-0.1%
8. Spain	156.7	167.8	-6.6%
9. Belgium	143.9	145.8	-1.3%
10. Austria	131.3	144.1	-8.8%
11. Sweden	115.1	110.0	+4.6%
12. Finland	86.7	85.4	+1.5%

- The UK has increased packaging per capita since 2000 by almost 9%, followed by Luxembourg and Sweden, which both show a 5% increase.
- Austria -9%, Spain -7%, France -3% and Belgium -1.3% all have reduced packaging per capita between 2000 and 2002.

³ Unweighted average not taking into account the differences in population between the Member States

RECYCLING RATES AND FORECASTS

Recycling Rates 1998 to 2002 (%)

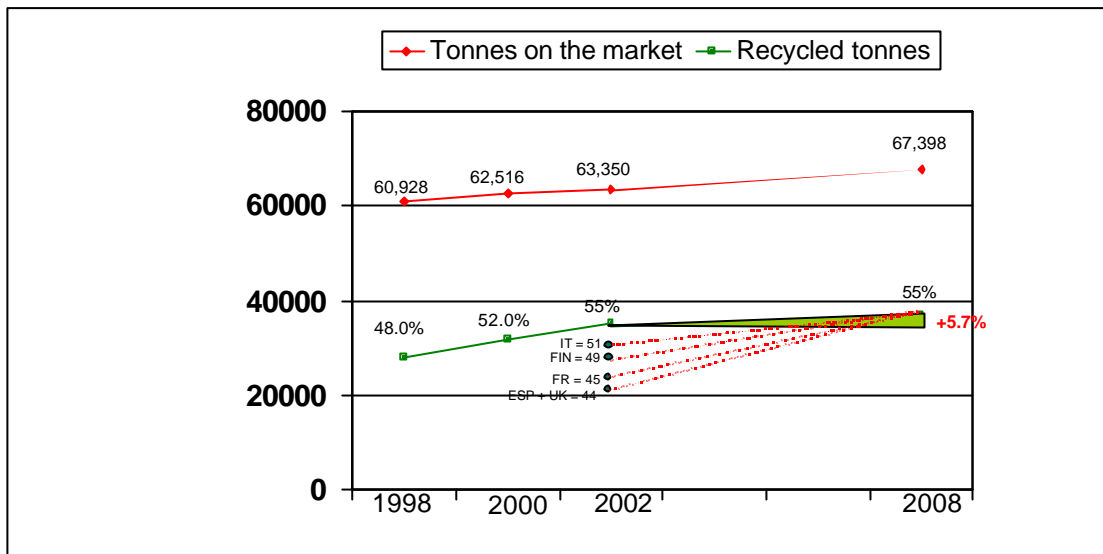
	1998	2000	2002
Austria	65	69	66
Belgium	64	63	70
Denmark	50	56	57
Finland	45	50	49
France	42	42	45
Germany	80	78	74
Italy	32	38	51
Luxembourg	42	45	57
Netherlands	62	59	57
Spain	34	40	44
Sweden	75	58	65
UK	28	40	44
Total⁴	48	52	55

- As seen from the figures above there is still some variation in recycling performance between Member States. However, the gap between the highest and the lowest achiever has decreased from 52% in 1998 to 30% in 2002.
- While seven Member States have already reached the 2008 PPW Directive overall recycling target, five Member States are still below with the UK and Spain bringing up the rear at 44%.
- The performance of high-achieving countries has levelled out in the 1998 to 2002 period with some countries registering falling or only moderate increases in recycling performance in this time period.
- The performance of the highest achiever: Germany has gradually decreased from 80% recycling in 1998 to 74% in 2002.
- Some Member States who began slowly have made impressive progress since 1998 with recycling figures increasing with 19% in the case of Italy, 16% for the UK and 10% for Spain. Luxembourg has also managed to increase its performance substantially from a very respectable 42% in 1998 to 57% in 2002.
- The average recycling rate shows a net percentage improvement of 4% points between 1998 and 2000 and a further 3% points between 2000 and 2002.
- It is worthwhile to point out that the total quantity of packaging being recycled has increased by almost 20% between 1998 and 2002.⁵

