2003 EDITION

Waste generated and treated in Europe

Data 1990-2001

8

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Annex

SUMMARY

The purpose of this publication is to offer a set of official European statistics on waste, which are relevant for Community action on the environment, providing the basic data required for the assessment of the environmental impact of waste generation and management.

After an **introductory section** describing the general framework of the report, the statistical source and the methodology applied, results are presented in sections 2 to 6. Annexed tables include time series for Western Europe[1], Eastern Europe Candidate Countries[2] as well as Malta and Cyprus. However, due to poor data availability, it has not been possible to show a complete set for countries and indicators.

Section 2 deals with the total amounts of waste generated in Europe, broken down by main sources: about 2.2 billion tons of waste has been generated annually in Europe between 1998 and 2001.

However, these 2.2 billion should not be taken indistinctly, as the management of agricultural waste (mostly biodegradable) for instance is not at all equivalent to that of hazardous waste produced by the metal or chemical industries. The construction sector contributes the most to waste generation in Western and Eastern Europe, followed by agriculture and by 'mining and quarrying' sectors. This information should not be taken at face value, notably since the countries interpret waste from agriculture differently.

Section 3 explains in more detail the generation of waste by manufacturing industry. The largest European waste producing industries are the basic metal industries, followed by the food, beverages and tobacco producers and by the manufacturing of other non-metallic mineral products.

Eastern Europe countries produced relatively much more industrial waste than Western Europe: 953 kg per thousand € of value added against 177 kg.

Overall structure of industry cannot explain such a high difference, given that this difference is also observed at the level of each sector.

Municipal waste, presented in **section 4**, is the category of waste on which the best information is collected. Data and figures show a tendency for the amounts of municipal waste generated to increase. Municipal waste generated by households was around 456 kg per capita in Western Europe and about 200 kg in Eastern Europe.

Separate collection of certain kinds of waste (packaging in particular) is growing, but this method of collection is not equally used among the countries: for instance, less than 5% of municipal waste are collected separately in Portugal, but over 65% in Austria.

In 8 out of 18 Western European Countries, landfill continues to be a rather common practice but incineration is increasing and in recent years recovery showed an important increase. In Eastern European Candidate Countries, landfill is the dominant way of managing municipal waste and the only method in Bulgaria, Cyprus, Lithuania, Romania and Slovakia.

Section 5 presents statistics on generation and management of hazardous waste. A rough estimate shows that more than 36 million tonnes of hazardous waste has been generated in Western Europe between 1997 and 2001. In Eastern Europe, it has amounted more than to 15 million tonnes.

Finally, **section 6** relates to recycling and packaging. Around 18% of municipal waste collected in Western Europe has been collected for recycling. On average, among four selected packaging waste streams generated (paper, glass, plastics and metals), paper packing is dominating (45%*).*

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[1] The EU-15 Countries, Norway, Iceland and Switzerland

[2] Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, Turkey.

1 Introduction

During the last decades, waste generation has become a serious problem for our highly industrialised societies. Waste volumes have persistently grown faster than GDP.

The 6th Environmental Action Programme calls for a number of inter-related measures designed to reduce the environmental impacts of resource use in line with the 'Community Strategy for a Sustainable Development'.

"*Ensuring the sustainable management of natural resources and* ***wastes***" is one of the four priority areas, which includes the development of a 'Thematic Strategy on Waste Recycling' and initiatives in the field of waste prevention, notably proposals on Community waste prevention targets.

The proposed strategy on waste management includes a hierarchy of options in which primary emphasis is laid on waste prevention, followed by promotion of recovery (recycling, re-use and energy recovery) and lastly by optimisation of final disposal methods[3].

The improvement of waste management at EU level requires detailed information. Since 1988, international waste statistics are collected through a **questionnaire developed jointly by Eurostat and the OECD** (Questionnaire on the State of the Environment); this questionnaire constitutes a prime source of information and avoids duplication of data collection for both institutions.

This issue is the **second publication** made by Eurostat on the **generation and treatment of waste in Europe** [4]. The work carried out for this publication has shown that it is still difficult to present a complete picture of waste management. Data availability is not yet satisfactory in many countries and the provision of data according to national definitions and classifications may vary. Consequently, it is impossible to draw up a comparable set of data for the different countries at the time being. There is a strong need to establish a more regular and harmonised system providing information on both, the quantities of waste generated and on the management facilities.

With the implementation of the Regulation on Waste Statistics it will be possible to build up a more complete picture on waste generation and treatment, not only in relation to the whole economy but also at the different points of the waste stream, including trans-border movements.

Eurostat did not carry out any estimations of missing data at national level. However, some aggregates have been estimated for Western Europe as well as for the Candidate Countries. The data presented in the tables of the statistical annex are **figures provided by the national authorities**. Eurostat has checked their accuracy and consistency in co-operation with the OECD and the participating countries. For some countries, data has been supplemented with figures from national publications.

Waste statistics are not available at a regular frequency. Data on waste generated by different economic and industrial sectors are, in general, the scarce.

An accurate estimation of the total waste quantities produced in Europe is not possible. Whenever they are provided, they should be interpreted with care.

Waste, in this publication, refers to materials that are not prime products (i.e. products produced for the market) and that have to be disposed of; the waste-producer has no further use for his production process, transformation or consumption. Wastes may be generated during activities such as extraction of raw materials, processing of raw material into intermediate and final goods, consumption of final products or during any other human activity. It is to be noted that residuals that are recycled or reused at the place where they have been generated are excluded. Waste materials that are directly discharged into ambient water or air[5]are also excluded.

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[3] See box on "Environment 2010: Our Future, our choice" in the annex.

[4] The EU-15 countries, the 13 Candidate Countries and Norway, Iceland and Switzerland.

[5] Definition used in the waste section of the joint Eurostat/OECD Questionnaire on the State of the Environment.

2 Total waste generated

Main findings:

- **About 2.25 billion tons of waste has been generated in Western Europe between 1998 and 2001 and 550 million in Eastern Europe Candidate Countries.**
- **Main sources of waste are agriculture and forestry (roughly 30% of total waste), construction (31% of total waste in Western Europe, 3% in Eastern Candidate Countries) and mining and quarrying (15% of total waste in Western Europe, 31% in Candidate Countries).**

2.1 Overview

This section aims at giving a global view of the quantities of waste generated in Europe.

According to some very crude estimates [6], some 2.25 billion tons of waste have been generated in the 18 Western European countries (the 15 EU Member States, Switzerland, Iceland and Norway) between 1998 and 2001. During the same time period, 550 million tons of waste have been produced in the 13 Candidate Countries located in Eastern Europe.

This overall aggregate includes waste generated by production as well as consumption, i.e. it covers industrial and municipal waste. Industrial waste itself includes hazardous waste and waste destined for recovery.

Households mainly generate municipal waste at the consumption stage but also by the economic activities, the waste of which is generally collected with household waste and cannot be directly related to a specific economic sector (in general urban services).

Both types of waste, industrial and municipal, will be presented in more detail in separate sections.

It is recalled that those estimates should be carefully interpreted due to poor data availability (see **Table 1** in annex) and to uncertainties about their comparability. In particular, in some sectors (notably agriculture and construction) data show a very high variability between countries, which may reveal differences in the methodologies used for measuring their waste.

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[6] Data presented in this section originate from replies to the 2002 Eurostat/OECD Questionnaire. However, as a lot of data are missing, especially in the production waste area, estimates had to be made. A method, based on value added growth, was used:

- If waste data specific to a sector were provided at least for one year, a series was reconstituted by using sectoral value added growth at constant prices, when available in New Cronos Eurostat database.
- If sectoral value added data at constant prices were not available, corresponding value added at current prices was multiplied by the GDP global deflator.
- When no sectoral waste data was supplied, the other countries' average was used.

These assumptions have been used only for the assessment of the global waste total. No estimate for a specific country or sector is presented in this report.

[7] Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia, Turkey

2.2 Breakdown by main sector

Table 2 in the statistical annex gathers information on the amount of waste generated by six different economic sectors, following the major divisions of the European economic activity nomenclature (NACE-Rev.1):

	NACE Rev1 division code
• Agriculture and forestry	01 – 02
• Mining and quarrying	10 – 14
• Manufacturing industry	15 – 37
• Energy production	40
• Water purification and distribution	41
• Construction	45

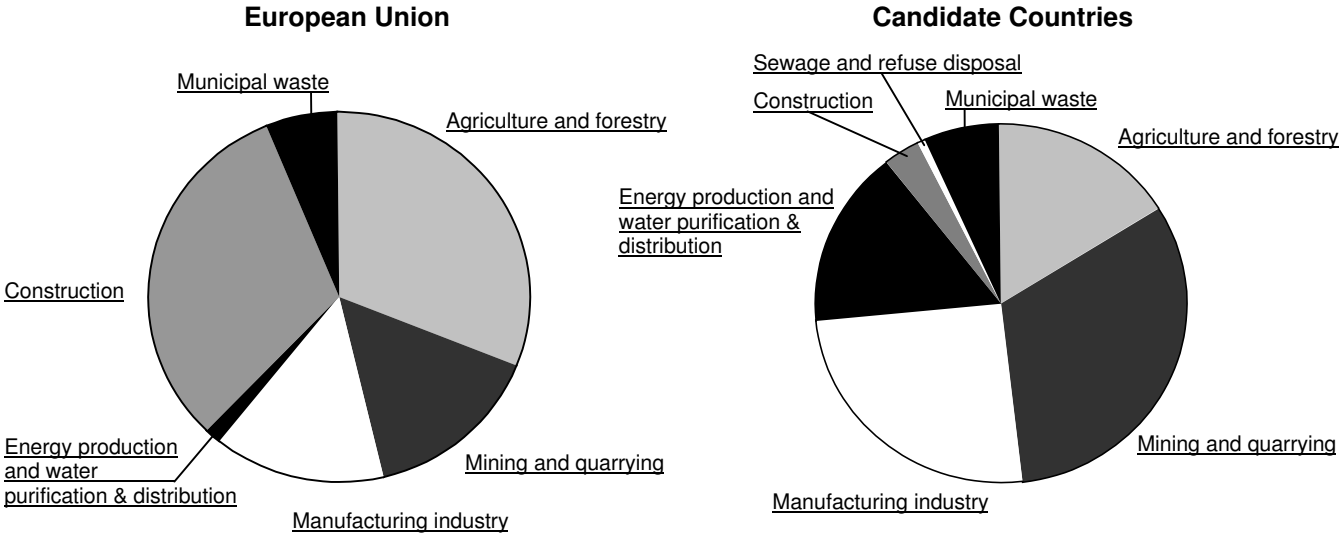
In order to give a more complete picture, data on municipal waste are included in the diagram below.

However, as it can be seen in **Table 2**, the lack of data availability is quite severe and some rough estimation have been carried out to illustrate the share of each sector at aggregate level. Some EU Member States never provided data about one category or the other.

Most of the Candidate Countries analysed also reported on the distribution of waste generated according to the NACE categories listed above.

The amounts of waste differ greatly between economic activities and between countries. This is due to the characteristics of waste production related to each economic activity and to the relative importance of the economic activity considered in the countries.

Figure 2.1: Origin of waste in Europe



Source: Eurostat / OECD

Waste from agriculture and forestry seems to be dominant in most European countries. The second and the third important waste streams come from construction sector (about 31% in Western European countries and 3% in Candidate Countries) and from mining and quarrying sector (about 15% in Western European countries and 31% in Candidate Countries.

However, some more detailed data are available: a few countries have reported on the amounts of waste generated from water purification and distribution activities (NACE 41).

In some of these countries the amount is rather high and one must therefore assume that waste from water treatment (NACE 90) is also included. Actually, many enterprises in the water area carry out both activities.

The construction sector generates relatively more waste in Western Europe (31%) compared to Candidate Countries (3%).

3 Industrial waste

Main findings:

- **For each thousand Euro of value added, manufacturing industry sectors produce on average 177 kg of waste in Western Europe and 953 kg of waste in Eastern European Candidate Countries.**
- **In Western Europe, the best performances are obtained by Germany, Denmark and Italy; the worst by Greece and Finland. Hungary, Slovenia and Turkey have similar levels of industrial waste in comparison with Western Europe.**
- **Basic metal industries, followed by the food, beverages and tobacco sector and by the wood and wood products sector seem to generate the largest amount of waste in Europe.**

3.1 Industrial waste by country

Table 3 in the annex provides an overview of the waste generated by different branches of the manufacturing industry. These branches correspond to the following NACE codes:

Branch	NACE code
- Food, beverages, tobacco industry	15-16
- Textile industries	17-18
- Leather industries	19
- Wood and wood products	20
- Paper and paper products	21
- Printing and publishing	22
- Chemical industries	24
- Rubber and plastics	25
- Refineries, etc. :	23
- Non-metallic mineral products	26
- Basic metal industries	27
- Fabricated metal products, machinery, electrical, optical and transport equipment	28-35
- Other manufacturing industries	36-37

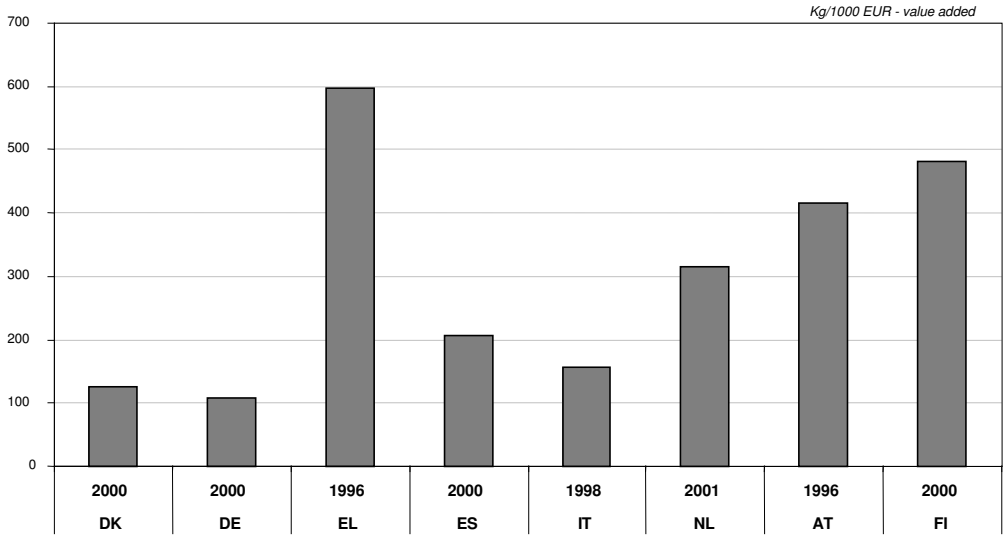
Note that **Table 11** gives the same details as Table 3 but relates to hazardous waste. Due to poor data availability, hazardous waste generated by sector will not be analysed. Data for describing the generation of waste by selected streams also do exist (c.f. Table 4) but are rather incomplete. In this edition, for production sectors, the volume of waste is expressed as a ratio of waste per value added, instead of a ratio per capita as compared to the former publication. Although the coverage of value added may not be completely in line with the coverage of waste streams, in a comparison between countries, this indicator is less influenced by the overall structure of the countries than the ratio per capita: for instance the ratio per capita is sensitive to demographic elements such as the ratio labour force/ total population. However, when aggregating different sectors, the indicator calculated upon the added value remains sensitive to the industrial structure of the country.

Figure 3.1 and **Figure 3.2** (designed for different scales) give a general picture of industrial waste generation in Western European and eastern European Candidate Countries, respectively

The values correspond to the latest available year (ranging from 1996 for Greece and Austria to 2001 for The Netherlands). The industrial waste generated in Candidate Countries (relative to added value) is much higher than in Western European countries, with three notable exceptions: Hungary, Slovenia and Turkey.

In Western European countries, the volume of waste per 1000 Euro of added value varies between 107 kg in Germany to 597 kg in Greece, with an average of 177 kg for the 13 countries considered..

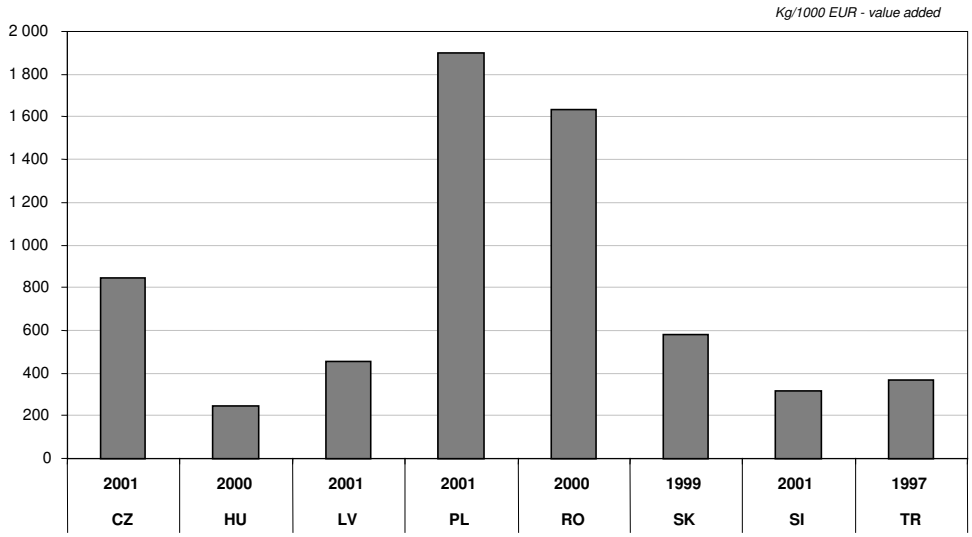
Figure 3.1: Industrial waste generated by Western European countries



Source: Eurostat/OECD

For their part, the six Candidate Countries generate on average 953 kg of industrial waste for every 1000 of euro of added value. This is much higher than the 177 kg for Western European countries. However, the situation is at great variance within the Candidate Countries: as mentioned before, Hungary, Slovenia and Turkey are at comparable level with Western Europe (respectively 247 kg, 318 kg and 368 kg per euro of value added), but Romania and Poland generate far more waste: respectively 1 635 kg and 1 897 kg.

Figure 3.2: Industrial waste generated by Candidate Countries



3.2 Industrial waste by branch

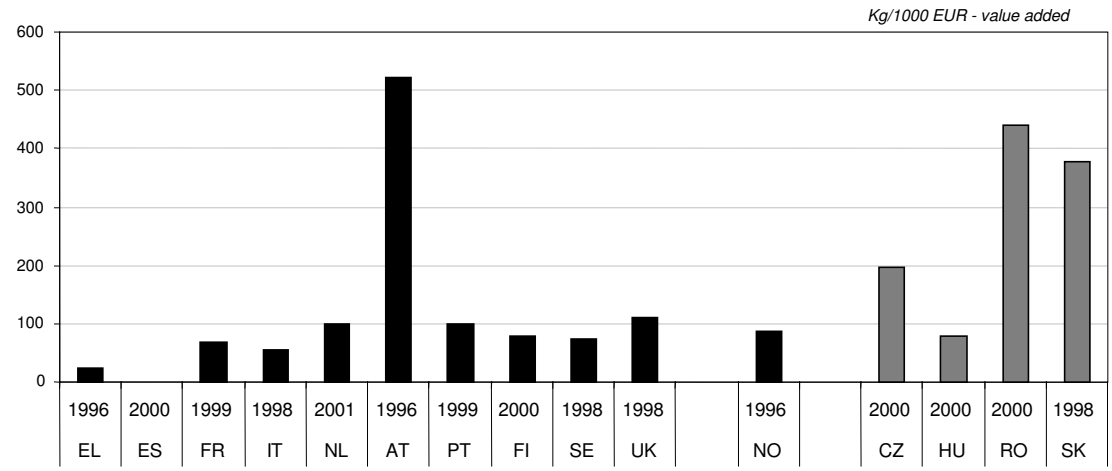
As mentioned above, waste generated in the manufacturing sector is available at a more detailed branch level. The following statistics are described at the division level of the NACE (2-digit level) with some groupings. For a detailed analysis by added value (here, at current price instead of 1995 constant price, due to data unavailability and because no analysis along time was attempted), further groupings have been carried out. Hence, industrial waste as measured per 1000 Euro of value added, has been broken down into 10 different sub-groups. It is still difficult to have a general picture of the situation, whether at aggregate or national level.

This is again due to a number of countries that have not been reporting full set of data (some of them have not provided any data at all).

As a ratio of value added, basic metal industries seems to generate the largest amount of waste, followed by the food, beverages and tobacco sector and by the wood and wood products sector.

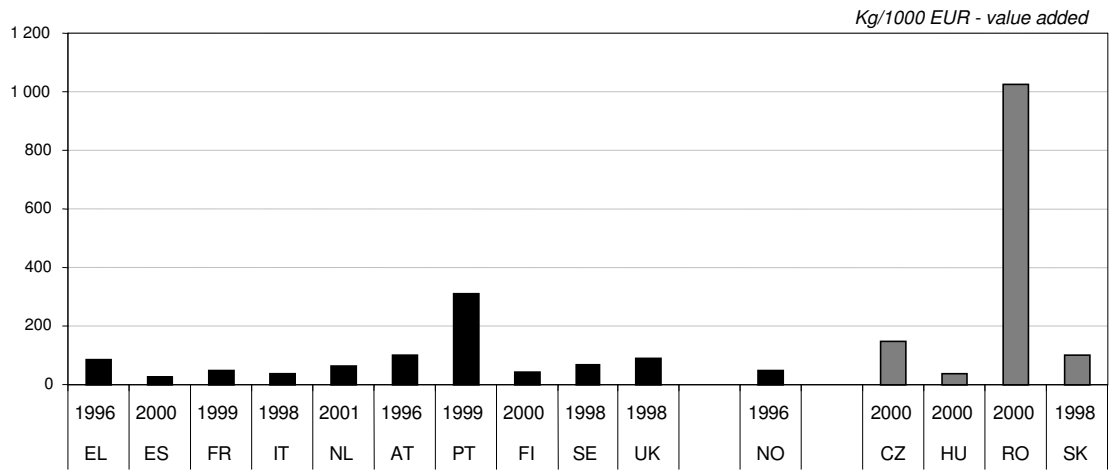
The 'textile, textile products, leather and leather products sector' generates far less waste per 1 000 Euro of value added than any other branch of the manufacturing sector in Western Europe. Second best after the textile and leather industry are rubber and plastic products.

Figure 3.3: Waste generated in the rubber and plastic products sector



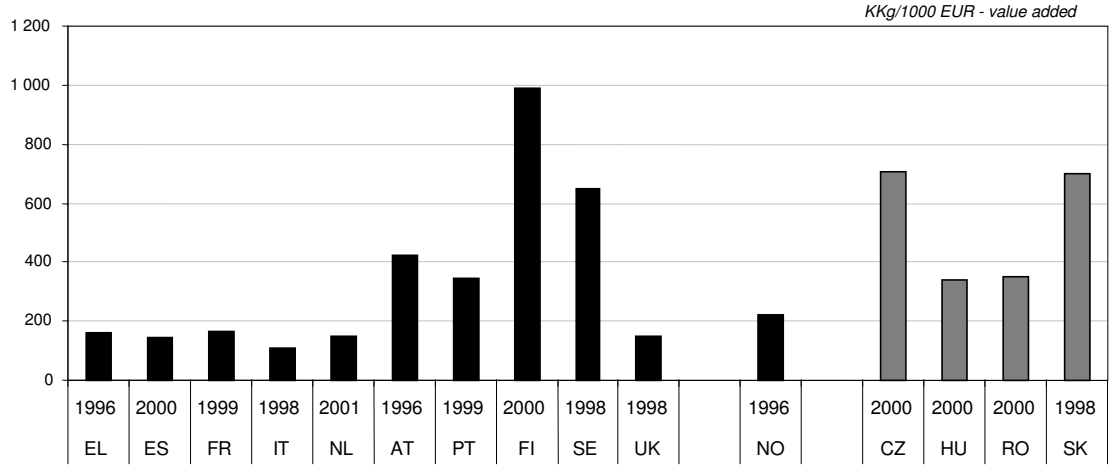
Source: Eurostat/OECD

Figure 3.4: Waste generated in the textile, textile products, leather and leather products sector



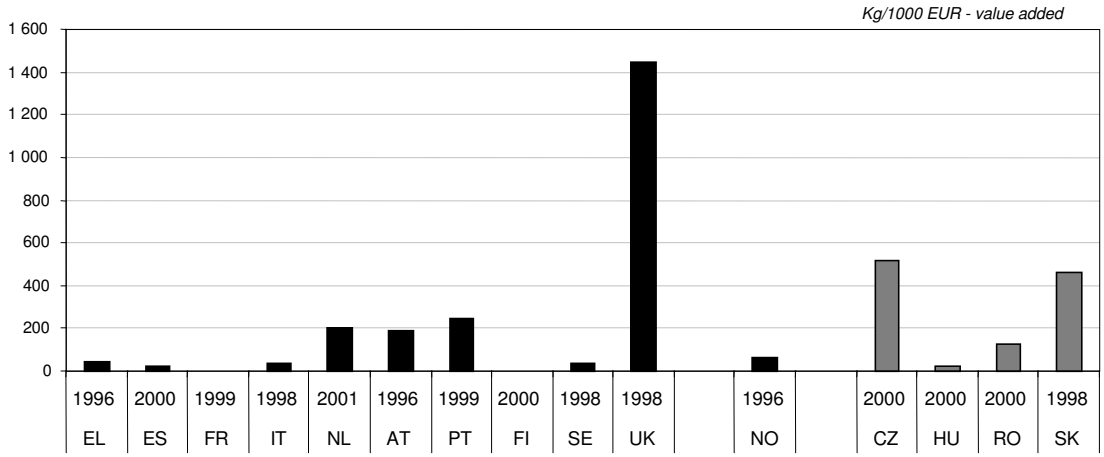
Source: Eurostat/OECD

Figure 3.5: Waste generated in the pulp, paper & paper products; publishing and printing sector



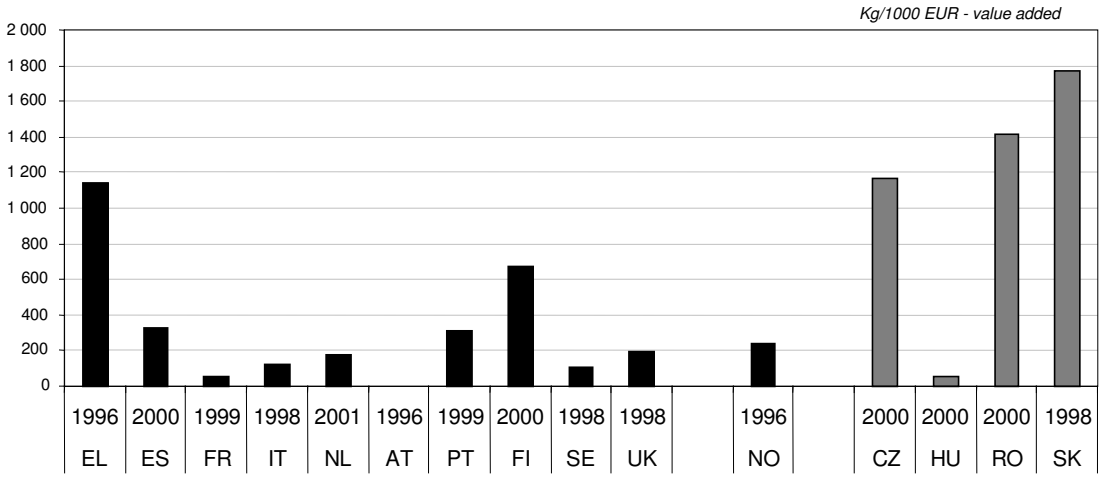
Source: Eurostat/OECD

Figure 3.6: **Waste generated in the coke, refined petroleum products** sector



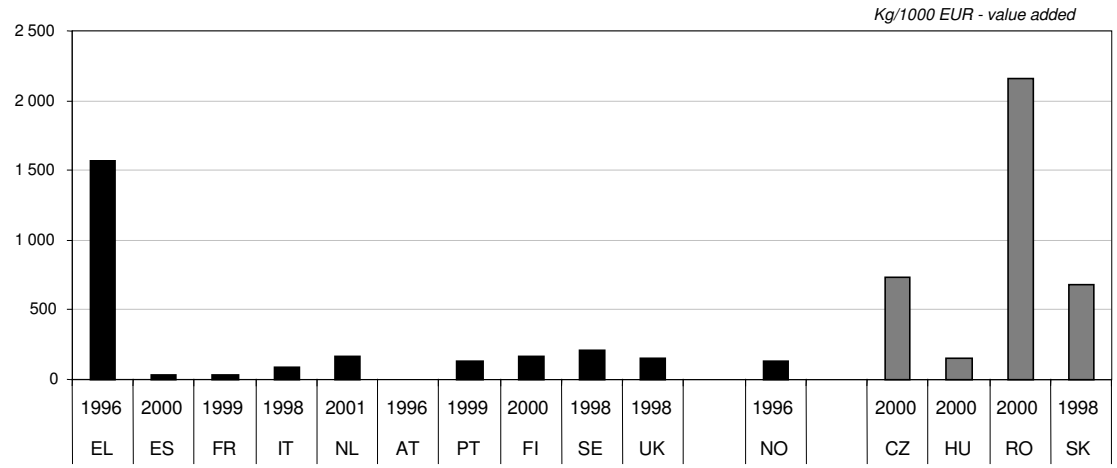
Source: Eurostat/OECD

Figure 3.7: Waste generated in the chemical and chemical products sector



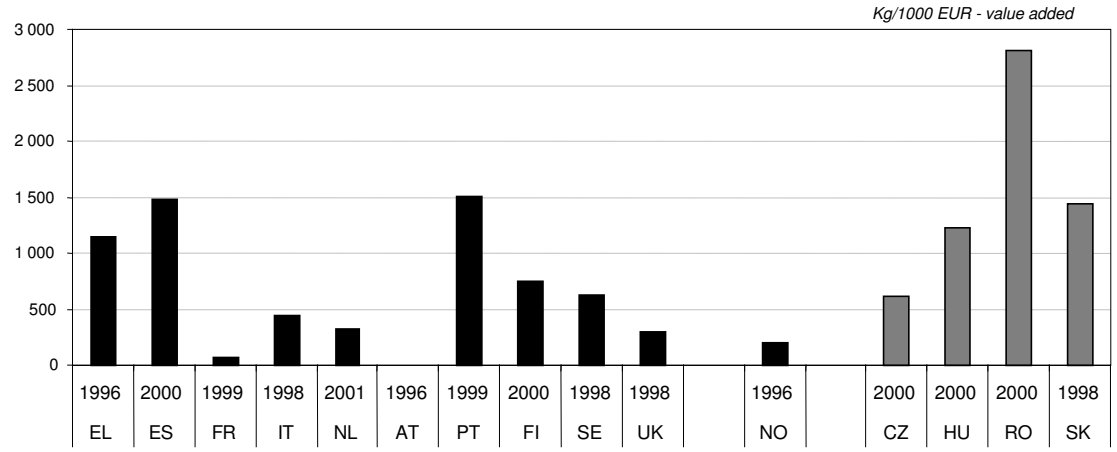
Source: Eurostat/OECD

Figure 3.8: Waste generated in the basic metals, machinery, electrical, optical and transport equip. sector



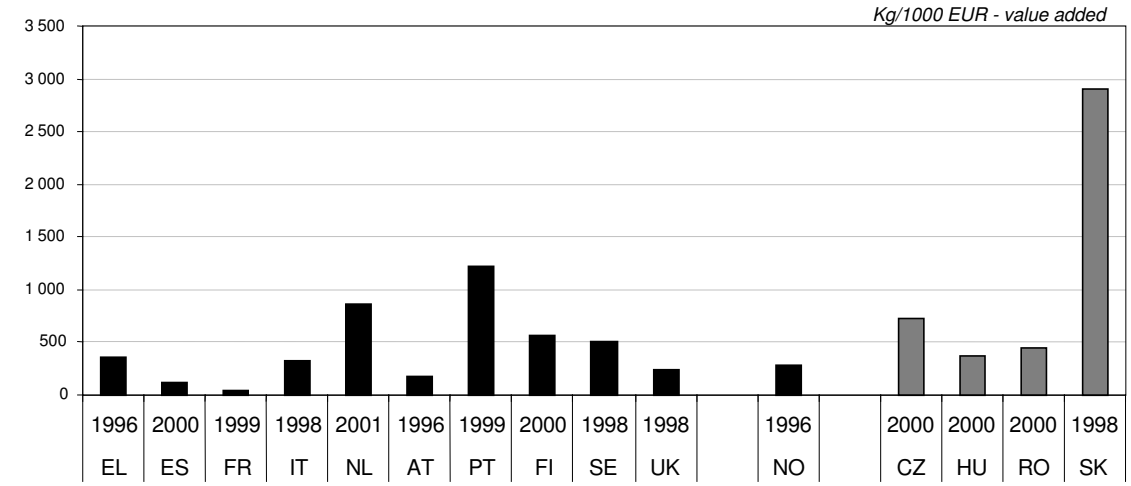
Source: Eurostat/OECD

Figure 3.9: **Waste generated in the non-metallic mineral products sector**



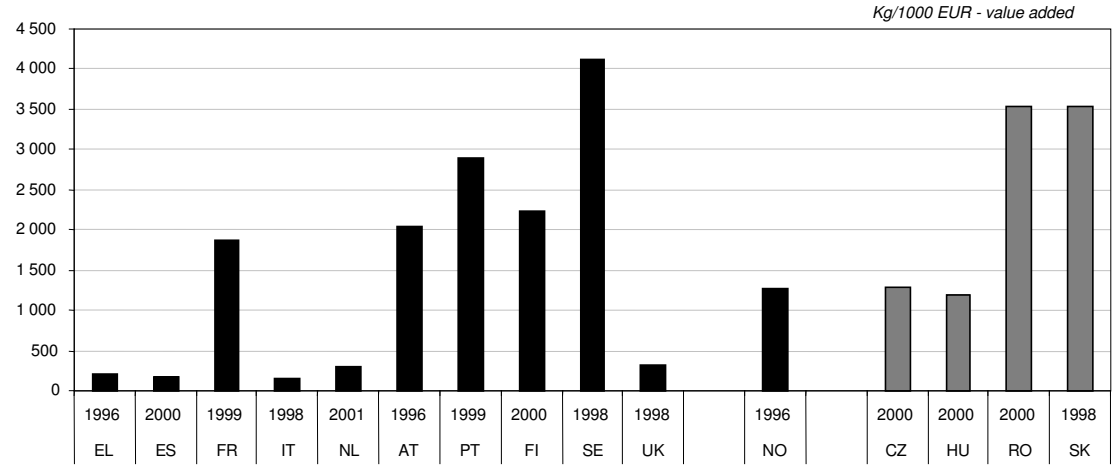
Source: Eurostat/OECD

Figure 3.10: Waste generated the food, beverages and tobacco sector



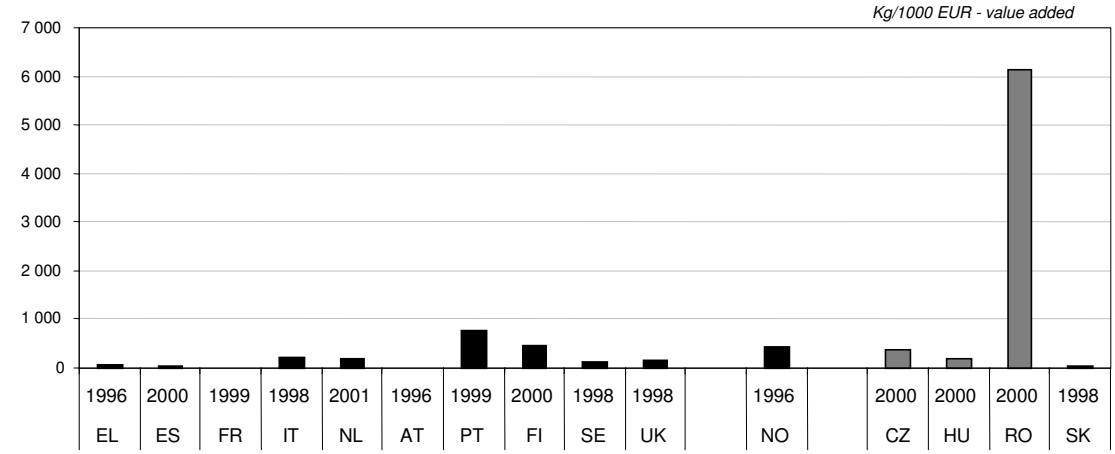
Source: Eurostat/OECD

Figure 3.11: Waste generated in the wood and wood products sector



Source: Eurostat/OECD

Figure 3.12: Waste generated in the manufacturing non-elsewhere comprised (n.e.c) sector



Source: Eurostat/OECD

Due to unavailability of value added by branch for Poland, data does not appear in the figures 3.3 to 3.12. At the country level, Romania generates more waste by 1000 Euro of value added than any of the other countries where data are available. This situation has already been seen from **Figure 3.2**.

The situation is even more marked at the branch level, namely in 'chemical and chemical products', 'manufacturing non-elsewhere comprised (n.e.c)', 'basic and fabricated metals, machinery, electrical, optical and transport equipment' sector and in 'textile, textile products, leather and leather products'.

.

On average, Slovakia also generates relatively high level of waste, particularly in the 'manufacture of food, beverages and tobacco', in the 'wood and wood products' and in the 'chemical and chemical products' sectors.

The volume of waste generated in France per 1000 Euro of value added is relatively low compared to other countries presented in the bar charts above. In most of the sectors where data have been provided, France is part of the group of countries with the lowest tonnage of waste, except for 'wood and wood products'

4 Municipal Waste

Main findings:

- **Some 550 kg of municipal waste were generated per capita per annum in Western Europe between 1998 and 2001, of which 456 kg were generated by households.**
- **In the Candidate Countries, these figures respectively amounted to around 358 kg for municipal waste and to 200 kg for household waste.**
- **In Western Europe, on average, municipal waste mainly consisted in organic materials (27%) and paper products (26%).**
- **The share of separately collected waste globally increased, but remained highly variable among countries and among materials.**
- **Landfill was the dominating method of management in 8 out of 18 Western European Countries and in all Candidate Countries.**

Municipal waste is a traditional domain in waste management and is therefore the category for which most reliable data is available, both from the point of view of quantity and quality. Nevertheless, there remain gaps preventing the establishment of a detailed picture of the existing situation for the whole of Europe.

This report is based on data collected through the joint Eurostat/OECD questionnaire on the state of the environment where municipal waste is defined as waste collected by or on behalf of municipalities. These generally originate from households, commerce and trade, small businesses, office buildings and institutions such as schools, hospitals, government buildings, etc. If managed as waste, waste from selected municipal services, i.e. waste from parks and garden maintenance, from street cleaning services (street sweepings, content of litter containers, market cleansing, …) are also included. Waste are generally collected by door-to-door through traditional collection (mixed household waste) or collected separately for recovery operations (door-to-door collection / voluntary deposits). The definition also relates to waste collected directly by the private sector (business or private non-profit institutions) not on behalf of municipalities or those originating form rural areas not served by regular waste service, even though they are disposed of by the generator. However, it excludes waste from municipal sewage network and treatment and municipal construction and demolition waste.

When interpreting the figures, it should be kept in mind that the countries, when filling in the questionnaire, do not uniformly apply this definition; consequently this leads to some data inconsistencies and makes cross-country comparisons problematic[8]. Taking into account the above-mentioned imperfections, it can be estimated that the total yearly amount of municipal waste collected in Western Europe accounted for over 210 million tonnes between 1998 and 2001, i.e. a yearly average of some 550 kg per capita. In the same line, in the Candidate Countries municipal waste amounted to 60 million tonnes, an average of nearly 358 kg per inhabitant. All in all, municipal waste in these two groups of countries summed to around 275 million tonnes (about 510 kg per capita).

Based on some very rough estimations, the share of waste generated by households in total municipal waste collected is about 82% between 1998 and 2001, i.e. Western-European households have generated some 170 million tonnes of waste collected by or on behalf of municipalities, an approximate average of 456 kg per capita. As for the Candidate Countries, the total amount of household waste managed by municipalities is estimated to 45 million tonnes (200 kg per inhabitant). The following section shows trends on municipal and household waste generated, the composition of waste, as well as the treatment and disposal methods used.

[8] Cf. "Household and municipal waste: Comparability of data in EEA member countries", European Topic Centre on Waste (European Environment Agency), April 2000

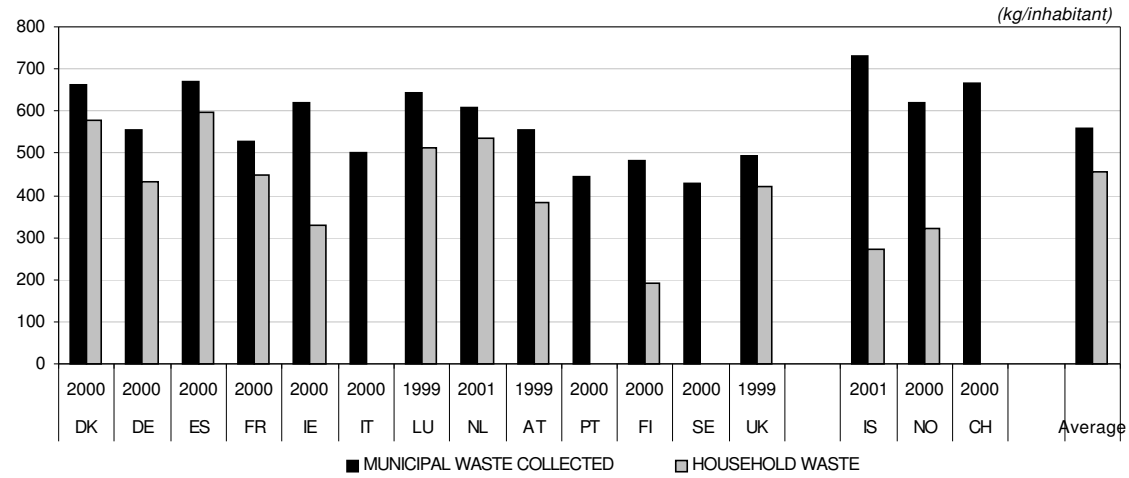
4.1 Amounts of municipal and household waste collected

At the national level, between 428 kg and 730 kg of municipal waste have been collected by or for municipalities per inhabitant in Western-European countries (see collection of industrial waste **Figure 4.1**) Four countries have been collecting over 650 Kg per capita (Denmark, Spain, Iceland and Switzerland); the lowest averages are found in Sweden and Portugal (less than 450 kg/capita).

In most countries, municipal waste consists of 60% or more of household waste. The situation is however different in Iceland and Finland where the share stands at respectively 37% and 40%.

In Denmark, Spain, the Netherlands and United Kingdom, the proportion of municipal waste labelled as household is quite high, a little less than 85%. An explanation could be that the quantity of municipal waste from municipal services (street and market cleaning, garden waste, litter containers etc) is relatively low. But the differences may also be explained by the share of responsibility that municipalities have in the collection of industrial waste.

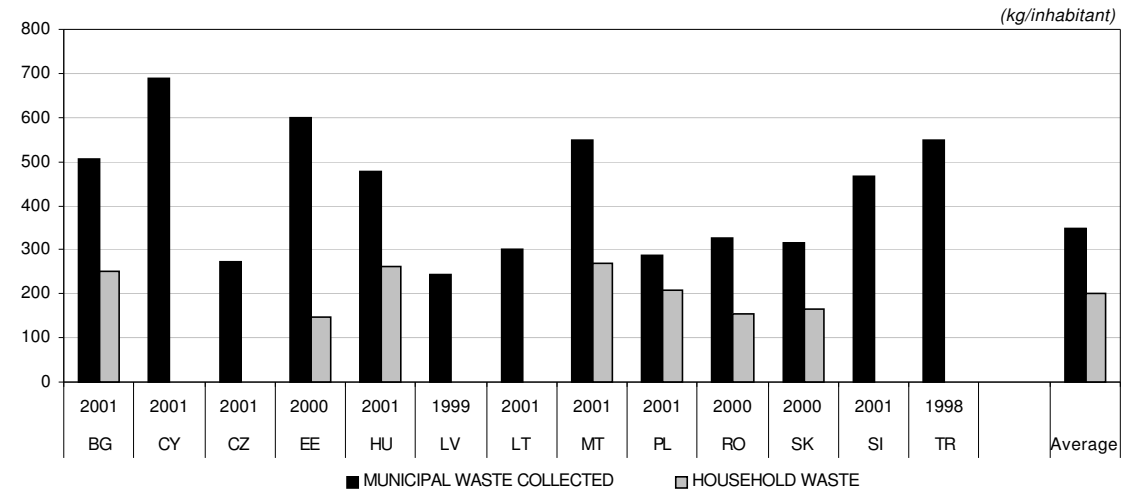
Figure 4.1: Municipal and household waste generated per capita, Western-Europe



Source: Eurostat/OECD

Compared to Western-European countries, municipal waste per capita is lower in the Candidate Countries; in most Eastern-European countries considered in **Figure 4.2,** municipal waste collected per habitant is somewhat or much lower than 400 kg. Cyprus has the highest municipal waste per capita: 689 kg. The share of household waste in municipal waste varies from a low 32% in Estonia to a high 72% in Poland.