⁴ Average percentage rate based on total quantity recycled in the 12 Member States divided with total quantity of packaging put on the market in the 12 Member States

⁵ Total recycling in 1998: 29209.5 Ktonnes
 Total recycling in 2000: 32400.9 Ktonnes
 Total recycling in 2002: 35057.7 Ktonnes

Distance to 2008 target @ 2002



- If packaging placed on the market continues to grow at the same rate as it has between 1998 and 2002, then efforts needed to meet the 55% overall recycling targets set for 2008 would require a 5.7% increase in the tonnes to be recycled on average across the EU. At an average level, this looks achievable.
- However, we need to remain attentive to the fact that the recycling targets apply to each Member State individually, not as an average. Today's lower performers have more to do if they are to meet them.
- Member States with a faster growth of packaging put on the market will also be challenged to increase their recycling achievements in tonnes if they are to meet the 2008 % recycling rate targets
- In addition, these statistics relate to only 12 Member States out of 25 – most Member States therefore face a considerable challenge to catch up to this average in the medium term.

Material specific recycling rate of packaging waste

Material	K/tonnes Recycled in EU-12	Average rate of packaging recycled by material	Member State Highest recycling %	Member State Lowest recycling %
Glass	8150.9	59.1%	Belgium 93%	UK 34%
Paper	17796.6	69%	Germany 88%	Italy 58%
Metal	2526	58.5%	Belgium 86%	UK/Spain 39%
Plastics	2634.3	25.4%	Germany 49%	France/Finland 15%
Total	31107.8			

- 2008 targets include material specific recycling targets in addition to the overall recycling target.

- As with the overall target, these apply to each of the Member States, individually, not as an average.

- The material specific targets for recycling by 2008 are:
 - Glass 60%
 - Paper 60%
 - Metals 50%
 - Plastics 22.5%
 - Wood 15%

RECOVERY RATES

Recovery Rates 1998 to 2002 (%)

	1998	2000	2002
Austria	70	76	75
Belgium	73	71	91
Denmark	89	91	94
Finland	55	60	61
France	56	57	62
Germany	81	81	78
Italy	34	43	56
Luxembourg	51	59	62
Netherlands	84	77	61
Spain	37	44	50
Sweden	82	66	67
UK	33	45	50
Total	55	56	63

- Recovery rate percentages have increased by 8 percentage points between 1998 and 2002.
- The total tonnage of packaging recovered has increased by 21% between 1998 and 2002.⁶
- The gap between the highest and lowest achiever has decreased from 56% in 1998 to 44% in 2002, however no Member State registers a recovery rate below 50%.
- Denmark and Belgium have very high recovery rates at 94 and 91% respectively.
- The highest increase in recovery rates between 1998 and 2002 can be found in Italy (+22%), Belgium (+18%), the UK (17%), Spain (+13%) and Luxembourg (+11%).
- It is worthwhile to point out that packaging going to final disposal has decreased from 45% of packaging put on the market in 1998 to 37% of packaging put on the market in 2002⁷.

⁶ Total recovery in 1998: 33081.6 Ktonnes

Total recovery in 2000: 35266.3 Ktonnes

Total recovery in 2002: 40076.2 Ktonnes

⁷ Member States define and measure recovery differently in their national practice. The percentages above may not always be directly comparable.

MEMBER STATE PACKAGING AND PACKAGING WASTE STATISTICS 2002

An overview of Member State recovery and recycling data for 2002 is given below. The numbers (in kilo tonnes) in the tables have been rounded off for consistency reasons. The recycling and recovery percentage figures are, however, calculated on the exact numbers as reported by Member States to the Commission.