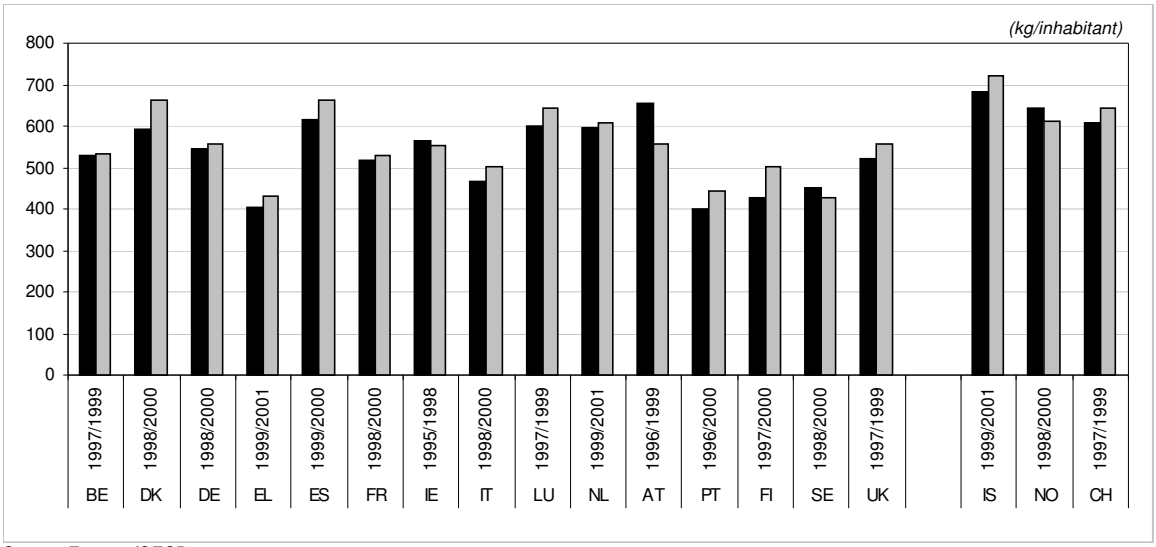
Figure 4.2: Municipal and household waste generated per capita, Candidate Countries



Source: Eurostat/OECD

Municipal waste per capita has been increasing for most Western European countries, as illustrated in **Figure 4.3**. It is to be noted that the time frame is not identical for all countries. In Ireland for example, a comparison over a 3-year period is made while in Spain the comparison is made over two consecutive years. Denmark, Spain and Finland show the highest annual increase of municipal waste collected per head (annual average over 5%). In Ireland, Austria and Sweden, municipal waste per inhabitant has been decreasing.

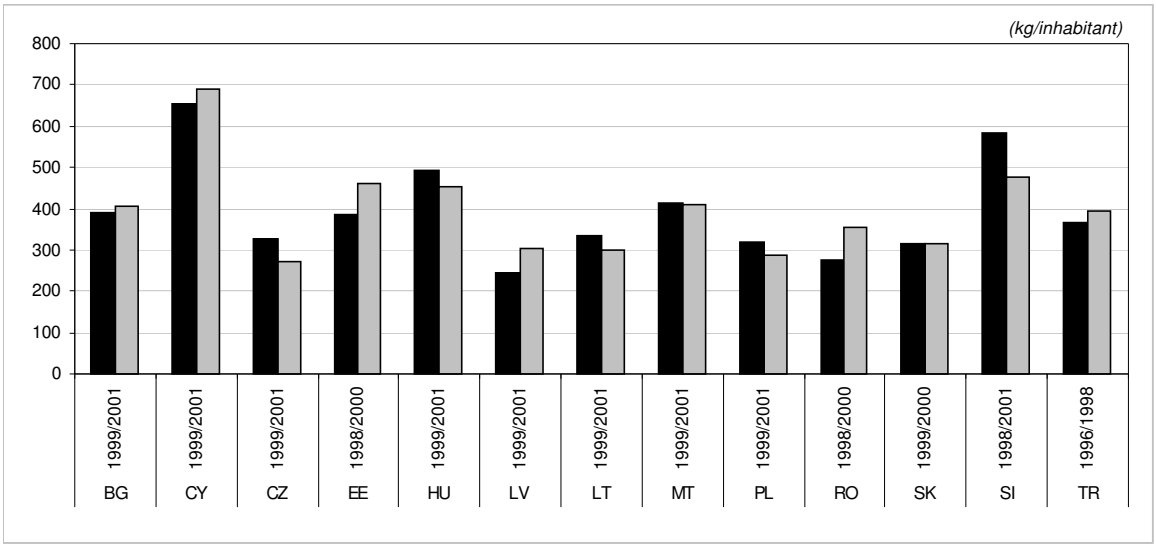
Figure 4.3: Municipal waste generated per capita by country in Western Europe - Latest evolution -



Source: Eurostat/OECD

In the Czech Republic, municipal waste has been decreasing from some 372 kg to 272 kg per inhabitant between 1999 and 2001, i.e. a decrease of some 9% per annum. In Hungary, Lithuania, Poland and Slovenia, the rate of decrease has been much lower, while the amount remained practically constant in Malta and Slovakia. Per capita, municipal waste has been increasing in Bulgaria, Cyprus, Estonia (9%), Latvia (12%), Romania (13%) an Turkey.

Figure 4.4: Municipal waste generated per capita by country in Candidate Countries - Latest evolution -



Source: Eurostat/OECD

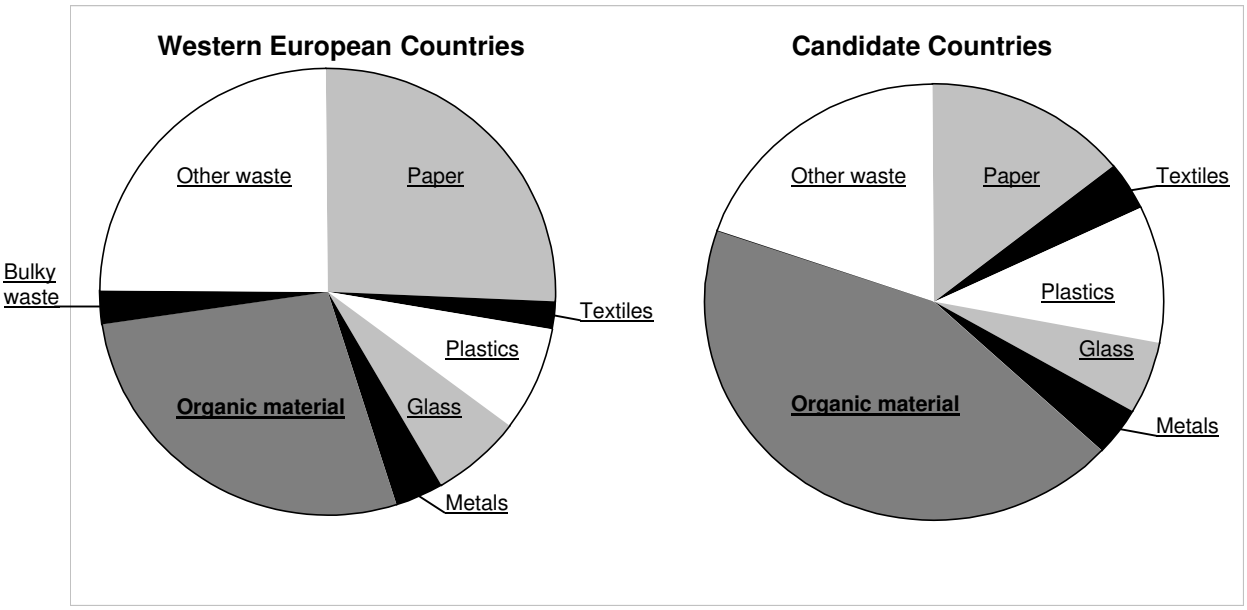
4.2 Composition of municipal waste

Data on the composition of municipal waste is presented in Table 7 of the statistical annexe. The composition of waste depends upon the consumption patterns for households waste and on industrial and economic structures for non-household waste. Table 7 provides data on the average composition of municipal waste expressed as the percentage contribution of various materials to total weight. The categories considered are the following:

- paper, paperboard and paper products,
- textiles
- plastics,
- glass,
- metals,
- organic material,
- bulky waste and
- other waste.

An analysis of the data shows that not only is data availability in general very poor but also there exists comparability problems. It is important to mention that the methodology may vary from country to country. Hence the method used to assess the weight of the various fractions may influence the statistics provided due to items containing a mixture of materials that may or may not be assigned to a single category. Furthermore, the percentages reported may not always refer to the total amount of municipal waste generated which should, but does not always, include all the waste fractions separately collected for recycling and recovery operations (through door to door collection and/or through voluntary deposits). Another issue that may be of importance is the humidity rate that can highly influence the weight of waste.

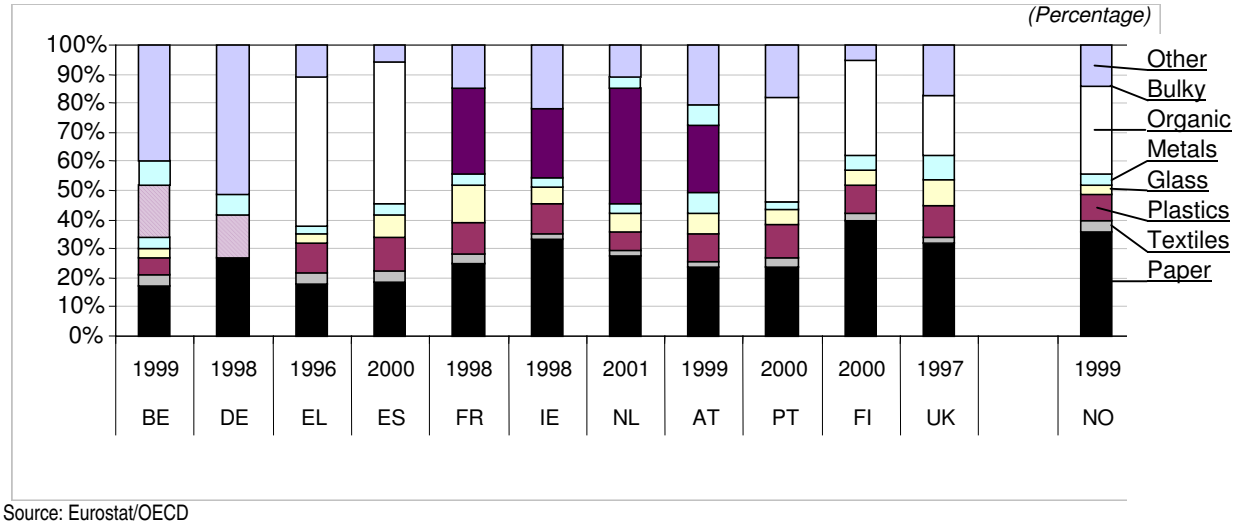
Figure 4.5: Composition of municipal waste



Source: Eurostat/OECD

On average for the countries selected, municipal waste (see **Figure 4.1**) consists mainly of organic materials, paper and other waste. The main difference between these two groups of countries lies in the share of paper and organic materials. In the first mentioned group of countries, municipal waste consist of almost a quarter of paper, paperboard and paper products, whereas in the other group this share is lower, standing at 14%. As for organic material, the proportion is higher in Candidate Countries (43%), compared to Western European countries (27%).

Figure 4.6: Composition of municipal waste, Western Europe

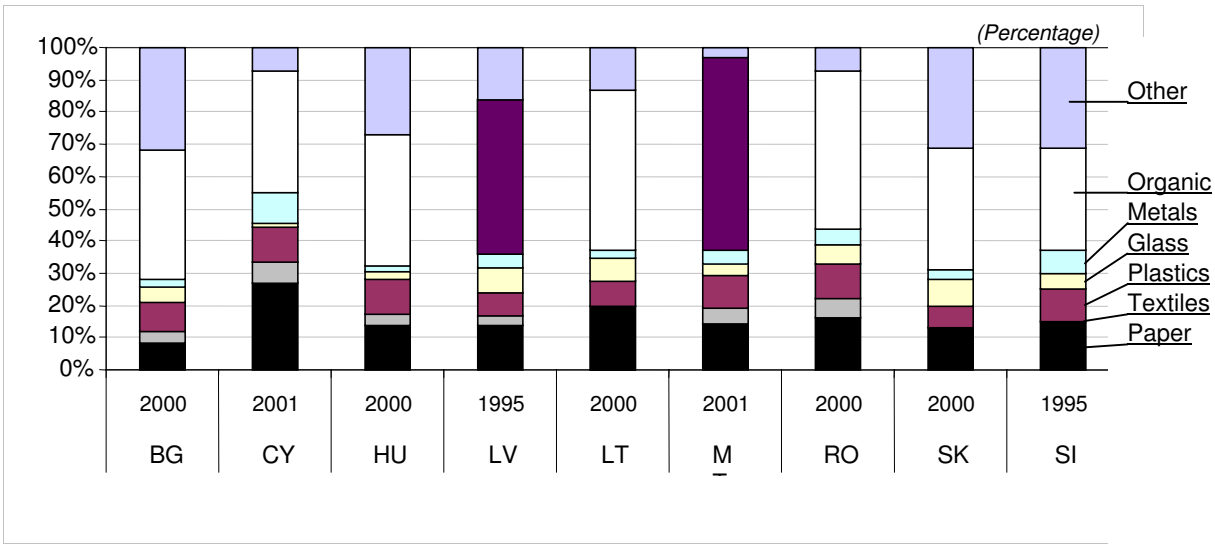


Source: Eurostat/OECD

At the country level, organic materials can represent half of the municipal waste such as in Greece and in Spain, but a much lower fraction in Belgium (18%). As for paper and paper products, its share varies between 17% (Belgium) and 40% (Finland). Plastics in municipal waste are not negligible. On average they stand for 7% of municipal waste.

The ranking of the different waste items for the Candidate Countries is similar to that of Western European Countries. Organic materials and paper products are the most two important components of municipal waste; the share of paper products is however lower (14%).

Figure 4.7: Composition of municipal waste, Candidate Countries

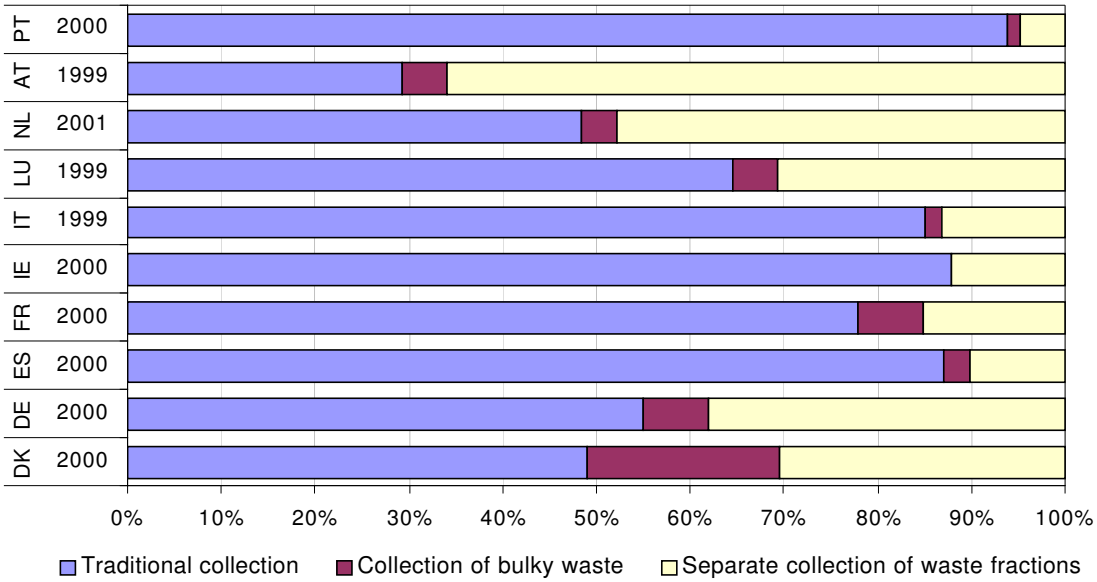


Source: Eurostat/OECD

4.3 Type of collection of municipal waste

There are three types of municipal waste collection that can be distinguished: traditional, separately collected and 'bulky' waste. 'Bulky' waste is defined as waste that, due to their bulky character, needs special considerations for its management.

Figure 4.8: Municipal waste by type of collection

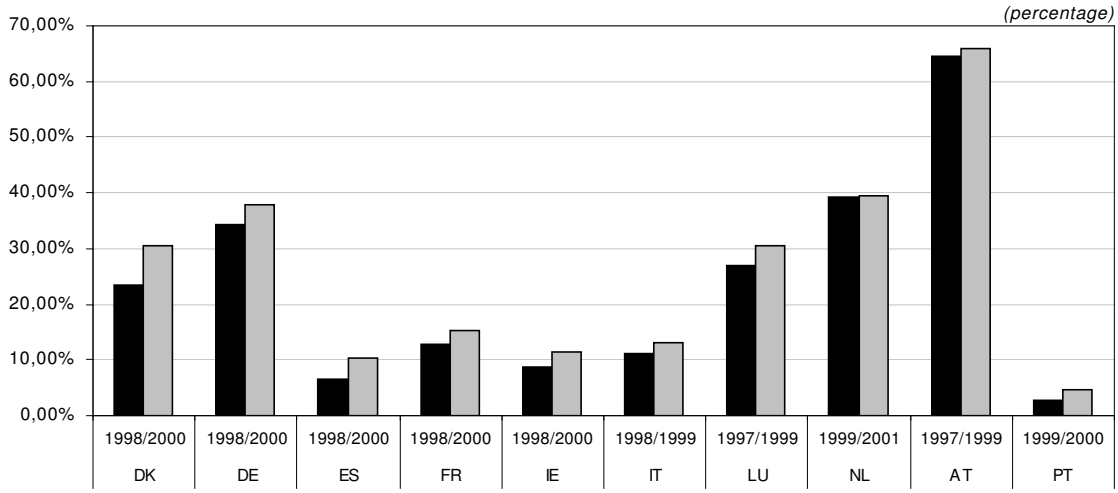


Source: Eurostat/OECD

Traditional collection of municipal waste is the dominating type. In **Figure 4.8**, describing the situation in nine countries where a full set of data is available, it can be seen that this kind of collection varies from 29% (Austria) to 94% (Portugal). Separate collection has a larger share than collection of bulky waste. Turning to separate collection of waste, it can be seen from **Figure 4.9** that countries are at large variance. Less than 5% of municipal waste is separately collected in Portugal (2000) as opposed to more than 65% in Austria (1999).

Spain, Ireland, Italy and Portugal gather 15% or much less of their municipal waste through separate collection. These countries can be opposed to Denmark, Germany, Luxembourg, the Netherlands or Austria where separate collection is much more widespread. In Austria, the share of separate collection is higher than that of traditional collection. Yearly comparisons show that separate collection has been increasing at a rapid pace in Portugal (circa 68% per annum) and Spain (circa 25% per annum).

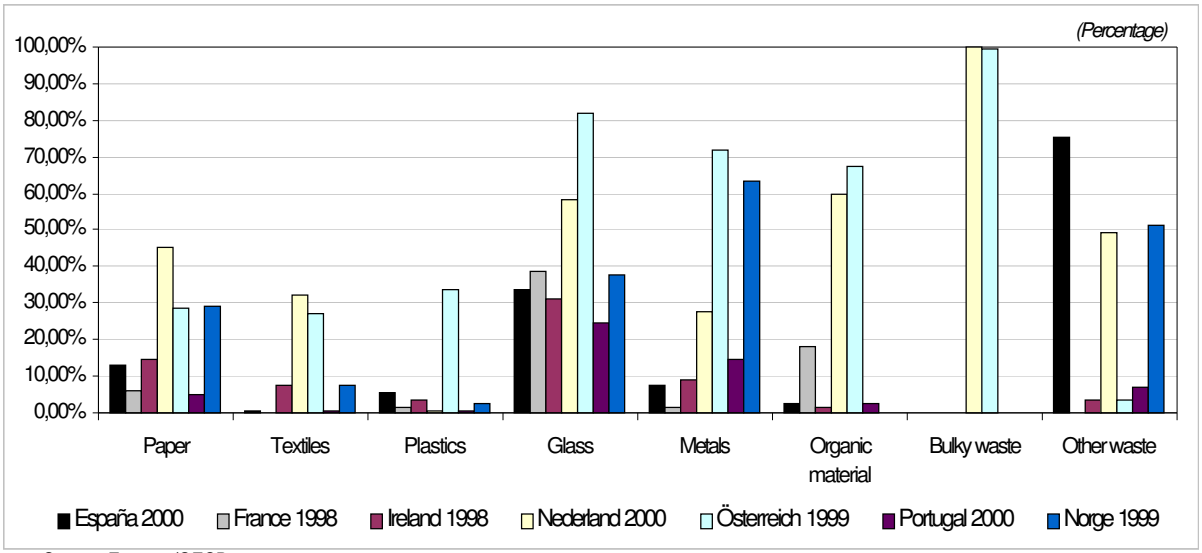
Figure 4.9: Separate collection of waste fractions, as a percentage of total municipal waste



Source: Eurostat/OECD

A global view of separate collection is not sufficient to assess the situation. As seen from **Figure 4.10,** the share of separate collection for each type of material is highly variable among countries.

Figure 4.10: Share of waste material in municipal waste collected separately, in percentage a country comparison



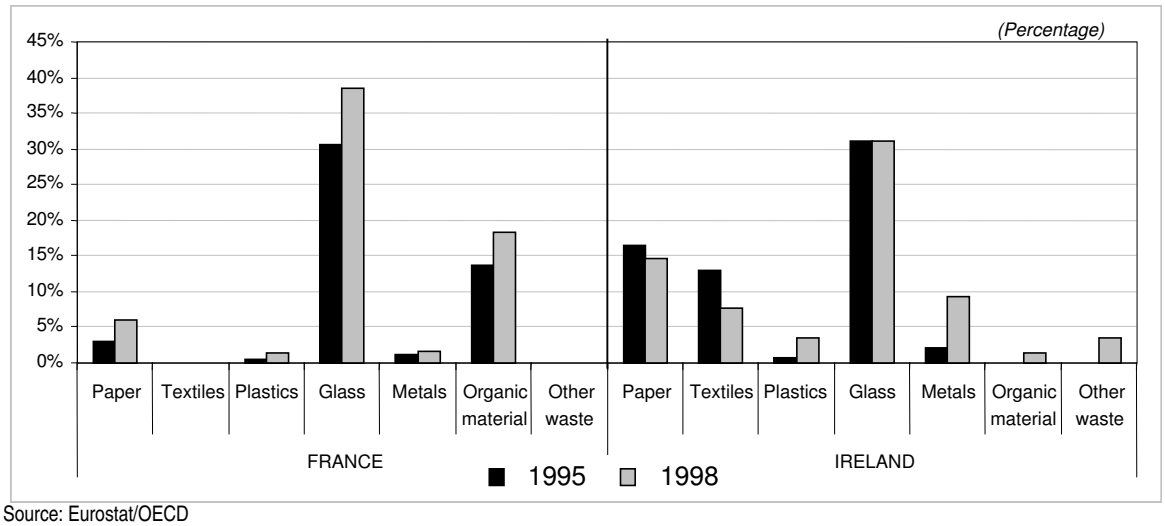
Source: Eurostat/OECD

When municipal waste is collected through separate collection, in general, the effort is not concentrated on a specific material but covers the whole range of materials, though at different degrees: for example, in Spain, France, Ireland and Norway, some one third of municipal waste made up of glass are collected separately, but the share fall to less than 10% for textiles and plastic.

The available data shows that glass seems to be the most common type of municipal waste to be collected separately.

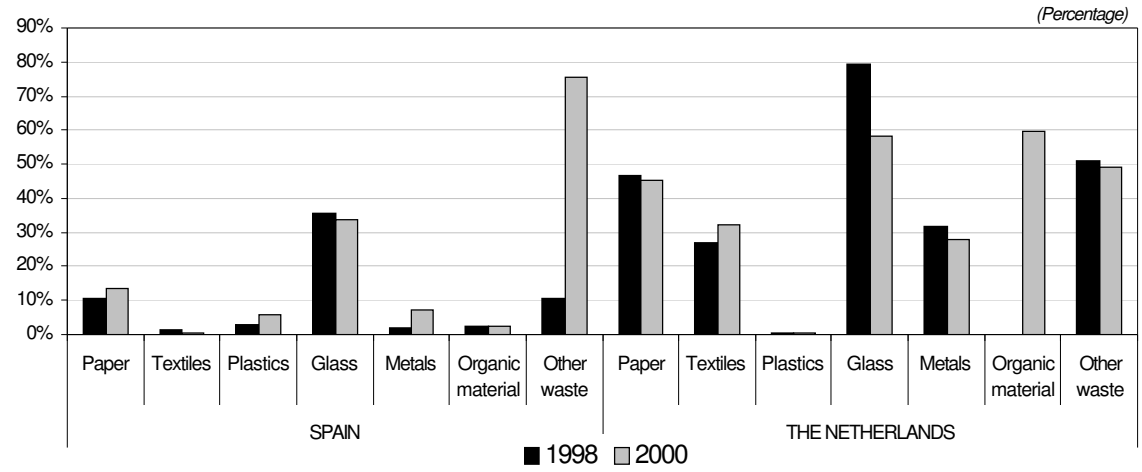
Time comparison analyses do not reveal any specific trends; this can be seen from the two charts below.

Figure 4.11: Share of waste material in municipal waste collected separately in percentage - A time comparison for France and Ireland -



Source: Eurostat/OECD

Figure 4.12: Share of waste material in municipal waste collected separately in percentage
- A time comparison for Spain and The Netherlands -



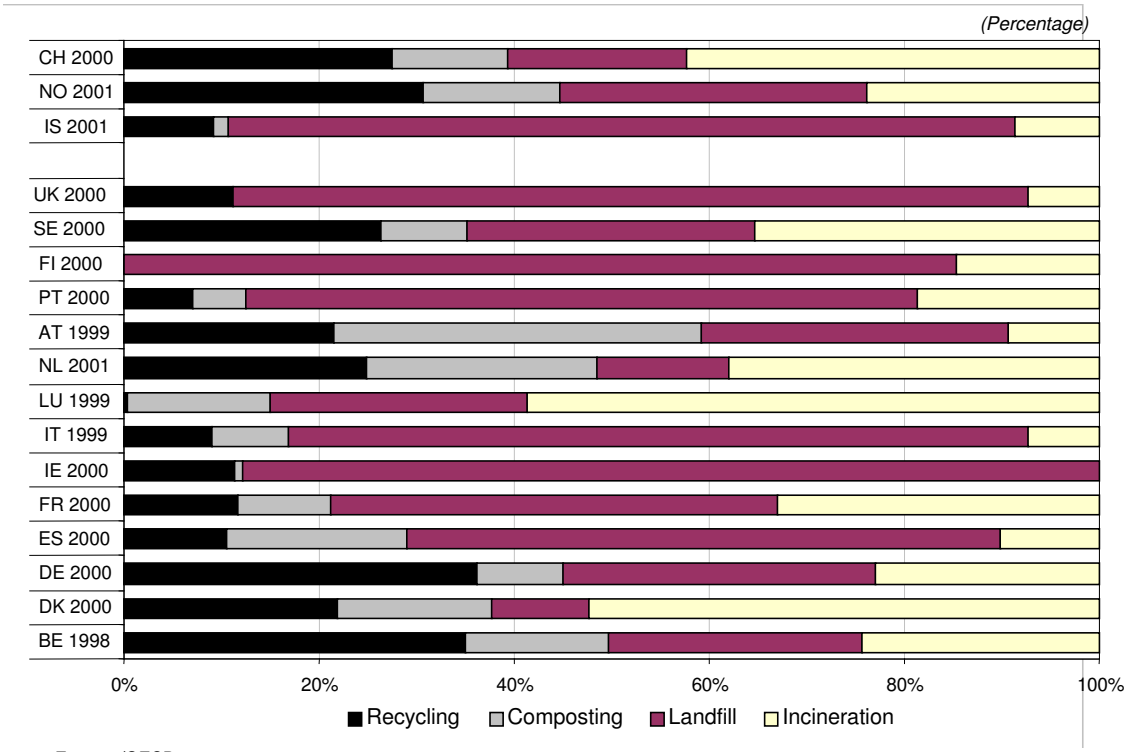
Source: Eurostat/OECD

4.4 Management of municipal waste: treatment and disposal

The purpose of waste management is to decrease the pressures on the environment. The policies adopted at Community level are guided by the Community Waste Management Strategy that aims at establishing an integrated waste management policy. Thus, the Strategy sets up a hierarchy of principles, giving top priority to the prevention of waste generation, followed by treatment methods such as recycling, re-use, composting or incineration (preferably combined with energy recovery), and landfill as the last resort.

The Eurostat/OECD questionnaire covers data on waste treatment and disposal. Detailed figures are presented in Table 6 for municipal waste while Table 15 focuses on non-hazardous waste. The municipal waste managed in the country sometimes differs from total amounts of municipal waste from Table 5; the difference lies in amounts imported and exported.

Figure 4.13: Treatment and disposal of municipal waste in Western Europe



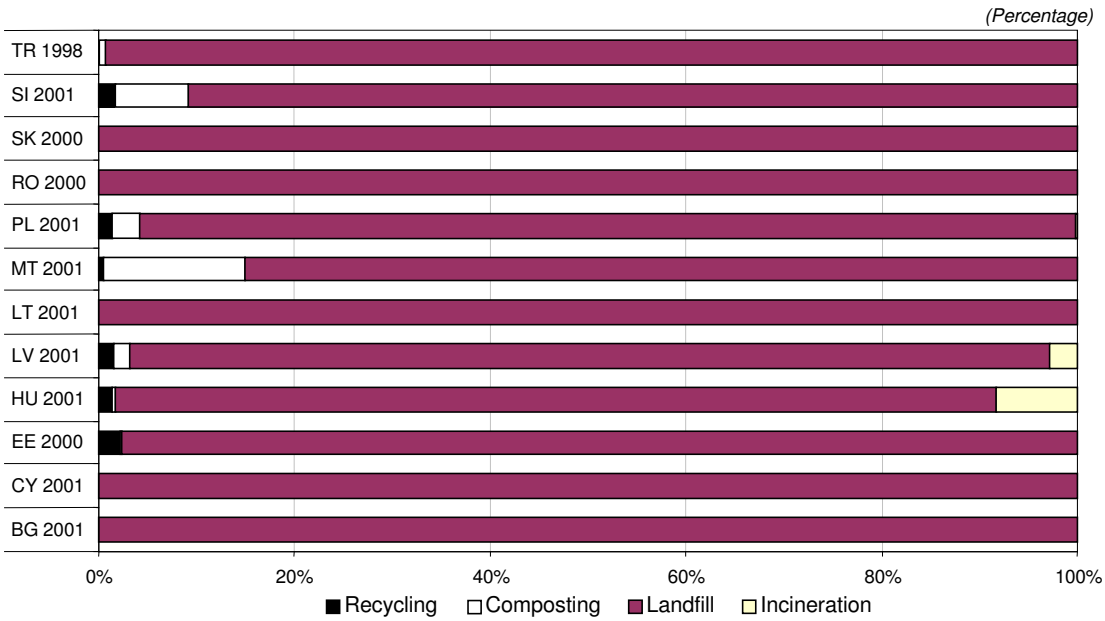
Source: Eurostat/OECD

In 9 out of 17 Western countries considered, landfilling is the dominating method of municipal waste management. The share of landfill in municipal waste managed can be as high as 85%, as in Ireland, Finland and Iceland. Landfilling causes a lot of environmental pressures: pollution of surface water and groundwater, contribution to the greenhouse effect by emission of methane, bad allocation of land use (including loss of natural areas). Despite all these pressures, landfill is widely used, probably because it is the cheapest option at the short term.

Incineration is however also largely used, particularly in Denmark and Luxembourg where it represents respectively 52% and 59% of total municipal waste managed. The share is also important, though to a much lesser extent, in France, Sweden, the Netherlands and Switzerland.

Regarding the Candidate Countries, the most remarkable feature is that landfill is the standard method for treatment and waste disposal. Apart from Malta, as shown in **Figure 4.14**, over 90% of municipal waste is managed by landfill. In Bulgaria, Cyprus, Lithuania, Romania and Slovakia, it is the only method used.

Figure 4.14: Treatment and disposal of municipal waste in Candidate Countries

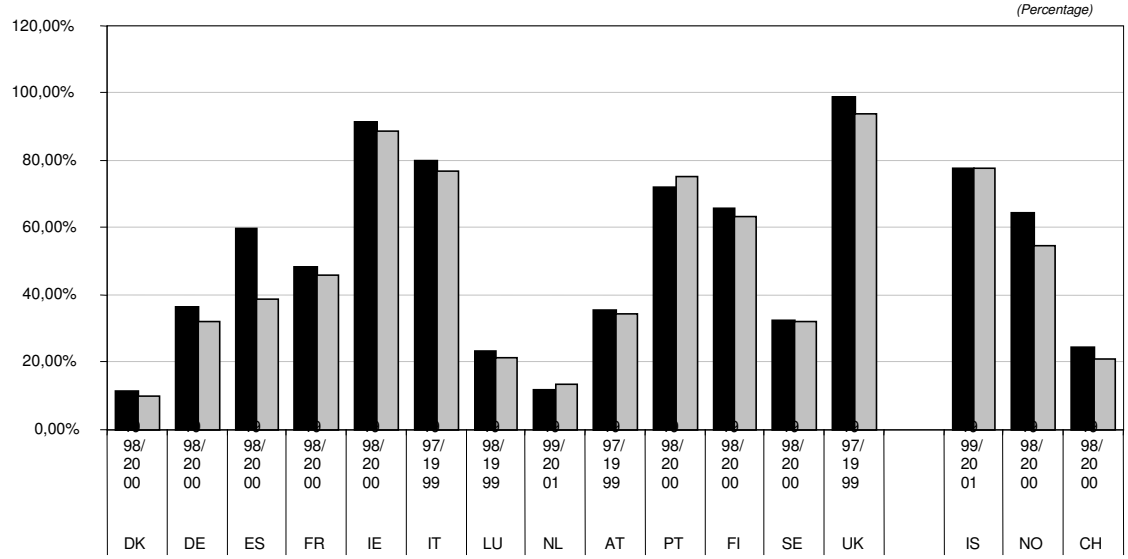


Source: Eurostat/OECD

The share of municipal waste managed through landfill is decreasing in Western Europe. This feature can be seen from **Figure 4.15** below for those countries where data are available. Neither the reference years nor the time span is identical for all the countries. Nevertheless, the general trend is to a decrease.

The decline is more important in Spain (about 20% per annum) but much less important for the other countries. In Sweden and Iceland, the decrease is relatively negligible while there has been an increase of landfill as a share of municipal waste managed in the Netherlands and Portugal.

Figure 4.15: Share of municipal waste disposed of through landfill, Western European countries



Source: Eurostat/OECD

Times series are available for nine Candidate Countries. The share of landfill in municipal waste managed is relatively stable, except for Malta (+5% annually from 1999 to 2001).

5 Hazardous waste

Main findings:

- **Circa 62 million tonnes of hazardous waste were generated per annum in Western Europe between 1997 and 2001 (estimation).**
- **15 million annual tonnes were generated in Candidate Countries in the same period.**
- **On average, in Western Europe, some 6 kg of hazardous waste were generated for every thousand Euro of value added produced.**

In recent years politicians and the public have become aware of the threats of hazardous waste to the environment and to the population due to the problem of contaminated sites and related health problems. Hazardous substances in waste, even in small quantities, can have a very negative impact on the environment. This section presents some quantitative information and trends on this topic. The figures are those reported by countries replying to the 2002 Eurostat/OECD questionnaire on Waste.

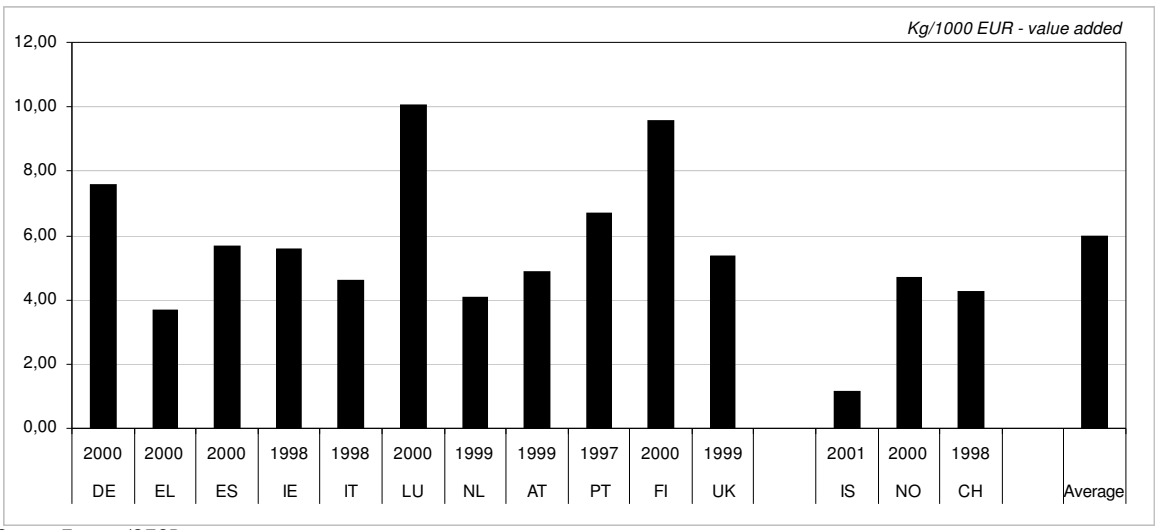
An estimated 47 million tonnes of yearly hazardous waste has been generated in Western Europe between 1997 and 2001. This figure is based partly on national data and partly on some estimation. In Candidate Countries, the volume of hazardous waste amounts to some 15 million tonnes.

In many countries national classifications and definitions are used; consequently, it is very difficult to draw valid comparisons between data from different countries as the classification systems can be quite different.

5.1 Generation of hazardous waste

The Eurostat/OECD questionnaire refers to the generation of hazardous waste as defined in the Basel Convention [9], i.e. 18 categories of waste streams to be controlled. If data according to the Basel definition are not available, data according to national definition are provided. In fact, Member States still report their hazardous waste generation mostly according to national specific classifications [10] The total amount of hazardous waste generated according to national classifications used by each country is presented in Table 8 of the statistical annex.

Figure 5.1: Hazardous waste generated by country, Western Europe – National classification –



Source: Eurostat/OECD

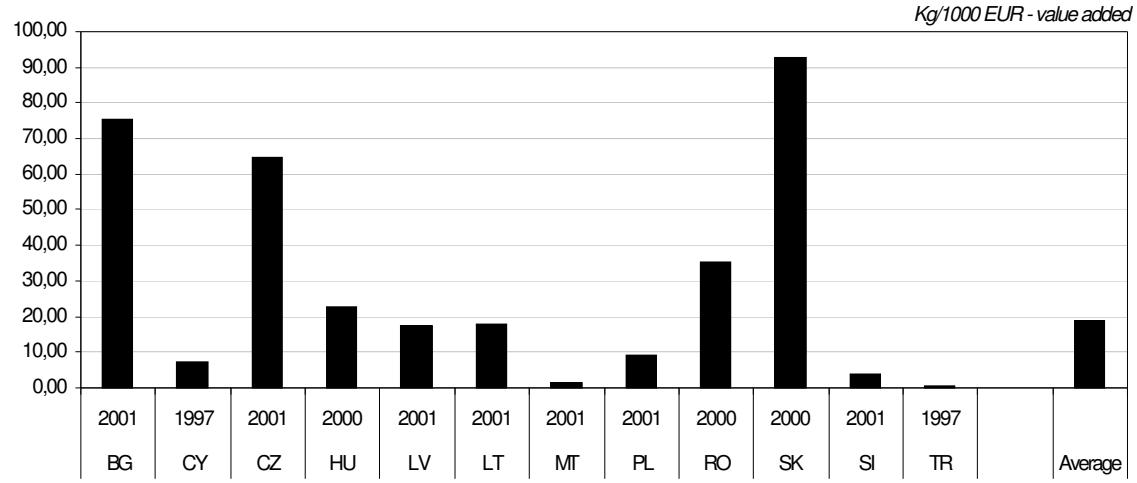
[9] Signed in 1989 under the auspices of UNEP (United Nations Environment Programme) to regulate the transboundary movements of hazardous wastes, it lays down categories of waste and defines a list of characteristics that render waste hazardous.

[10] Cf. "Hazardous waste generation in selected European countries, comparability of classification systems and quantities ETC/W", European Topic Centre on Waste (European Environment Agency), 1999

Luxembourg and Finland generate far more hazardous waste per 1000 Euro of GDP than any other Western-European country. For each 1000 Euro of value added, around 10 kg of hazardous waste are generated in these two mentioned countries. The volume of waste is much lower in Iceland (around 1 kg/1000 Euro of value added). On average, some 6 kg of hazardous waste are generated for every 1000 Euro of value added. As the data are based on national definitions, comparisons between countries are only indicative.

In terms of kg per 1000 Euro of value added, the generation of hazardous waste in the Candidate Countries is much higher than in Western-European countries. It is the highest in Estonia – not presented in the Figure 5.2 below - at 1 721 kg, but in this country, 90% of waste are oil shale residues from oil mining and processing. On average (Estonia excluded), some 19 Kg of hazardous waste are generated for every thousand Euro of added value. Cyprus, Malta, Slovenia and Turkey generate comparable volume of waste, in proportion of value added, as Western Europe.

Figure 5.2: Hazardous waste generated by country, Candidate Countries

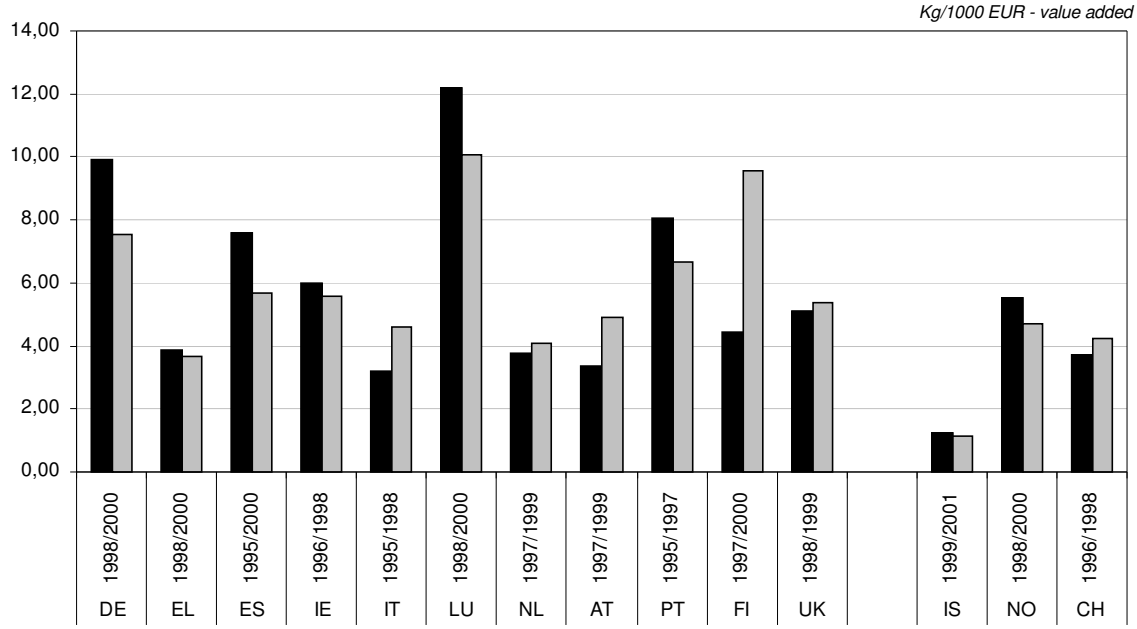


Source: Eurostat/OECD

In general, hazardous waste generated in Western-European countries has a tendency to increase (see Table 8). In terms of value added, hazardous waste has been increasing in Italy, the Netherlands, Austria, Finland, United Kingdom and Switzerland (see **Figure 5.2**).

In terms of total weight, the amount of hazardous waste has been increasing in Ireland; however compared to its gross domestic product, the generation of waste has been decreasing. This is due to the fact that the increase in value added has been carried out at a faster pace than the increase of hazardous waste.

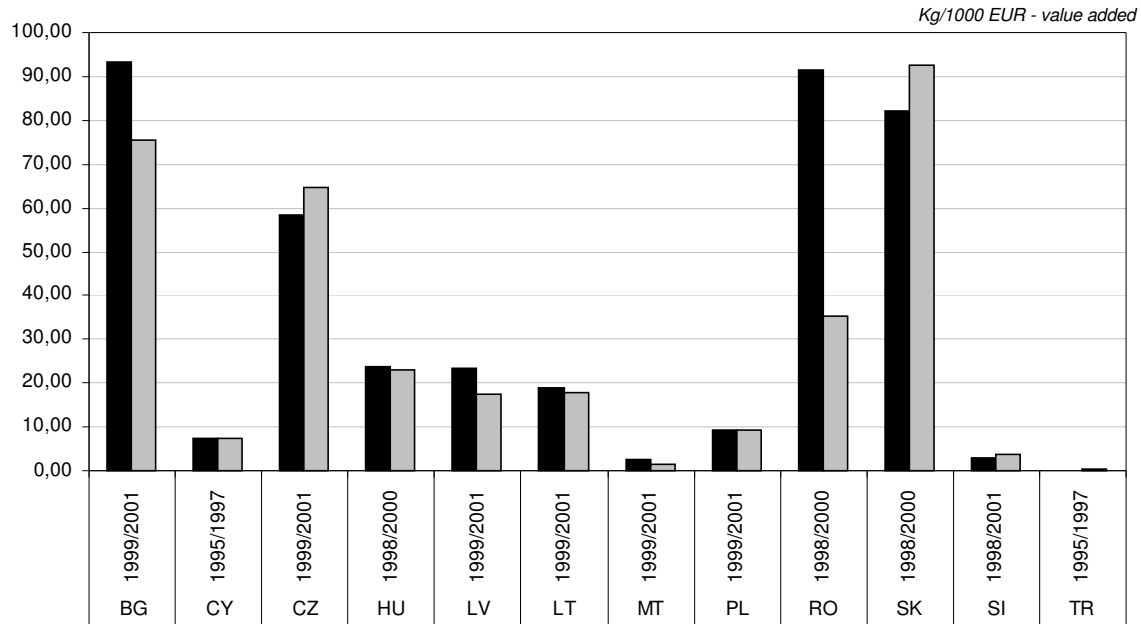
Figure 5.3: Hazardous waste generated by country, a time comparison, Western Europe



Source: Eurostat/OECD

The statistics reported by Candidate Countries shows large variation across time. As shown in **Figure 5.4,** in Bulgaria, Czech Republic, Romania and Slovakia, there is a sharp drop of hazardous waste generated per thousands of Euro of value added. It is not known whether these statistics describe the real situation or are a mere reflection of change in the national nomenclature for the list of hazardous waste.