Austria

Material	K/tonnes Market	K/tonnes Recycled	%	K/tonnes Recovered	%
Glass	210	181.4	86	181.4	86
Paper	500	400	80	400	80
Plastics	200	60	30	120	60
Metal	52	35	67	35	67
Wood	62	10	16	28.1	45
Total*	1059	698.4	66	789.8	75

*=includes 35 K/tonnes Verbundstoffe

Belgium

Material	K/tonnes Market	K/tonnes Recycled	%	K/tonnes Recovered	%
Glass	323	299.6	93	299.6	93
Paper	568.5	445.4	78	530.1	93
Plastics	258	76	29	205.9	80
Metal	138.2	119.1	86	119.1	86
Wood	166.2	91.9	55	166,2	100
Total*	1490.2	1045.7	70	1349.3	91

*=includes 36,3 Ktonnes of other material

Denmark

Material	K/tonnes Market	K/tonnes Recycled	%	K/tonnes Recovered	%
Glass	156.2	140.4	90	140.4	90
Paper	502.1	307.8	61	492.4	98
Plastics	157.2	24.4	16	150.6	96
Metal	41.1	18.2	44	18.2	44
Wood					
Total	856.7	490.8	57	801.6	94

Finland

Material	K/tonnes Market	K/tonnes Recycled	%	K/tonnes Recovered	%
Glass	67.6	33.4	49	33.4	49
Paper	255.3	155.5	61	190.5	75
Plastics	87.1	12.7	15	32.7	38
Metal	41.3	20,6	50	20.6	50
Wood					
Total	451.3	222.2	49	277.2	61

France

Material	K/tonnes Market	K/tonnes Recycled	%	K/tonnes Recovered	%
Glass	3372	1769	52	1769	52
Paper	4234	2725	64	3846	91
Plastics	1867	284	15	954	51
Metal	734	389	53	395	54
Wood	2068	401	19	679	33
Total	12275	5568	45	7643	62

Germany

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	3266.4	2814.3	86	2814.3	86
Paper	6607.3	5807	88	5807	88
Plastics	2073	1015.8	49	1042.7	50
Metal	1090.5	867.1	80	867.1	80
Wood	2382.2	980	41	1500	63
Total*	15434.7	11484.2	74	12031.1	78

*=includes 15.3 Ktonnes of other material

Italy

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	1970	1038	53	1038	53
Paper	4218	2469	58	2589	61
Plastics	1951	449.8	23	870,1	45
Metal	625	336.9	54	341.9	55
Wood	2603	1554	60	1577	61
Total	11367	5847.7	51	6416	56

Luxembourg

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	23.2	19.3	83	19.3	83
Paper	29.2	17.6	60	17.6	61
Plastics	9.7	2.8	28	4.2	43
Metal	6.9	5.5	79	5.5	79
Wood					
Total*	84.9	48.2	57	52.3	62

* = includes 16 Ktonnes of other material (wood and composites)

The Netherlands

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	516	406	79	406	79
Paper	1451	1001	69	1001	69
Plastics	530	87	16	185	35
Metal	222	177	80	177	80
Wood	398	117	29	117	29
Total	3117	1788	57	1886	61

Spain

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	1523	553.1	36	553.1	36
Paper	3048.9	1823.6	60	1984.9	65
Plastics	1319	258	20	441.7	33
Metal	483.1	189.1	39	196.8	41
Wood					
Total	6374.1	2823.8	44	3176.5	50

Sweden

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	170	149	88	149	88
Paper	623	436.9	70	438.6	70
Plastics	167.2	33.2	20	59.8	36
Metal	69.1	46.8	68	46.8	68
Wood					
Total	1029.4	665.9	65	694.2	67

UK

Material	Ktonnes Market	Ktonnes Recycled	%	Ktonnes Recovered	%
Glass	2190.7	747.4	34	747.4	34
Paper	3725.7	2207.8	59	2529.2	68
Plastics	1740	330.6	19	593.6	34
Metal	818	321.7	39	321.7	39
Wood	1398	767.2	55	767.2	55
Total*	9897.3	4374.8	44	4959.2	50

*=includes 25 Ktonnes of other material