Figure 5.4: Hazardous waste generated by country, a time comparison, Candidate Countries



Source: Eurostat/OECD

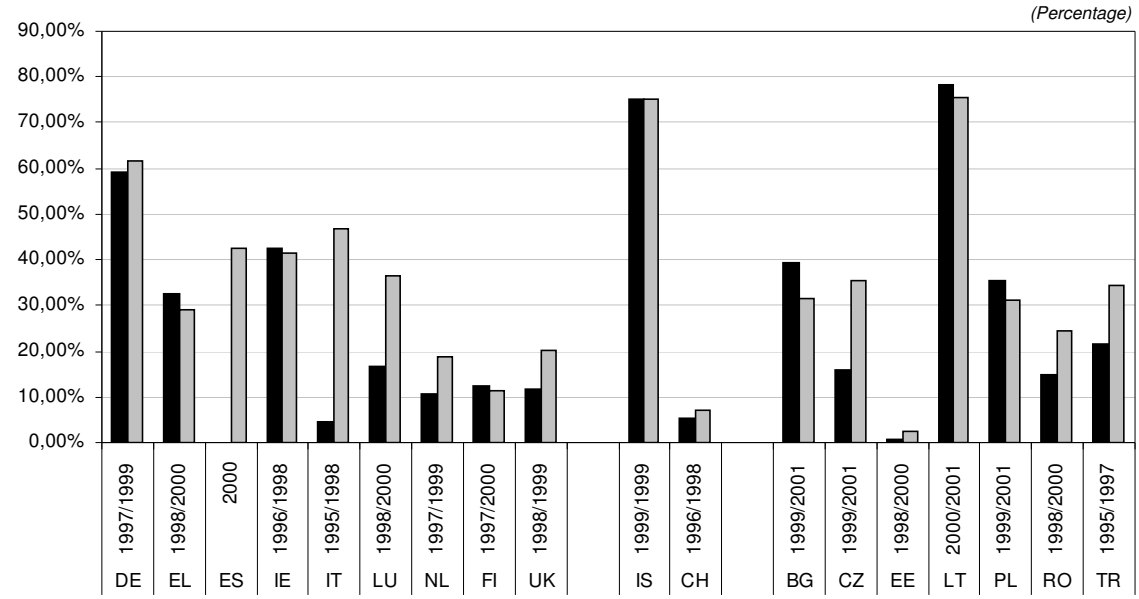
5.2 Management of hazardous waste: Treatment and disposal

The treatment and disposal operations presented in this publication refer to those listed in the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal. Countries have to report eleven operations, grouped under recovery and disposal operations. Nine main methods are presented in **Table 9**.

Recovery operations of hazardous waste

In general, recovery methods are operations enabling waste recovery without endangering human health or causing harm to the environment. Such operations are recycling/reclamation of metals and metal compounds, recycling/reclamation of other inorganic materials, solvent reclamation/regeneration, regeneration of acids or bases etc. In Germany and Iceland and to a lesser extent Spain, Ireland and Italy, a large part of hazardous waste is managed by recovery operations. These operations for the first two mentioned countries represent between 62% and 75% of hazardous waste managed. In the other Western-European countries where data is available, the share is much lower (see **Figure 5.5**).

Figure 5.5: Share of hazardous waste managed by recovery operations



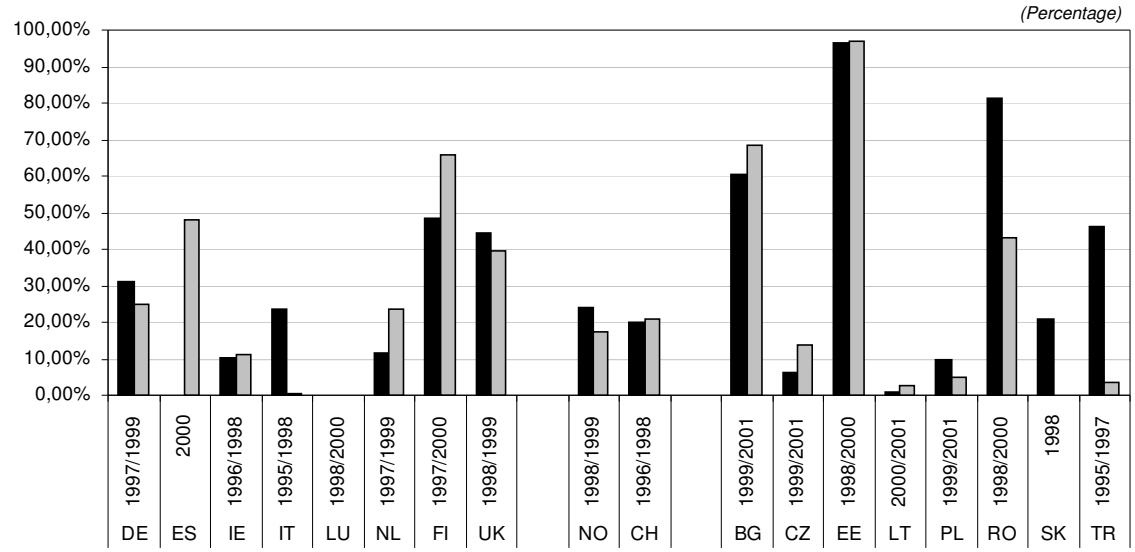
Source: Eurostat/OECD

In Candidate Countries, recovery operations are used for only a small part of hazardous waste, except in Lithuania in (75% in 2001), Bulgaria, the Czech Republic, Poland and Turkey.

Landfilling of hazardous waste

Disposal of waste by landfill, if not properly managed, can result in the leaching of toxic substances into soil and groundwater. The EU's 15 Member States have agreed that landfill is the option of last resort and should only be used when all possibilities of treatment have been exhausted. The amount of landfilled waste depends on national policy for waste management and on the role given to other possible actions (waste avoidance, recycling or incineration).

Figure 5.6: Share of hazardous waste landfilled



Source: Eurostat/OECD

Between 1997 and 2001, the amount of hazardous waste disposed by landfill has been in general increasing (see Table 9). In Spain, Finland, United Kingdom, Bulgaria, Estonia and Romania significant part of hazardous waste are disposed of by landfilling. In Finland and in Romania, this share amounted to more than 65% and is as high as 97% in Estonia.

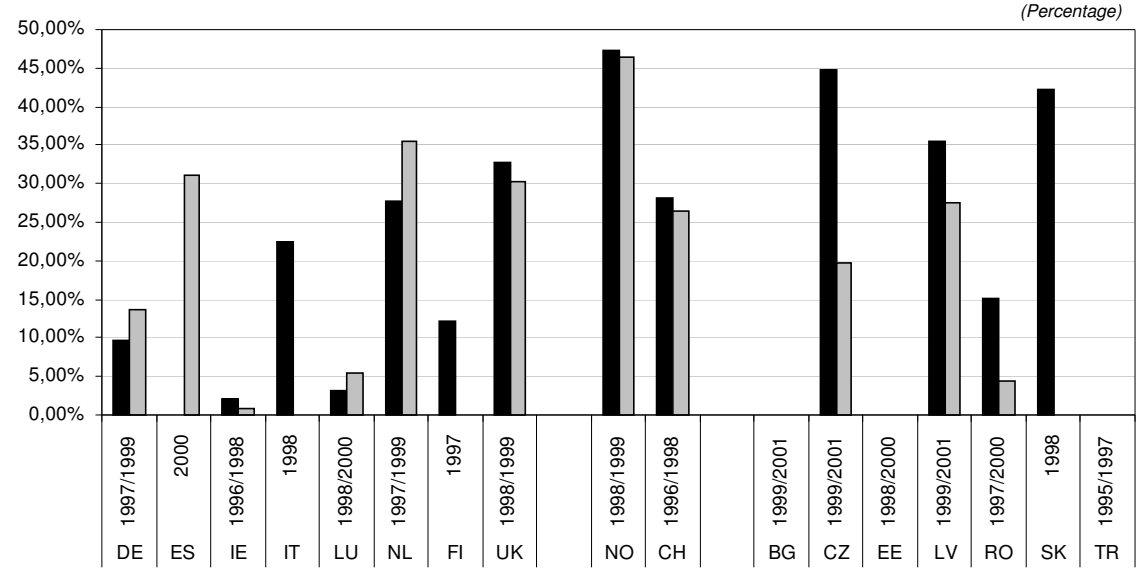
In those countries where data are available, landfilling – as a share of total hazardous waste – is decreasing in Denmark, Italy, United Kingdom, Norway, Turkey and particularly in Romania (halved between 1998 to 2000). However in the Netherlands, Finland, Bulgaria and the Czech Republic the proportion of landfill has been increasing significantly.

Physico/chemical treatment of hazardous waste

There are many possible ways of treating hazardous waste depending on the characteristics of the waste to be treated. Treatment may be chemical, physical or biological. Physical/chemical treatment can reach over 50% of hazardous waste such as in Norway in 1999 (see **Figure 5.7**) In the Netherlands, this form of treatment is developing at a rapid pace. In 1997, 27% of Dutch hazardous waste was disposed of through physico/chemical treatment, compared to 35% two years later. In the Czech Republic the share of hazardous waste undergoing physico/chemical treatment decreased to 50 % within two years.

However, in three countries, there has been a slight decrease in the use of physico/chemical treatment for hazardous waste, namely Ireland, United Kingdom and Switzerland.

Figure 5.7: Physico/chemical treatment of hazardous waste



Source: Eurostat/OECD

6 Recycling and Packaging

Main findings:

- **Around 18% of municipal waste collected in Western Europe have been collected for recycling**
- **The collection of waste for recycling from paper, paperboard and paper products as well as glass is increasing over the years**
- **On average, among four selected packaging waste streams (paper, glass, plastics and metals), paper packaging waste is dominating**

Waste management policy in the European Union follows a three options, hierarchically ordered strategy; primary emphasis is laid on waste prevention, followed by promotion of recovery (i.e. recycling, reuse and energy recovery) and lastly by disposal of waste. This policy relies strongly on the conservation principle, which means managing the production process in order to reduce the total amount of waste produced.

Recycling follows two principles. The first is the traditional type of recycling activity where material from goods that have reached the end of their life cycle are collected, sorted, and used to create alternative goods. The second type of recycling activity focuses on using waste materials as a fuel for renewable energy, especially for bio fuels projects.

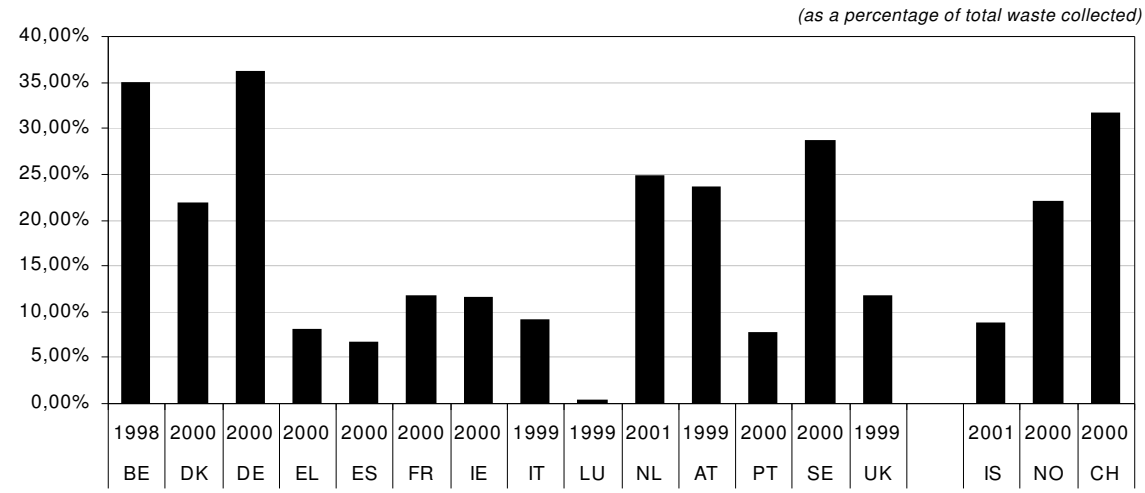
6.1 Recycling

Some 40 million tons of municipal waste in Western European countries have been collected for recycling; this represents approximately 18% of the total municipal waste. This crude estimation is based on data from the OECD/Eurostat questionnaire where recycling refers to any reprocessing of material in a production process that diverts it from the waste stream, except reuse as fuel. It is to be noted that both reprocessing as the same type of product, and of different purposes are included. Direct recycling within industrial plants at the place of generation is excluded.

The situation is however quite heterogeneous among countries (c.f. Figure 6.1). Around a third or more of the municipal waste collected in Belgium, Germany and Switzerland are for recycling; around a quarter in Denmark, the Netherlands, Austria, Sweden and Norway. This percentage is however relatively low (less than 10%) in Greece, Spain, Italy, Portugal and Iceland. In Luxembourg, the share refers to screens, TVs and refrigerators only.

Data for Candidate Countries are still scarce (see **Table 6**) and even crude estimations are not possible.

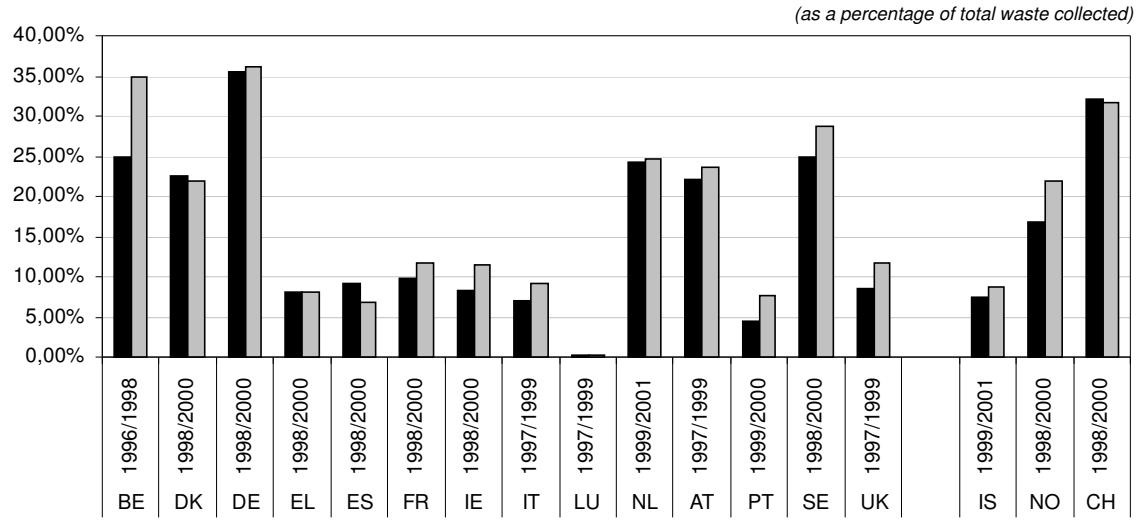
Figure 6.1: Share of municipal waste collected for recycling, Western European Countries



Luxembourg : data refers to screens, TVs and fridges
Source: Eurostat/OECD

In most countries, the situation is improving. A yearly comparison shows that, out of seventeen countries for which data is available, in thirteen countries the share of municipal waste collected for recycling has been increasing (see **Figure 6.2**). The biggest effort has been made in Portugal, with an increase of 73% over one year; the share was however relatively low as compared to other countries. Belgium and Ireland, with an annual average increase of circa 18% come second. In two countries, namely Denmark and Spain, the relative share of waste for recycling has decreased. It is to be noted that neither the reference years, nor the number of years between the two periods are identical.

Figure 6.2: Share of municipal waste collected for recycling, Western European countries
- Latest evolution -

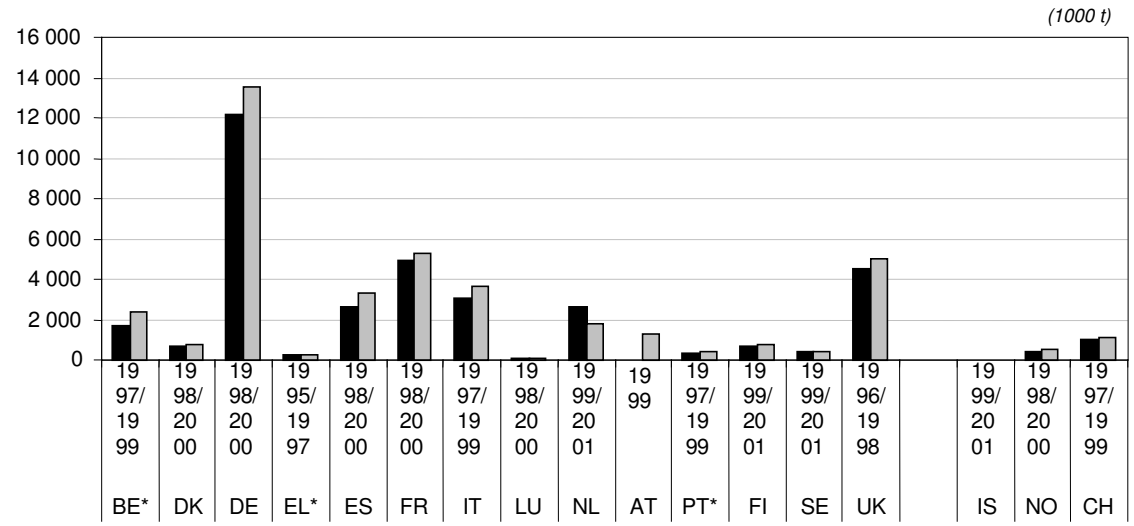


Source: Eurostat/OECD

Tables 12 and **13** in the annex present national data on waste generated, collected for recycling and recycled in the country for two different types of material, respectively paper, paperboard and paper products and glass. As it can be seen, the availability of data is quite scarce. For the sake of illustration, a temporal comparison is made for each waste stream.

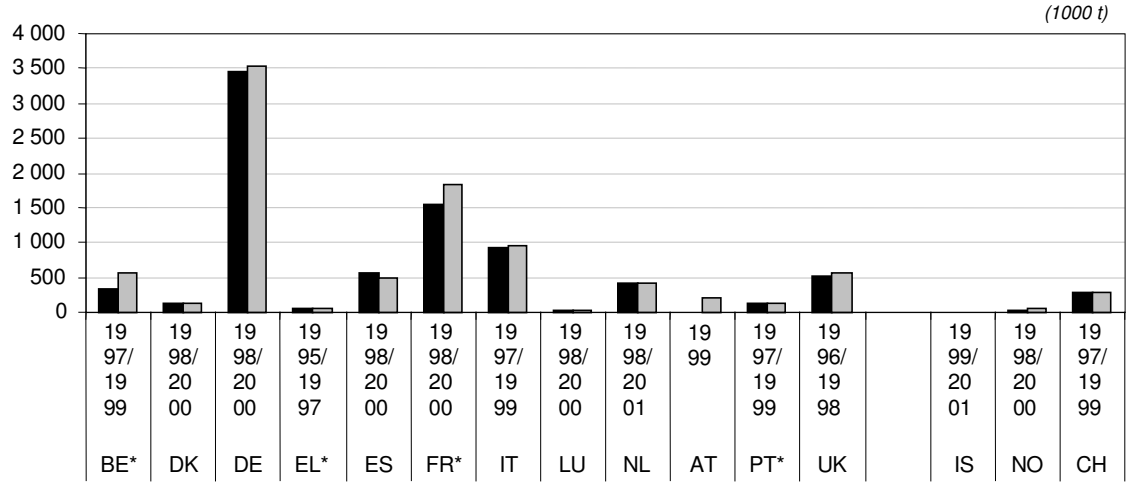
In general, the collection of those two waste streams for recycling is increasing as shown in **Figure 6.3** and **Figure 6.4.** To have a general overview of the situation, the data should be analysed in the light of the volume of waste generated for each waste stream; this information is however not available in many countries.

Figure 6.3: Paper, paperboard and paper products collected for recycling, Western European countries
- Latest evolution-



*: Refers to waste recycled in country and not waste collected for recycling
Source: Eurostat/OECD

Figure 6.4: Glass collected for recycling, Western European countries
- Latest evolution-



*: Refers to waste recycled in country and not waste collected for recycling
Source: Eurostat/OECD

6.2 Packaging

In 1994 a European Directive on packaging and packaging waste was adopted. It aims at the double objective of preventing or reducing the environmental impact caused by packaging and packaging waste, and ensuring the functioning of the internal market so as to avoid obstacles to trade, as well as distortion of or restriction to competition. With the implementation of the directive, numerous measures have been introduced in Member States to promote the prevention, re-use, recycling and recovery of packaging waste. Packaging relates to all products made of any material of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.

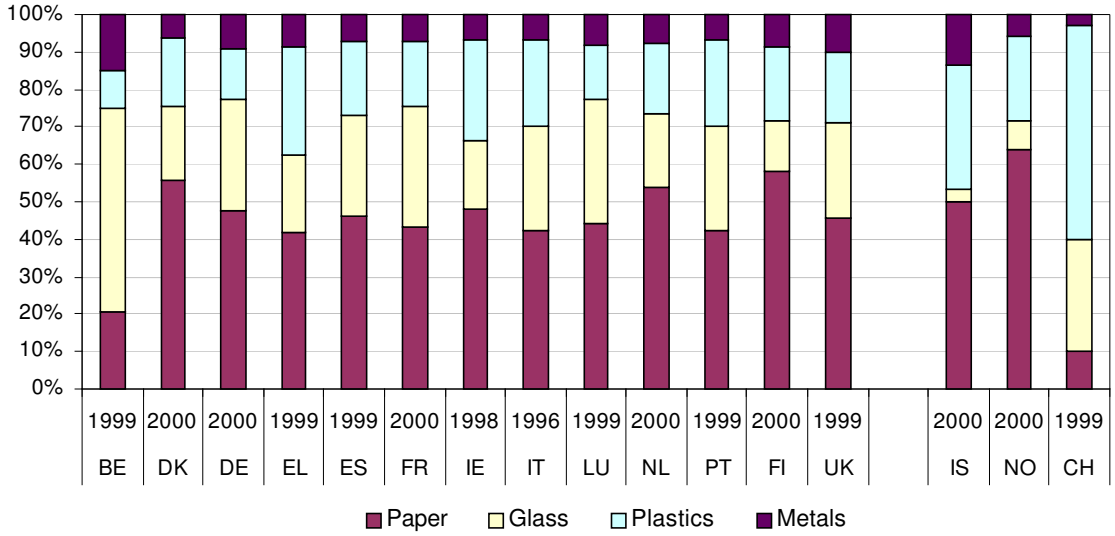
National data for waste packaging generated, collected and recycled are presented in Table 14 of the statistical annexe. The provision of data is too poor to make any valid comparison between the different Candidate Countries.

A relatively large share of paper and glass packaging generated are collected for recycling. Belgium performs well as far as glass packaging is concerned. Except for Switzerland, whenever data is available, it can be seen that the situation is not as good for plastic packaging.

There is a slight tendency for the proportion of collected packaging for recycling to increase across the years; the presented data are, however, too limited to confirm this trend and to generalise it to all the countries.

Comparing paper, glass, plastics and metals, in most of the countries (fourteen out of sixteen countries considered), paper packaging is the dominating generated material as shown in **Figure 6.5** below. This feature is particularly true in Denmark, the Netherlands, Finland, Iceland and Norway where paper packing represents over half of the packaging generated for the four selected streams. The situation is however different in Belgium and Switzerland where the share of paper packaging is respectively 20 and 10%.

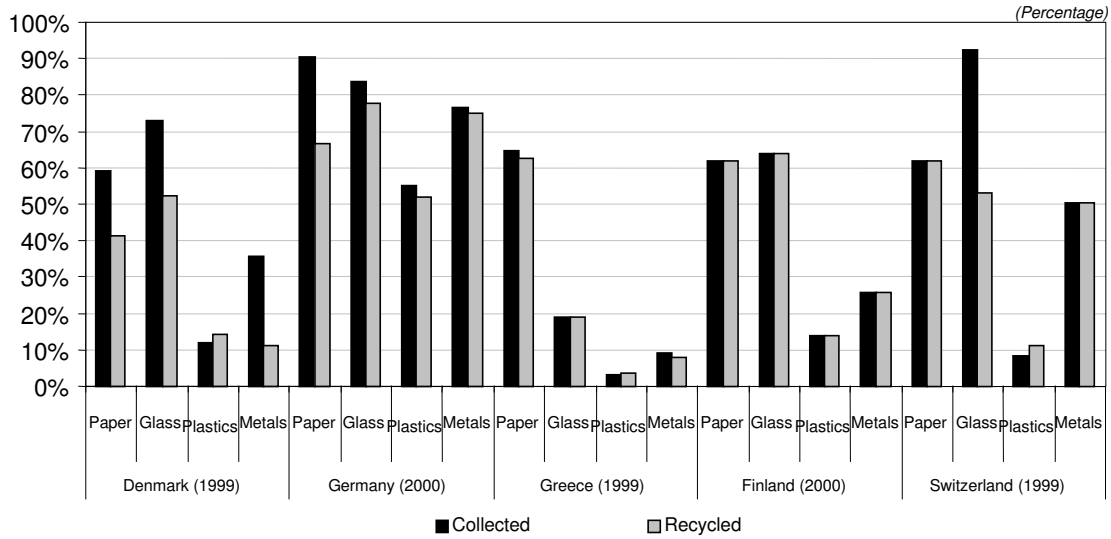
Figure 6.5: Generation of packaging waste by waste streams



Source: Eurostat/OECD

In Belgium, the highest share of waste packaging generated relates to glass (55%) while in Switzerland it is plastics (57%).

Figure 6.6: Waste packaging collected and recycled, as a share of waste generated



Source: Eurostat/OECD

Figure 6.6 depicts waste packaging collected and recycled in the country as a share of the waste generated. Data availability does not allow a comparison for all the countries. For the five countries considered, a large share of generated paper and glass waste packaging are collected (except for glass in Greece: 20%). The proportion varies between over 90% (paper in Germany and glass in Switzerland) to some 60% (paper in Denmark, without considering glass in Greece). The corresponding shares for plastics and metals packaging is lower, metals waste packaging representing 14% of the waste generated in Finland while plastics stands at 8% in Switzerland.

On average, the share of waste packaging recycled in the country is lower than the share of waste collected. This is particularly true for paper packaging in Denmark and in Germany, and for glass packaging in Denmark and in Switzerland. The picture is different for plastics in Switzerland.

In Germany, over half of the packaging waste generated are collected and recycled. The share for collection of packaging waste is as over 75 percent for paper, glass and metals and is lower for plastics (some 55%). In Finland and Greece, the share of collected and recycled plastics and metals packaging is fairly low and in Switzerland it is the case of plastics.

Annex

List of figures

List of tables

Community legislation

(Source: New Cronos, 25/06/2003, Environment and energy, domain MILIEU)

- Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils
- Council Directive 75/442/EEC of 15 July 1975 on waste
- Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry
- Council Recommendation 81/972/EEC of 3 December 1981 concerning reuse of waste paper and use of recycled paper
- Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture
- Council Directive 91/157/EEC of 18 March 1991 on batteries and accumulators containing certain dangerous substances
- Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC
- Council Directive 91/689/EEC of 12 December 1991 on hazardous waste
- Council Directive 91/692/EEC of 23 December 1991 standardising and rationalising reports on the implementation of certain Directives relating to the environment
- Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community
- Council Regulation (EEC) No 793/93 of 23 March 1993 on the evaluation and control of the risks of existing substances
- Commission Decision 94/3/EC of 20 December 1993 establishing a list of wastes pursuant to Article 1 (a) of Council Directive 75/442/EEC on waste
- Commission Decision 94/741/EC of 24 October 1994 concerning questionnaires for Member States reports on the implementation of certain Directives in the waste sector (implementation of Council Directive 91/692/EEC)
- Council Decision 94/904/EC of 22 December 1994 establishing a list of hazardous waste pursuant to Article 1 (4) of Council Directive 91/689/EEC on hazardous waste
- Council Directive 94/67/EC of 16 December 1994 on the incineration of hazardous waste
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste
- Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)
- Commission Decision 97/138/EC 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 (Text with EEA relevance)
- Commission Decision 97/622/EC of 27 May 1997 concerning questionnaires for Member States reports on the implementation of certain Directives in the waste sector (implementation of Council Directive 91/692/EEC)

- Council Decision 97/640/EC of 22 September 1997 on the approval, on behalf of the Community, of the amendment to the Convention on the control of transboundary movements of hazardous wastes and their disposal (Basel Convention), as laid down in Decision III/1 of the Conference of the Parties.

- Council Resolution of 24 February 1997 on a Community strategy for waste management

- Commission Decision 98/184/EC of 25 February 1998 concerning a questionnaire for Member States' reports on the implementation of Council Directive 94/67/EC on the incineration of hazardous waste (implementation of Council Directive 91/692/EEC) (Text with EEA relevance)

- Commission Decision 1999/177/EC of 8 February 1999 establishing the conditions for a derogation for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC on packaging and packaging waste (notified under document number C(1999)246) (Text with EEA relevance)

- Commission Decision 1999/412/EC of 3 June 1999 concerning a questionnaire for the reporting obligation of Member States pursuant to Article 41(2) of Council Regulation (EEC) No 259/93 (notified under document number C(1999)1456)

- Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste

- Council Regulation (EC) No 1547/1999 of 12 July 1999 determining the control procedures under Council Regulation (EEC) No 259/93 to apply to shipments of certain types of waste to certain countries to which OECD Decision C(92)39 final does not apply (Text with EEA relevance)

- Council and Parliament Directive 2000/76/EC on the incineration of waste

- Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (notified under document number C(2000) 1147) (Text with EEA relevance)

- Commission's proposal COM/2001/0137 final Amended proposal for a Regulation of the European Parliament and of the Council on waste statistics (presented by the Commission pursuant to Article 250 (2) of the EC-Treaty)

- Regulation (EC) No 2150/2002 of the European Parliament and of the Council of 25 November 2002 on waste statistics

Basel Convention, list of waste streams

The Eurostat/OECD questionnaire refers to the generation of hazardous waste as defined in the Basel Convention [11], i.e. 18 categories of waste streams to be controlled. These categories are:

- clinical wastes;
- wastes from the production of pharmaceutical products;
- waste pharmaceuticals, drugs, medicines;
- wastes from production of biocides and phytopharmaceuticals;
- wastes from the manufacture and used of wood preserving chemicals;
- wastes from the production and use of organic solvents;
- wastes from heat treatment and operations containing cyanides;
- waste mineral oils;
- waste oil emulsions, mixtures;
- waste containing PCBs, and/or PCTs, and/or PBBs;
- waste tarry residues from refining, distillation, and any pyrolytic treatment;
- wastes from production and use of inks, dyes, pigments, paints, lacquers, varnish;
- wastes from the production and use of resins, latex, plasticizers, glues,/adhesives;
- waste chemical substances (not identified and/or new) from R&D or teaching activities;
- waste of explosive nature, not subject to other legislation;
- waste from the production and use of photographic chemicals and processing materials;
- waste from surface treatment of metals and plastics;
- residues from industrial waste disposal operations.

[11] Signed in 1989 under the auspices of UNEP (United Nations Environment Programme) to regulate the transboundary movements of hazardous wastes, it lays down categories of waste and defines a list of characteristics which render waste hazardous.

"Environment 2010: Our future, Our choice"
Waste in the Sixth Environment Action Programme of the European Community

Objectives

- To de-couple the generation of waste from economic growth and achieve a significant overall reduction in the volumes of waste generated through improved waste prevention initiatives, better resource efficiency, and a shift to more sustainable consumption patterns;

For wastes that are still generated, to achieve a situation where:

- the wastes are non-hazardous or at least present only very low risks to the environment and our health;
- the majority of the wastes are either reintroduced into the economic cycle, especially by recycling, or are returned to the environment in a useful (e.g. composting) or harmless form;
- the quantities of waste that still need to go to final disposal are reduced to an absolute minimum and are safely destroyed or disposed of.
- Waste is treated as closely as possible to where it is generated.

Targets

Within a general strategy of waste prevention and increased recycling, to achieve in the lifetime of the programme a significant reduction in the quantity of waste going to final disposal and in the volumes of hazardous waste generated.

- Reduce the quantity of waste going to final disposal by around 20% by 2010 compared to 2000, and in the order of 50% by 2050;
- Reduce the volumes of hazardous waste generated by around 20% by 2010 compared to 2000 and in the order of 50% by 2020

Policy approach

The Community's approach to waste management policy is based on the guiding principle of the waste hierarchy which gives preference first to waste prevention, then to waste recovery (which includes reuse, recycling and energy recovery, with preference being given to material recovery), and lastly to waste disposal (which includes incineration without energy recovery and landfilling). The current architecture of Community waste policy and legislation comprises three main elements:

- framework legislation on waste definitions, site permitting, waste shipments controls, etc;
- legislation governing the operating standards of waste facilities such as landfills and incinerators;
- legislation targeted at specific priority waste streams such as end-of-life vehicles with the primary aim of increasing recovery, and in particular recycling levels and reducing the hazardousness of these wastes.

Actions

- Integrate waste prevention objectives and criteria into the Community's Integrated Product Policy and the Community strategy on Chemicals.
- Revised Directive on sludges
- Recommendation on construction and demolitions wastes
- Legislative initiative on biodegradable wastes.
- A Thematic Strategy on waste recycling to include the following types of actions:
    - Identify which wastes should be recycled as a priority, based on criteria which are linked to the resource management priorities, to the results of analyses that identify where recycling produces an obvious net environmental benefit, and to the ease and cost of recycling the wastes
    - Formulate policies and measures that ensure the collection and recycling of these priority waste streams occurs, including indicative recycling targets and monitoring systems to track and compare progress by Member States

Identify policies and instruments to encourage the creation of markets for recycled materials.

Main elements of the EU Waste Management Strategy

Strategy	Legal action in force	Considered legal and political action
Prevent waste generation and reduce its hazardous content Hierarchy of principles: prevention material recovery energy recovery safe disposal	Treaty, Art. 130R Member States are required to: • encourage firstly, the prevention or reduction of waste, secondly the recovery of waste by means of recycling, re-use or the use of waste as a source of energy (Framework Dir, Art 3) • ensure that waste is recovered or disposed of safely, and prohibit the dumping or uncontrolled disposal of waste (Framework Directive, Art. 4) • draw up waste management plans (Framework Directive, Art. 7)	Possible proposals to set quantitative targets for reducing and recovering waste (COM(96) 399)
Prevention of waste generation	Community Regulations on eco-audit and eco-labels (Regulation 1836/93 and 880/92) Member States required to take measures to prevent generation of packaging waste, limit the heavy metal content of packaging, and inform consumers (Directive 94/62, Art. 4, 11 and 13)	In particular cases EU-wide rules to limit or ban the presence of heavy metals or specific substances in products to prevent hazardous waste to generate (COM (96) 399) Integrate the principle of producer responsibility in all future measures on a case-by-case basis (COM (96) 399) Improve environmental dimensions of technical standards (Council Resolution 97/C76/o1)
Prevention of impact on environment Prevent the negative impact on the environment	Member States required to take measures: • to reduce the heavy-metal content of batteries and accumulators, ensure separate collection, inform consumers, and prohibit marketing of certain batteries (Directive 91/157) • to collect and dispose of waste oils safely and prohibit and discharge of waste oils into inland surface waters, groundwaters, etc. (Directive 75/439, Art 2. and 4) • for the use of sewage sludge in agriculture in order to prevent harmful effects on soil, vegetation, animals and man (Directive 86/278) • to implement common emission standards and operation criteria for incinerators for MSW and hazardous waste (Directive 89/369 and 94/67)	Proposed specific requirements for Member States to ensure that measures aiming at reducing the negative impact on the environment from end-of-life vehicles are implemented (Com(97) 358) Proposed directive on landfills setting minimum technical and administrative standards for landfills (Com (97) 105)
Recovery Where generation of waste cannot be avoided, waste shall be re-used or recovered for its material or energy. Where environmentally sound, re-use shall be further encouraged in order to avoid generation. Preference to be given to recovery of materials over energy recovery operations.	Specific requirements for Member States to: • encourage re-use systems of packaging, to take the necessary measures in order to attain certain targets of recovery and recycling of packaging, and to ensure that systems are set up to provide for the return and/or collection of packaging waste (Directive 94/62, Art. 5-7) • to give priority to the processing of waste oils by regeneration (Directive 75/439, Art. 3)	Consider EU quality requirements to define when a given incineration operation is a recovery or a disposal operation (COM (96) 399) Proposed specific targets of re-use, recycling and recovery for end-of-life vehicles, and demands for establishing systems for the collection of all ELVs (COM (97) 358) Development of a recycling industry based on modern technologies and methods and promote recyclability of materials and products (COM (98) 463)
Final disposal Avoidance of incineration without energy recovery and landfilling Incineration with energy recovery to be promoted for all incineration installations, leaving landfilling in principle as the last solution. In the mid-term, only non-recoverable and inert waste to be accepted in landfills	• Disposal costs must be borne by the producer of the waste (Framework Directive, Art. 15) • Member States required to make appropriate measures to: o establish an integrated and adequate network of disposal installations (Framework Directive, Art. 5) o dispose of batteries and accumulators containing dangerous substances separately (Directive 91/157, Art. 6) o ensure safe combustion of waste oils, and where neither regeneration nor combustion is feasible, to ensure safe destruction or controlled storage or tipping (Directive 75/439, Art.4) o prohibit the uncontrolled discharge, dumping and tipping of PCBs/PCTs, making environmentally safe disposal compulsor (Directive 96/59)	Proposed requirement for Member States to ensure that all costs are covered by the price to be charged by the operator for the disposal of any type of waste in that site and to set up a national strategy for reduction of biodegradable waste going to landfills ensuring certain targets to be met (COM (97) 107) Encourage Member States to make serious efforts to prevent and to minimise quantities of waste that go to landfills, and in the long run to ensure that the price of disposal is make more transparent (CPM (96 399)

Strategy	Legal action in force	Considered legal and political action
Shipment of waste: the principle of self-sufficiency aims at avoiding shipments for disposal between Member States, while shipments for recovery are mainly submitted to the principles of the internal market	Requirements on notifications procedures (Regulation 259/93)	Increase approximations of standards in order to establish common environmental standards for recovery operations (COM (96) 399) Concern of large-scale movements within the Community of waste for incineration with or without energy recovery (Council Resolution 97/C76/01)

Source: Environment in the European Union at the turn of the century, European Environment Agency

Abbreviations and symbols

Western Europe	EU-15, Iceland, Norway and Switzerland
EU-15	Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom
Candidate Countries	Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, Turkey
NACE	General industrial Classification of Economic Activities within the European Communities
OECD	Organisation for Economic Co-operation and Development
Eurostat	Statistical Office of the European Communities
EU	European Union

Western European Countries

BE	Belgium
DK	Denmark
DE	Germany
EL	Greece
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
IS	Iceland
NO	Norway
CH	Switzerland

Candidate Countries

BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
LV	Latvia
LT	Lithuania
MT	Malta
PL	Poland
RO	Romania
SK	Slovakia
SI	Slovenia
TR	Turkey

Table 1: Total amount of waste generated (1 000 t)

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
B	Belgique/België			35.387 c)f)	34.475 c)f)	33.106 c)f)	34.852 c)f)						
DK	Danmark					11.105 d)	11.466 d)	12.912 d)	12.857 d)	12.233 d)	12.233	13.031 d)	
D	Deutschland							391.472 e)	399.469	401.188 w)	408.675 x)	405.049 y)	
EL	Ellada							33.130 l)					
E	España												
F	France				138.700 k)		130.057				128.506		
IRL	Ireland						41.020 l)			58.410 l)			
I	Italia								87.293	72.750 r)			
L	Luxembourg										6.934		
NL	Nederland							34.943 l)		39.214 l)			
A	Österreich							45.600 p)			48.600 q)		
P	Portugal									22.359			
FIN	Suomi / Finland												
S	Sverige				64.190 k)					87.600 m)			
UK	United Kingdom									424.704 v)			
BG	Balgarija							179.664	235.395	222.182 u)	178.775 u)	96.411 u)	90.364 u)
CY	Cyprus												
CZ	Ceska Republika						32.522 b)	41.149 b)	42.643 b)	47.139 i)	41.453	43.597	45.453
EE	Eesti						14.196	14.687	14.398	12.984	10.848	11.616	
HU	Magyarorszag	103.790 l)				65.450 k)	84.442 l)	70.514 l)	79.256 l)	79.980 l)			
LT	Lietuva												
LV	Latvija												1.186
MT	Malta	1.799	1.792	2.694	1.328	1.590	1.515	1.555	999	954	1.148	1.056	1.126
PL	Polska	154.959 n)	138.969 a)	132.486 a)	131.129 a)	131.908 a)	133.647 n)	136.166 n)	136.652 n)	144.931 n)o)	138.572 n)o)	137.710 n)o)	134.919 n)o)
RO	Romania						352.087	117.986	216.337	83.164	80.160	55.832	
SK	Slovenska Republika						25.668 j)	20.200 j)		19.800 j)	19.600	16.000	
SL	Slovenija						2.659 h)			4.543			
TR	Turkey					28.280 z)	44.512 aa)	48.839 aa)	59.237 aa)	37.143 ab)			
BA	Bosnia and Herzegovina												
HR	Croatia										6.356	4.300	
MK	Macedonia (Former Yugoslav Republic of)						620 t)			635 t)			
YU	Yugoslavia												
IS	Island			203	206	209	212	216	223	231	241	252	262 s)
NO	Norge				6.428 g)	6.551 g)	7.451 g)ac) ad)ae) af)	7.529 g)ac) ad)ae) af)	7.887 g)ac) ad)ae) af)	8.265 g)ac) ad)ae) af)	8.291 g)ac) ad)ae) af)	8.517 g)ac) ad)ae) af)ag)	
CH	Schweiz/Suisse/Svizzera												

Table 1: Total amount of waste generated (1 000 t)

FOOTNOTES

a) Excludes agriculture
b) Hazardous and special waste only
c) NSI estimate
d) Includes waste from manufacturing industry, energy production, construction, sewage and refuse disposal, other sectors and household waste (municipal waste from institutions, commerce and businesses is included in other sectors)
e) Break in time series due to new methodologies
f) Not validated by the Belgium regional authorities
g) Soil, gravel, stone etc. not included but includes sewage sludge and only selected parts of agricultural and mining and quarrying wastes
h) Excludes municipal waste reported by enterprises authorised for collection and treatment of municipal waste
i) A new law about Waste Act No. 125/1997 Coll. and new Catalogue of waste came into force with effect from Jan.1st 1998
j) Municipal waste generated
k) Estimate
l) Data according to a new waste classification based on EWC
m) It does not include construction and demolition waste
n) The data represent "Total quantity of waste in the Republic of Macedonia from buildings" (industrial and other waste are not included) by public enterprises. Other data are not collected.
o) Preliminary data
p) Includes manufacturing industry waste and municipal waste
q) Excludes agriculture and forestry, water purification and distribution and construction waste
r) Includes energy production waste and municipal waste
s) Excludes dismantled ships larger than 100 GT and off-shore installations
t) Excludes infectious waste, nuclear waste and explosives
u) Includes end-of-life vehicles
v) Excludes waste from harvesting brought directly back into the biosphere, i.e. fish waste dumped in the oceans, waste from timber logging left behind in the logged area, manure etc.
w) Includes 0.9 million tonnes from service industries (incl. end-of-life vehicles and sewage sludge) and 1.7 million tonnes of waste not allocated to any industry

Table 2: Waste generated by economic sector (1000 t)

		Agriculture and forestry	Mining and quarrying	Manufacturing industry	Energy Production	Water Purification & Distribution	Construction	Sewage and refuse disposal	Municipal waste	Other
Belgique/België	1980	:	:	:	:	:	:	:	3.499 a)	:
	1991	:	:	:	:	:	:	:	4.294 a)	:
	1992	:	721 a)	13.989 a)	:	:	:	:	4.448 a)	:
	1993	:	:	12.570 a)	1.077 a)	84 a)	:	:	4.668 a)	:
	1994	:	601 a)	12.370 a)	1.053 a)	68 a)	:	:	4.897 a)	:
	1995	:	618 a)	13.240 a)	1.183 a)	56 a)	:	:	5.014 a)	:
	1996	:	619 a)	:	1.106 a)	74 a)	:	:	5.047 a)	:
	1997	:	:	:	1.187 a)	83 a)	:	:	5.386 a)	:
	1998	:	:	:	1.194 a)	75 a)	:	:	5.373 a)	:
	1999	:	:	13.779 a)	1.287 a)	131 a)	:	:	5.462 a)	:
Danmark	1985	:	:	2.304	1.532	:	1.700	:	2.430	506
	1990	:	:	:	1.139	:	:	:	:	:
	1991	:	:	:	1.702	:	:	:	:	:
	1992	:	:	:	1.395	:	:	:	:	:
	1993	:	:	:	1.671	:	:	:	:	:
	1994	:	:	2.309	1.962	:	2.433	1.156 b)	2.803 c)	670 d)
	1995	:	:	2.563	1.699	:	2.559	1.195 b)	2.959 c)	840 d)
	1996	:	:	2.632	2.332	:	3.088	1.212 b)	3.253 c)	881 d)
	1997	:	:	2.736	1.775	:	3.427	1.248 b)	3.104 c)	895 d)
	1998	:	:	2.666	1.469	:	2.962	1.251 b)	3.141 c)	973 d)
	1999	:	:	2.653	1.299	:	2.968	1.379	3.329 c)	970 d)
	2000	:	:	2.948	1.176	:	3.223	1.476	3.545 c)	1.124 d)
Deutschland	1990	:	:	:	31.058	:	121.178	:	50.183	1.663
	1993	:	67.813 e)f)	65.119 f)	25.310 f)i)	:	131.645 f)	:	43.486 c)f)	1.023 k)f)
	1996	:	54.308	43.012	:	:	231.480 j)	:	44.390 j)	:
	1997	:	57.590	48.088	:	:	229.338	:	45.593	:
	1998	:	56.155	48.650	:	:	232.085	:	44.825	:
	1999	:	52.251	45.952 g)	:	:	249.207 g)	:	44.245 g)	:
	2000	:	48.187	44.889 h)	:	:	250.790 h)	:	45.641 h)	:
Ellada	1980	:	:	:	:	:	:	:	2.500	:
	1985	:	3.800	:	:	:	:	:	3.000	:
	1990	:	3.800	:	7.680	:	:	:	3.000	:
	1991	:	:	:	:	:	1.720 p)	:	3.105	:
	1992	:	3.800	:	:	:	:	:	3.200	:
	1995	8.058 l)	3.900 m)	:	:	:	:	:	3.200	:
	1996	7.527	:	6.682 o)	:	:	1.800	:	3.600	:
	1997	7.781	8.930 n)	:	9.320	:	:	:	3.900	:
	1998	:	:	:	:	:	:	:	4.082	:
	1999	:	:	:	:	:	1.899	:	4.264	:
	2000	:	:	:	:	:	2.092	:	4.447	:
	2001	:	:	:	:	:	:	:	4.559	:
España	1991	:	:	:	:	:	:	:	12.821 r)	:
	1992	:	:	:	:	:	:	:	13.828 r)	:
	1993	114.000	:	:	:	:	:	:	14.256 r)	:
	1994	:	:	:	:	:	:	:	14.296 r)	:
	1999	:	22.539 q)	21.532 q)	:	:	:	:	24.470 q)	:
	2000	:	41.782 q)	20.308 q)	2.463 q)	:	:	:	26.505 q)	:
France	1990	377.000	:	:	:	:	:	:	:	700
	1991	:	:	:	:	:	13.700	:	:	:
	1992	:	:	:	:	:	:	:	27.000	:
	1993	:	:	105.000 h)	:	:	:	:	33.700	:
	1995	:	:	101.000 h)	:	:	:	:	29.057	:
	1996	:	:	:	:	:	:	:	29.681	:
	1997	:	:	:	:	:	:	:	29.947	:
	1998	:	:	:	:	980	:	:	30.293	:
	1999	:	:	98.000 h)	:	:	:	:	30.506	:
	2000	:	:	:	:	:	:	:	31.213	:
Ireland	1995	31.000	2.200	3.781	353	58	1.320	:	2.030	280 u)
	1998	64.578 s)t)	3.510	5.113	450	39	2.704	:	2.057	:
Italia	1991	:	:	:	:	:	:	:	:	42.500
	1993	:	:	:	1.330	:	:	:	:	:
	1995	:	:	22.210 x)	:	:	:	:	25.780	:
	1996	:	:	:	:	:	:	:	25.960	:
	1997	242 v)w)	350	22.993	:	1.183 y)	20.397 h)	8.330	26.605	7.193 z)
	1998	322	500	28.422	1.358	355	:	10.797	26.846	4.149 z)
	1999	:	:	:	:	:	23.880	:	28.364	:
	2000	:	:	:	:	:	:	:	28.959	:
Luxembourg	1991	:	:	:	:	:	:	:	217 aa)	:
	1992	:	:	:	:	:	:	:	196 aa)	:
	1993	:	:	:	:	:	:	:	201 aa)	:
	1994	:	:	:	:	:	:	:	196 aa)	:
	1995	:	:	:	:	:	:	:	240 ab)	:
	1996	:	:	:	:	:	:	:	242 ab)	:
	1997	:	:	:	:	:	:	:	253 ab)	:
	1998	:	:	:	:	:	:	:	266 ab)	:
	1999	:	:	:	:	:	:	:	278 ab)	:

Table 2: Waste generated by economic sector (1000 t) (continued)

		Agriculture and forestry	Mining and quarrying	Manufacturing industry	Energy Production	Water Purification & Distribution	Construction	Sewage and refuse disposal	Municipal waste	Other
Nederland	1985	:	:	6.417	:	:	:	:	6.933	2.730 ad)
	1990	1.590 w)	391	7.665	1.553	:	:	:	:	2.675 ad)
	1991	:	:	:	:	:	:	:	7.470 ac)	:
	1992	14.500	227	8.049	1.273	:	:	:	:	305
	1993	:	:	:	1.273	:	:	:	8.563	:
	1994	17.000	194	8.208	1.400	146	:	:	8.652	2.852
	1995	1.630 w)	:	:	:	:	:	:	8.465	2.905 ad)
	1996	:	335	8.893	1.403	70	:	:	8.782	3.115 ad)
	1997	:	:	:	:	:	:	:	9.143	3.195 ad)
	1998	1.805 w)	333	9.779	1.546	98	:	:	9.221	3.370 ad)
	1999	1.730 w)	:	:	:	:	:	:	9.434	3.400 ad)
	2000	1.705 w)	268	19.148	1.652	124	:	:	9.753	3.365 ad)
	2001	1.755 w)	246	19.003	1.588	156	:	:	9.750	3.560 ad)
Österreich	1990	880	21	12.955 ab)	1.150	6.619 ax)	20.946 az)	:	4.782 ba)	:
	1993	:	3	12.315 ab)	125	2.268 ay)	19.949 az)	:	5.341 ba)	:
	1996	:	:	14.284 ab)	:	2.297	25.392 az)	:	5.270 t)ba)	:
	1997	:	:	:	:	:	:	:	:	13.690
	1999	:	:	:	:	2.330	27.503 az)	:	4.496	:
Portugal	1985	:	:	:	:	:	:	:	2.350 q)	:
	1990	:	:	:	:	:	:	:	3.000 q)	:
	1992	:	:	:	:	:	:	:	3.270 q)	:
	1993	:	:	:	:	:	:	:	3.563 q)	:
	1994	:	:	:	:	:	:	:	3.800 q)	:
	1995	:	4.726 q)	13.316 q)	882 q)af)	:	11.002 q)	:	3.884 q)	:
	1996	:	:	:	:	:	:	:	4.030 q)	:
	1997	:	7.120 q)	10.989 q)	569 q)af)	:	7.733 q)	:	:	70 ad)ae)
	1998	:	4.691	12.804	487	:	63	:	:	:
	1999	:	4.676	12.226	463	:	85	:	4.364	2.646
	2000	:	4.665	8.356	126	:	:	:	4.531	:
Suomi / Finland	1985	38.000	:	:	:	:	:	:	2.500	:
	1990	22.000	:	:	:	:	7.000	1.000	3.100	:
	1991	22.000	:	:	:	:	:	:	:	:
	1992	22.000	15.000	15.500	1.350	1.700	:	:	:	:
	1993	22.000	:	:	:	:	:	:	:	:
	1994	22.000	:	:	:	:	7.000	:	2.100	:
	1997	25.500	28.000 s)	15.910	1.274	:	35.000 ag)	136 s)	2.200	:
	1998	:	:	:	:	:	:	:	:	:
	1999	:	29.600 s)	16.000	921	:	1.400 ah)	160 s)	2.400	1.017 ai)
	2000	:	26.400	15.600	776	:	1.400 ah)	160 s)	2.600	612 ai)
	2001	:	24.600	:	:	:	:	:		:
Sverige	1980	:	:	:	:	:	:	:	2.510	:
	1985	:	:	:	:	:	:	:	2.650	:
	1990	:	:	:	:	:	:	:	3.200	:
	1993	:	47.000 j)	13.990	:	:	:	:	:	:
	1994	:	:	:	:	:	:	:	3.200	:
	1998	:	63.818 aj)jj)	19.780 ak)	:	:	:	:	4.000 al)	:
	2000	:	:	:	:	:	:	:	3.800 h)	:
United Kingdom	1990	80.000 am)	107.000 ao)	56.000 aq)	13.000 ar)	:	70.000 as)	1.052 au)	27.100 ab)	15.000 av)
	1995	:	82.000 ao)	:	:	:	:	1.124 au)	28.900 ab)	:
	1996	:	74.000 ao)	:	:	:	:	1.079 au)	29.442	:
	1997	:	:	:	:	:	:	1.005 au)	30.763	:
	1998	87.000 an)	135.000 ap)	43.830	6.585	:	:	1.058 au)	31.900 ab)	3.001 aw)
	1999	:	:	:	:	:	72.500 at)	:	33.200 ab)	:
Island	1992	:	:	10 cm)	:	:	:	:	159	34 bd)
	1993	:	:	10 cm)	:	:	:	:	162	34 bd)
	1994	:	:	10 cm)	:	:	:	:	163	36 bd)
	1995	:	0 bb)	10 bc)	:	:	:	:	166	36 bd)
	1996	:	0 bb)	10 bc)	:	:	:	:	169	37 bd)
	1997	:	0 bb)	10 bc)	:	:	:	:	174	39 bd)
	1998	:	0 bb)	10 bc)	:	:	:	:	180	41 bd)
	1999	:	0 bb)	10 bc)	:	:	:	:	189	42 bd)
	2000	:	0 bb)	10 bc)	:	:	:	:	198	44 bd)
	2001	:	0 bb)	10 bc)	:	:	:	:	206	46 bd)
Norge	1980	:	15.900 bg)	2.400	:		:	:	1.700	:
	1985	:	:	:	:	:	:	:	1.968	:
	1990	:	9.000 h)bg)	2.000 h)	:	:	:	:	2.000	:
	1992	:	7.600	:	:	:	:	:	2.223	1.024
	1993	:	4.726 ab)	3.288 ab)jj)	:	:	3.578 ab)	:	2.217	:
	1994	:	:	:	:	:	:	:	2.366	:
	1995	:	:	3.139	22 ab) bi)	:	698 bh)bj)	:	2.722	:
	1996	102	:	3.026 ab)jj)ab)	19 ab) bi)	:	702 bh)bj)	:	2.761	:
	1997	107	123 bh) ab)	3.153	21 ab) bi)	:	754	:	2.721	:
	1998	86	137 bh) ab)	3.287	22 ab) bi)	:	793	:	2.858	:
	1999	123	127 bh) ab)	3.361 bh)	21 ab) bi)	:	765	:	2.650	:
	2000	97 ab) be)bf)	126 bh) ab)	3.339	21 ab) bi)	:	752	:	2.755	:

Table 2: Waste generated by economic sector (1000 t) (continued)

		Agriculture and forestry	Mining and quarrying	Manufacturing industry	Energy Production	Water Purification & Distribution	Construction	Sewage and refuse disposal	Municipal waste	Other
Schweiz/ Suisse/ Svizzera	1985	:	:	:	:	:	:	:	3.413	
	1990	:	:	:	:	:	3.000	:	4.119	180 bk)
	1991	:	:	:	:	:	:	:	4.160	180 bk)
	1992	:	:	:	:	:	:	:	4.125	190 bk)
	1993	:	:	:	:	:	:	:	4.168	190 bk)
	1994	:	:	:	:	:	3.000	:	4.187	190 bk)
	1995	:	:	:	:	:	:	:	4.226	190 bk)
	1996	:	:	:	:	:	3.000	:	4.271	190 bk)
	1997	:	:	:	:	:	:	:	4.319	190 bk)
	1998	:	:	:	:	:	6.393	:	4.394	200 bk)
	1999	:	:	:	:	:	:	:	4.581	
Balgarija	1995	:	:	:	:	:	:	:	4.495	:
	1996	:	:	:	:	:	:	:	4.031	:
	1997	:	:	:	:	:	:	:	3.628	:
	1998	:	:	:	:	:	:	:	3.197	:
	1999	:	:	:	:	:	:	:	3.213	:
	2000	:	:	:	:	:	:	:	3.318	:
	2001	62	68.074	3.145	15.754	80	7	3	3.211	28
Cyprus	1985	:	:	84 ab)	:	:	:	:		:
	1990	:	:	:	:	:	:	:	369 bp)bq)	:
	1993	:	:	84 bo)	:	:	:	:	369	:
	1995	:	:	:	:	:	:	:	402 bq)	:
	1996	:	:	:	:	:	:	:	438 h)	:
	1997	:	:	:	:	:	:	:	455 h)	:
	1998	:	:	:	:	:	:	:	476 h)	:
	1999	:	:	:	:	:	:	:	494 h)	:
	2000	:	:	:	:	:	:	:	513 h)	:
	2001	:	:	:	:	:	:	:	525 br)	:
Ceska Republika	1995	1.329 bl)	361 bl)	12.193 ch)	15.439 bl)	539 bl)	233 bl)	1.934 bl)	:	108 bl)
	1996	1.071 bl)	176 bl)	6.900 ch)	29.675 bl)	1.766 bl)	718 bl)	299 bl)	:	234 bl)
	1997	1.373 bl)	165 bl)	6.990 ch)	31.214 bl)	1.674 bl)	367 bl)	269 bl)	:	96 bl)
	1998	10.336 bm)	2.256 bm)	12.663 bm)	9.537 bm)	450 bm)	3.421 bm)	676 bm)	3.017 bm)	4.783 bm)bn
	1999	10.435	2.484	9.107	6.945	782	4.835	659	3.365	2.841 bn)
	2000	9.644	2.678	9.618	7.967	777	5.083	1.023	3.434	3.373 bn)
	2001	8.577	2.386	9.758	9.398	810	7.565	1.167	2.798	2.994 bn)
Eesti	1995	:	:	:	:	:	:	:	533	:
	1996	:	:	:	:	:	:	:	565	:
	1997	:	:	:	:	:	:	:	593	:
	1998	:	:	:	:	:	:	:	557	:
	1999	:	:	:	:	:	:	:	569	:
	2000	:	:	:	:	:	:	:	633	:
Magyarorszag	1980	:	5.317 bt)	22.146 h)bt)	5.735 bt)	:	:	:	2.461	:
	1985	:	5.153 h)bt)	22.467 h)bt)	5.977 h)bt)	:	:	:	3.447	:
	1990	51.200	10.630 bt)	30.980 h)bt)	4.300 bt)	:	:	:	5.500	1.180 bt)
	1994	51.117	1.428 bt)	6.328 h)bt)	2.108 bt)	:	170 bt)	:	4.300	:
	1995	60.000	10.123 bt)	6.692 h)bt)	2.878 bt)	:	:	:	4.752	:
	1996	62.000	790 cn)	1.795 cn)	1.080 bt)	:	5 bt)cn)	:	4.834	10 bv)bt)
	1997	:	404 cn)	2.022 cn)	7.780 cn)bt)	:	21 bt)cn)	:	5.016	15 bt)
	1998	:	182 cn)	2.099 cn)	7.884 cn)bt)	:	81 bt)cn)	:	4.976	10 bt)
	1999	:	1.838 cn)	3.618 cn)	3.685	644	113 bt)cn)	:	4.943	:
	2000	:	2.233 cn)	2.605 cn)	3.612	790	707 bt)cn)	:	4.552	:
	2001	:	:	:	:	:	:	:	4.603	:
Latvija	1995	:	:	:	:	:	:	:	657	:
	1996	:	:	:	:	:	:	:	650	:
	1997	:	:	:	:	:	:	:	621	:
	1998	:	:	:	:	:	:	:	597	:
	1999	:	:	:	:	:	:	:	584	:
	2001	4	:	422	8	:	7	8	713	97
Lietuva	1992	:	7.427 j)	:	:	:	:	:	1.520	9.178 bs)
	1993	:	795	:	:	:	:	:	1.866	3.297
	1994	:	781	:	:	:	:	:	1.671	3.009
	1995	:	1.143	:	:	:	:	:	1.546	3.464
	1996	:	996	:	:	:	:	:	1.445	3.801
	1997	:	997	:	:	:	:	:	1.510	4.110
	1998	:	819	:	:	:	:	:	1.578	4.113
	1999	:	1.201 co)	:	:	:	:	:	1.236	3.797
	2000	:	:	:	:	:	:	:	1.086	3.022
	2001	:	:	:	:	:	:	:	1.046	4.002
Malta	1980	:	:	29	:		:	:	105	:
	1985	:	:	31	:	:	:	:	101	:
	1990	:	:	129	:	:	1.546	:	124	:
	1991	:	:	124	:	:	1.545	:	124	:
	1992	:	:	153	:	:	2.432	:	130	3
	1993	:	:	153	:	:	1.052	:	124	:
	1994	:	:	185	:	:	1.289	:	116	:
	1995	:	:	154	4	:	1.241	:	116	:
	1996	:	:	179	2	:	1.250	:	125	:
	1997	:	:	104	2	:	751	:	143	:
	1998	3	692 bw)	31 bx)	2	5	82	:	143 bz)	:
	1999	4	806	30 bx)	:	5	150	:	157	:
	2000	4	801	20 bx)by)	:	2	110 by)	:	123 by)	:
	2001	4	781	24 bx)	:	2	158	:	161	:

Table 2: Waste generated by economic sector (1000 t) (continued)

		Agriculture and forestry	Mining and quarrying	Manufacturing industry	Energy Production	Water Purification & Distribution	Construction	Sewage and refuse disposal	Municipal waste	Other
Polska	1980	:	108.060	35.124	19.716	574	55	:	10.055 ca)	1.570 cb)
	1985	:	110.135	37.313	21.092	610	58	:	11.087 ca)	1.668 cb)
	1990	:	91.111	32.846	17.845	538	51	:	11.098 ca)	1.470 cb)
	1991	:	80.445	28.360	17.796	393	47	:	10.638 ca)	1.290 cb)
	1992	:	80.130	22.523	17.784	247	43	28	10.621 ca)	1.110 cb)
	1993	:	80.392	21.378	17.417	339	32	26	10.645 ca)	900 cb)
	1994	:	80.369	22.155	17.340	325	13	21	11.015 ca)	670 cb)
	1995	:	82.371	22.608	16.647	436	10	37	10.985 ca)	553 cb)
	1996	:	83.333	21.876	18.290	532	11	11	11.621 ca)	492 cb)
	1997	:	82.672	22.547	18.028	769	18	28	12.183 ca)	407 cb)
	1998	:	55.901 j)	57.426 j)	17.759 j)	1.498 j)	25 j)	61 j)	11.827 j)ca)	434 j)cb)
	1999	:	49.480 j)	58.176 j)	16.684 j)	1.325 j)	68 j)	133 j)	12.317 j)ca)	389 j)cb)
	2000	:	45.804 j)	58.975 j)	18.101 j)	1.730 j)	143 j)	180 j)	12.226 j)ca)	551 j)cb)
	2001	:	43.731 j)	57.746 j)	18.823 j)	2.547 j)	134 j)	217 j)	11.109 j)ca)	612 j)cb)
Romania	1995	2.345	310.230	15.145	11.573	1.115	619	2.742	7.758	560
	1996	2.040	61.099 cc)	25.607	16.031	1.335	632	2.906	7.375	961
	1997	1.761	171.326	19.514	12.485	588 cc)	519	2.086	7.347	711
	1998	1.803	50.611	14.485	7.428 cc)	389 cc)	398	1.678	6.246	127
	1999	1.240	48.050	11.795	6.811	1.322	271	3.014	7.066	591
	2000	3.462	21.214	12.596	4.977	606	3.033	1.381	7.961	603
Slovenska Republika	1995	12.164	688	4.909	1.404	64	167	:	1.620	6.496
	1996	5.800 j)	840	4.458 j)	2.888 j)	308	293	:	1.700	130
	1998	4.375	944	4.342	2.920	417	68	:	1.700	4.972
	1999	4.548	:	2.302	:	:	21	:	1.700	:
	2000	:	:	:	:	:	:	:	1.700	:
Slovenija	1995	118 cd)	70	1.212	1.044	44	126 cf)	65 cg)	1.024	300 ch)ci)
	1998	:	17	1.281	1.518	28 ce)	510	12	1.159	18 cj)
	2001	:	196	1.493	273	42	1.000	9	953	12
Turkey	1994	:	:	10.524	:	:	:		17.757 ck)	:
	1995	:	2.015 ck)	11.344 ck)	7.884 ck)	:	:	2.359 cl)	20.910 ck)	:
	1996	:	3.281 ck)	12.445 ck)	7.964 ck)	:	:	2.666 cl)	22.483 ck)	:
	1997	:	3.624 ck)	12.838 ck)	15.746 ck)	:	:	2.849 cl)	24.180 ck)	:
	1998	:	:	:	12.198 ck)	:	:		24.945 ck)	:
Bosnia and Herzegovina		:	:	:	:	:	:	:	:	:
Croatia	1999	292	199	2.000	62	626	739	1.229	:	1.209
	2000	390	167	1.600	54	779	142	1.152	:	16
Macedonia		:	:	:	:	:	:	:	:	:
Yugoslavia		:	:	:	:	:	:	:	:	:

Table 2: Waste generated by economic sector (1000 t)

FOOTNOTES

a) Not validated by the Belgium regional authorities. NSI estimate.
b) Sewage only.
c) Municipal waste consists of all types of wastes from households, domestic waste, bulky waste, garden waste, hospital waste and separately collected fractions from institutions, commerce and offices.
d) Data refer to institutions, wholesale, retail trade business service and other.
e) Excavation material only.
f) Source: Statistisches Bundesamt, Germany
g) Preliminary
h) Estimate
i) Includes water purification and distribution and rest of mining.
j) Break in time series due to new methodologies or classifications.
k) Hospital waste.
l) Agriculture waste includes 200 000 tonnes from forestry and the rest are discarded fruits.
m) Mining includes only asbestos quarrying. Some other wastes are included in industrial wastes due to the classification of the registry.
n) Value refers to waste generated by extractive industry(mining and quarrying) inclunding wastes from extraction of basic metals, non metalic, industrial minerals. Wastes resulting from energy generation projects are not included.
o) Industry covers only establishments over 30 persons.
p) Construction covers only private building activity.
q) Source: INE
r) Household and similar waste.
s) Dry weight
t) Dirty water included which gives rise to 20 million tonnes increase.
u) Other industrial/trade w. collected by or on behalf of local authorities.
v) Includes NACE from 01 to 05.
w) Excludes Manure and excess manure.
x) May include some mining and quarrying waste.
y) Includes NACE 40, 41.
z) Includes NACE from 91 to 99, NACE from 50 to 55 and NACE from 60 to 85.
aa) Excludes separately collected fraction.
ab) National estimate.
ac) Underestimation of separately collected paper.
ad) Waste from commerce and services.
ae) Includes fabricated metalic products (except machinery and equipment); fabricated electrical machinery and equipment; fabricated radio, television and communication equipment; fabricated medical and surgical equipment, orthopaedic, of precision, optical a
af) Production and distribution of energy, gas and water.
ag) Includes construction waste and surplus soil from building sites, civil engineering sites and dredging, and from all sectors
ah) Includes waste from housebuilding, including renovation and demolition. Does not contain surplus soil and stones. For the year 1999 estimation for surplus soil and stones from house building sites is 8,5 million tonnes and from civil engineering sites 25
ai) Includes certain plants from NACE 42-89 which have granted an environmental permit, it is a rough estimate representing incompletely these economics activities.
aj) Excludes NACE 10-12.
ak) Excludes NACE 37.
al) Amount of waste treated.
am) Manure from housed livestock only, wet weight. Estimated in 1991, not updated
an) Figures come from a survey commissioned by the DETR and are for Great Britain only.
ao) Includes waste from china clay and clay extraction, deep and open cast coal extraction, slate and quarrying
ap) UK estimates based on production data from the UK Minerals Yearbook includes dredging
aq) Includes 6 million tonnes from basic metal industries. The remaining 50 million tonnes is a broad estimate of wastes from manufacturing industry.
ar) Ash from power stations, data from Digest of Envrionmental Statistics
as) Includes excavated soil and miscellaneous materials as well as hard materials, e.g. brick, concrete and road planings. Estimated in 1990, not updated
at) Figures for England and Wales only, from Environment Agency survey of Construction and Demolition Waste
au) Sewage sludge, dry weight, UK data from Water UK
av) Commercial waste
aw) NACE sectors 50-52, 55, 60-67, 70-75, 80, 85
ax) Wet mass - dry matter estimated at 5%.
ay) Wet mass - dry matter estimated at 30%.
az) Includes excavated soil, excludes construction site waste collected by municipalities

FOOTNOTES (continued)

ba) Includes construction site waste
bb) Mining not existent, very small quantities of quarrying activities usually recovered.
bc) Slaughterhouse waste only. Waste from textile industries; leather industries; wood and wood products; paper products; printing and publishing; chemical industries; rubber and plastics; and fabricated metal products and machinery are small amounts of varyi
bd) Scrap metal collection activities, the metals being exported for recycling.
be) Excludes end-of-life vehicles
bf) Excludes waste from harvesting brought directly back into the biosphere, i.e. fish waste dumped in the oceans, waste from timber logging left behind in the logged area, manure etc.
bg) Includes stone, gravel, sand etc.
bh) Excludes soil, gravel, stone, etc.
bi) Includes water purification etc.
bj) Calculated from building statistics. Includes waste from construction, rehabilitation and demolition of buildings, but not other infrastructure.
bk) sewage sludge, dry weight.
bl) hazardous and special waste only.
bm) A new law about Waste Act No. 125/1997 Coll. and new Catalogue of waste came into force with effect from Jan.1st 1998
bn) cover NACE 51, 55, 60, 64, 74, 85, 93
bo) Data on industrial waste refer to the year 1985
bp) Data refer to the year 1993 and are derived from an ad-hoc survey carried out at the landfill sites.
bq) Data refer to municipal waste delivered to landfills. There may exist a small proportion of recycling before disposal to landfills.
br) Data are derived from a survey among municipalities conducted by the Statistical Service of Cyprus.
bs) Break in time series due to an important decrease in the amount of organic waste generated as from 1993
bt) Fluctuations in time series are due to structural changes in industries
bu) 1997 and 1998 figures include a mass amount of waste generated in a coal mine of a power station.
bv) Data excluding hazardous waste; waste from privatised enterprises may not be fully covered.
bw) Includes construction & demolition, & roads/streets debris
bx) Commercial/Industrial waste
by) Covers from April to December only
bz) Exclude commercial waste
ca) Data on municipal waste refer to collection of municipal waste.
cb) ISIC: 90; 93 and other
cc) Break in time series due to inconsistencies in production and economic situation
cd) Excludes private sector
ce) Amount of sewage sludge is reported in the coresponding activities of its generation.
cf) Includes waste from the main operators by contract
cg) Includes secondary waste
ch) Includes G, H, I, K, L, M, N, and O without O 90.
ci) no data available for 1991; figures for 1990 are provided.
cj) Excludes municipal waste reported by enterprises authorised for collection and treatment of municipal waste.
Excludes private sector.
Includes waste from the main operators by contract.
Includes secondary waste.
Includes G, H, I, K, L, M, N, and O without
ck) Refers to the amount of solid waste
cl) Refers to the amount of sewage sludge of 439 establishments for 1995, 478 establishments for 1996 and 540 establishments for 1997. These amounts are originated from manufacturing industry establishments which have been using waste water treatment plant.
cm) Waste from textile industries; leather industries; wood and wood products; paper products; printing and publishing; chemical industries; rubber and plastics; and fabricated metal products and machinery are small amounts of varying quantity collected as mu
cn) Data based on firms with more than 10 employees.
co) Recovery of industry

Table 3: Industrial waste generated by branch (1000 t)

	Food, Beverages, Tobacco	Textile & leather industries	Wood and Wood Products	Paper and Paper Products	Printing and Publishing	Refineries, etc.	Chemical industries	Rubber and Plastics	Non-metallic Mineral Products	Basic Metal industries	Fabricated Metal Products, Machinery	Other Manufacturing industries
Belgique/België	:	:	:	:	:	:	:	:	:	:	:	:
Danmark	:	:	:	:	:	:	:	:	:	:	:	:
Deutschland	:	:	:	:	:	:	:	:	:	:	:	:
Ellada												
1996	975	219 a)	77	129 b)	:	16	842	8	786	3.570 h)	:	60
España												
1999	1.696 i)	161 i)	723 i)	788 i)	0	143 i)	3.712 i)	0	12.770 i)	0	1.334 i)	204 i)
2000	1.676 i)	210 i)	463 i)	1.317 i)	0	62 i)	2.989 i)	0	11.970 i)	0	1.426 i)	196 i)
France												
1993	1.503 s)t)	504 s)t)	7.596 s)t)	2.937 s)t)	:	:	513 s)t)	644 s)t)	282 s)t)	2.104 s)t)	542 s)t)	:
1995	1.139 s)t)ah)	260 s)t)ah)	6.637 s)t)ah)	2.769 s)t)ah)	:	:	545 s)t)ah)	504 s)t)ah)	403 s)t)ah)	2.157 s)t)ah)	523 s)t)ah)	:
1999	1.268 ai)	544 ai)	6.930 ai)	3.183 ai)	:	:	1.411 ai)	767 ai)	519 ai)	2.146 ai)	739 ai)	:
Ireland												
1995	899	262	22	182	:	10	330	58	1.550	218	:	250
1998	2.358 u)	171	288 u)	165 o)	:	29	1.533 w)	26	267 w)	120 p)v)	129 p)	26
Italia												
1997	4.251	944	:	:	2.239 k)	130	2.651	453	4.523	3.885	2.489	1.428
1998	6.874	1.124	837	1.061	440	187	2.080	507	5.356	4.405	3.570	1.981
Luxembourg												
Nederland												
1990	3.277	74	305	673	210	87	980	90	663	525	803	73
1992	3.467	69	262	710	233	89	1.137	91	497	538	864	92
1994	4.005	76	278	745	275	79	715	96	511	507	740	182
1996	3.771	75	217	702	292	104	903	121	586	642	705	774
1998	3.915	82	250	798	314	118	917	155	633	1.001	779	800
2000	10.140	86	285	860	346	549	1.471	192	905	2.593	877	845
2001	10.271	85	275	829	332	584	1.466	187	826	2.458	860	832
Österreich												
1990	807	157	898	170	1	4	2	8	302	2.770	458	1
1992	432	152	1.350	1.333	:	:	:	501	:	496	:	:
1993	1.202 d)	137 d)	3.505 d)	714 d)	3 d)	6 d)	18 d)	0 d)	4 d)	4.003 d)	19 d)	19 d)
1995	383	161	3.712	1.591	:	:	:	705	:	507	:	:
1996	768	168	3.545	1.238	:	182	:	654	:	:	:	:
Portugal												
1995	2.614 i)	:	3.011 i)	:	:	20 i)	160 i)	:	:	:	:	203 i)
1997	:	1.683 i)	2.126 i)	:	:	28 i)	368 i)	30 i)	1.767 i)	:	:	301 i)
1998	1.942	1.235	1.416	429 b)	:	14	91	31	1.674	2.986	2.986	:
1999	4.115	1.268	2.478	482	51	20	279	49	2.329	348	193 ag)	617 aj)
2000	865	1.211	1.141	615	102	11	181	55	1.972	1.312	335 ag)	558 aj)

Table 3: Industrial waste generated by branch (1000 t) continued

		Food, Beverages, Tobacco	Textile & leather industries	Wood and Wood Products	Paper and Paper Products	Printing and Publishing	Refineries, etc.	Chemical industries	Rubber and Plastics	Non-metallic Mineral Products	Basic Metal industries	Fabricated Metal Products, Machinery	Other Manufacturing industries
Suomi / Finland	1992	1.400	94	3.300	4.436 b)	53	:	2.550 c)	31	469	2.733	343	73
	1997	2.098	18	3.906	5.337	156	:	638 c)	63	1.809	1.188	413	286
	2000	995	23	3.022	6.777	184	:	1.042	77	687	2.009	474	311
Sverige	1993	988	31	6.715	2.626 b)	:	:	246 e)	:	540	2.171	523	145
	1998	1.814	36	7.589	3.730	367	18	460	93	583	3.691	1.245	154 l)
United Kingdom	1990	:	:	:	:	:	:	:	:	:	6.000 m)	:	:
	1998	7.203 r)	1.010 r)	1.064 r)	2.265 r)	1.935 r)	5.500 r)	4.425 r)	1.339 r)	2.217 r)	9.108 r)	6.482 r)	1.282 r)
Island	1992	10	:	:	:	:	:	:	:	:	:	:	:
	1993	10	:	:	:	:	:	:	:	:	:	:	:
	1994	10	:	:	:	:	:	:	:	:	:	:	:
	1995	10	:	:	:	:	:	:	:	:	:	:	:
	1996	10	:	:	:	:	:	:	:	:	:	:	:
	1997	10	:	:	:	:	:	:	:	:	:	:	:
	1998	10	:	:	:	:	:	:	:	:	:	:	:
	1999	10	:	:	:	:	:	:	:	:	:	:	:
	2000	10	:	:	:	:	:	:	:	:	:	:	:
	2001	10	:	:	:	:	:	:	:	:	:	:	:
Norge	1993	594	16	432	1.035 b)	:	:	344 e)	:	134	505	224	3
	1996	578	13	627	497 b)	:	12	309	27	104	722 f)	61 g)	197
	1999	620	10	455	456	76	10	379	24	270	929 f)	240	84
Schweiz/Suisse /Svizzera		:	:	:	:	:	:	:	:	:	:	:	:
Balgarija	2001	167	48	57	20	2	240	958	3	300	1.240	102	8
Cyprus	1985	52 q)ad)	1 q)ad)	3 q)ad)	2 q)ad)	0 q)ad)	0 q)ad)	1 q)ad)	0 q)ad)	21 q)ad)	:	3 q)ad)	1 q)ad)
Ceska Republika	1995	1.050 n)	1.183 n)	39 n)	5.774 n)	4 n)	605 n)	505 n)	57 n)	144 n)	1.672 n)	1.081 n)	79 n)
	1996	1.018 n)	1.668 n)	26 n)	225 n)	5 n)	63 n)	1.038 n)	59 n)	118 n)	1.999 n)	615 n)	66 n)
	1997	926 n)	1.925 n)	50 n)	230 n)	8 n)	64 n)	1.006 n)	39 n)	94 n)	1.051 n)	1.529 n)	68 n)
	1998	3.397 ab)	164 ab)	275 ab)	639 ab)	55 ab)	49 ab)	1.195 ab)	90 ab)	492 ab)	4.969 ab)	1.187 ab)	151 ab)
	1999	1.637	116	323	655	45	79	544	144	452	3.755	1.193	164
	2000	1.410	119	628	556	55	65	861	117	616	3.624	1.320	247
	2001	1.525	134	294	568	50	96	896	129	667	3.805	1.341	253

Table 3: Industrial waste generated by branch (1000 t) (continued)

	Food, Beverages, Tobacco	Textile & leather industries	Wood and Wood Products	Paper and Paper Products	Printing and Publishing	Refineries, etc.	Chemical industries	Rubber and Plastics	Non-metallic Mineral Products	Basic Metal industries	Fabricated Metal Products, Machinery	Other Manufacturing industries
Eesti	:	:	:	:	:	:	:	:	:	:	:	:
Magyarorszag												
1980	1.900 ae)y)	199 ae)y)	:	:	:	:	390 ae)y)	:	:	5.785 ae)y)	317 ae)y)	:
1985	1.900 ae)y)	190 ae)y)	:	:	:	:	253 ae)y)	:	:	6.156 ae)y)	335 ae)y)	:
1990	4.800 ae)y)	49 ae)y)	54 ae)y)	36 ae)y)	:	46 ae)y)	850 ae)y)	120 ae)y)	1.145 ae)y)	3.100 ae)y)	860 ae)y)	3.810 ae)y)
1994	2.622 y)z)	:	:	:	:	:	:	:	:	:	:	:
1995	:	12 ae)y)	196 ae)y)	71 ae)y)	:	:	:	:	:	:	:	:
1996	1 af)	13 af)	196 af)	71 af)	36 af)	4 af)	34 af)	31 af)	203 af)	985 af)	189 af)	30 af)
1997	463 af)	17 af)	165 af)	63 af)	21 af)	7 af)	64 af)	17 af)	175 af)	786 af)	226 af)	19 af)
1998	302 af)	9 af)	184 af)	77 af)	20 af)	0 af)	239 af)	30 af)	106 af)	801 af)	249 af)	80 af)
1999	1.498 af)	39 af)	241 af)	142 af)	132 af)	25 af)	76 af)	33 af)	285 af)	404 af)	614 af)	128 af)
2000	567 af)	26 af)	254 af)	160 af)	30 af)	13 af)	54 af)	34 af)	602 af)	538 af)	285 af)	43 af)
Latvija												
2001	218	41	69	0	1	:	3	0	2	58	24	7
Lietuva												
Malta												
1998	:	:	:	2	:	:	:	0	:	:	:	29
1999	0	:	:	2	:	:	:	1	:	:	0	27
2000	0	:	:	2 ac)aa)	:	:	:	1 aa)	:	:	0 aa)	18 aa)
2001	0	:	:	2	:	:	:	1	:	:	0	21
Polska												
1980	4.155	727	1.215	1.503	:	408	5.402	302	2.845	15.799	2.557	211
1985	4.414	772	1.291	1.597	:	433	5.739	321	3.022	16.783	2.716	224
1990	3.886	680	1.137	1.406	:	381	5.052	283	2.661	14.774	2.391	197
1992	2.123	384	755	897	:	308	3.837	241	1.726	10.887	1.261	104
1993	2.528	441	740	916	:	248	3.289	183	1.733	9.615	1.556	128
1994	2.191	329	741	921	:	289	3.874	156	1.780	10.241	1.496	139
1995	2.128	284	771	945	:	302	4.230	140	954	10.696	2.022	138
1996	2.507	283	622	1.033	:	276	4.268	141	934	10.184	1.473	155
1997	2.543	227	651	1.090	:	272	4.765	116	751	10.433	1.548	152
1998	10.795 ab)	310 ab)	932 ab)	1.473 ab)	3 ab)	349 ab)	4.846 ab)	114 ab)	1.455 ab)	35.377 ab)	1.263 ab)	510 ab)
1999	10.150 ab)	184 ab)	1.236 ab)	1.664 ab)	9 ab)	252 ab)	5.618 ab)	105 ab)	1.592 ab)	35.741 ab)	1.387 ab)	239 ab)
2000	10.496 ab)	131 ab)	1.388 ab)	1.192 ab)	8 ab)	257 ab)	5.277 ab)	112 ab)	1.914 ab)	36.902 ab)	1.032 ab)	266 ab)
2001	9.058 ab)	182 ab)	1.213 ab)	1.485 ab)	18 ab)	223 ab)	5.034 ab)	110 ab)	1.709 ab)	37.358 ab)	918 ab)	438 ab)

Table 3: Industrial waste generated by branch (1000 t) (continued)

	Food, Beverages, Tobacco	Textile & leather industries	Wood and Wood Products	Paper and Paper Products	Printing and Publishing	Refineries, etc.	Chemical industries	Rubber and Plastics	Non-metallic Mineral Products	Basic Metal industries	Fabricated Metal Products, Machinery	Other Manufacturing industries
Romania												
1995	1.855	116	572	118	:	112	6.560	126	453	4.047	1.146	40
1996	9.347 x)	533	817	151	:	187	5.326	25	690	7.190	1.195	146
1997	5.313	332	1.078 x)	154	1	926	2.923	22	679	6.954	1.132	:
1998	1.107	465	533	104	1	684	2.370	18	1.039 x)	6.525	1.322	317
1999	889	331	561	81	1	2.211 x)	2.110	20	568	3.595	1.428	:
2000	1.254	1.084	2.716	99	17	53	684	86	1.282	2.480	2.463	379
Slovenska Republika												
1995	1.841	88	301	446	12	85	183	34	294	866	641	118
1996	1.670	79	240	370	10	103	362 z)	39	387	420 z)	744	34
1998	1.577	27 z)	430 z)	197	10	160	358	53	353	230	944	4
Slovenija												
1995	210	41	92	53	7	6	193	11	89	163	94	254
1998	210	26	179	128	0	6	233	12	66	209	134	78
2001	188	27	196	156	8	15	227	17	137	228	209	86
Turkey												
1994	3.291	101	42	100	9	16	1.251	5	1.118	4.108	472	11
1995	3.219	163	54	121	9	13	1.863	4	1.007	4.400	479	12
1996	3.158	160	49	125	10	17	1.883	4	981	5.431	611	16
1997	3.904	233	46	127	11	15	1.796	6	837	5.185	659	19
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:	:	:
Croatia												
1999	353	7	144	29	11	53	389	5	509	35	344	121
2000	35	1	93	4	0	44	359	2	735	216	13	98
Macedonia	:	:	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:		:	:	:	:	:	:	:	:

Table 3: Industrial waste generated by branch (1000 t)

FOOTNOTES

a) Textile industry does not include NACE cat. 18.
b) Includes paper and paper products and printing and publishing.
c) Includes waste from chemical industry and refineries.
d) Source: NAMEA Waste, ÖSTAT 1999: all data except total industrial waste, which is estimated by subtraction. Includes hazardous waste.
e) Includes chemical, rubber, plastics and refineries.
f) Includes metal products.
g) Excludes metal products.
h) Basic metal industries and fabricated metal products included, but machinery is excluded.
i) Source :INE.
j) Waste data from basic metal industries not yet available.
k) Includes NACE 20, 21, 22.
l) Excludes NACE 37.
m) Blast furnace and steel slag, data from Digest of Envrionmental Statistics.
n) Hazardous and special waste only.
o) NACE 21 and 22. Disaggregated figures are not available.
p) The 120 thousand tonnes relates to NACE 27 and 28. The 129 thousand tonnes relates to NACE 29-35. Disaggregated figures are not available.
q) Data provided is based on the results of an ad-hoc survey carried out between October 1985 and July 1986. The survey covered 12,4% of the total number of enterprises in the manufacturing sector, which represents 32,5% of the total number of persons employed in this sector. It should be noted that most of the polluting enterprises have been covered. However, results have not been blown up in order to ascertain the total waste generated by the manufacturing sector.
r) Environment Agency industrial and commercial waste survey E&W only.
s) Non-hazardous industrial waste for industries of more than 10 employees.
t) Source : ADEME, non-hazardous industrial waste survey (DIB), metropolitan France.
u) Differences between 1995 and 1998 are mainly due to improved reporting and better response rate; they also reflect economic growth during the period.
v) Data relates to NACE DJ (27 and 28).
w) The re-classification of one facility from non-metallic mineral products to the chemical sector caused a significant decrease in mineral products waste tonnage and therefore an increase in tonnage in the chemical industries.
x) Break in time series due to inconsistencies in production and economic situation.
y) Estimate for all branches of industry. Figures for the breakdown by activity sector are only available for some industries (of at least more than 10 employees).
z) Fluctuations in time series are due to structural changes in industries and to a new classification system.
aa) Covers from April to December only
ab) Data according to to new waste legislation and/or a new classification.
ac) Includes wood
ad) Data are derived from an ad-hoc survey, which covered 12,4% of the enterprises in the manufacturing sector, representing 32,5% of total employment in the sector. Most of the polluting enterprises have been covered. However, results were not blown up so as to ascertain the total waste generated in the sector.
ae) Fluctuations in time series are due to structural changes in industries.
af) Data based on firms with more than 10 employees.
ag) Refers to non-specified machinery and equipment.
ah) Source : Ademe, enquête DIB. Non-hazardous industrial waste.
ai) Source : Ademe, national survey "Industrial waste" ADEME 2000. Industrial waste including hazardous waste.
aj) includes fabricated metalic products (except machinery and equipment); fabricated electrical machinery and equipment; fabricated radio, television and communication equipment; fabricated medical and surgical equipment, orthopaedic, of precision, optical and clock-making equipment; fabricated vehicles, tows and semitrailers; other transportation material; furniture industry and other non-specified industries; recycling industry.

Table 4: Generation of waste by selected waste streams (1 000 t)

	Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight)	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Belgique/België									
1994	6.559 af)	1.446 af)	:	:	128 af)	:	:	:	:
Danmark									
1985	:	:	152	;	:	:	:	:	:
1990	:	:	152	;	:	:	:	:	:
1992	2.086	:	192	;	:	:	:	:	:
1993	2.374	:	192	;	:	:	:	:	:
1994	2.397	:	170	;	121	:	:	:	:
1995	2.559	:	167	;	70	:	:	:	:
1996	3.088	:	162	;	83	17	17	:	:
1997	3.427	:	151	;	107	18	18	:	:
1998	2.962	:	154	;	156	19	19	:	:
1999	2.968	:	156	;	:	20	:	:	:
2000	3.223	:	:	;	:	34	:	:	:
Deutschland									
1996	231.480 ag)	:	:	:	:	:	:	:	:
1997	229.338	:	:	:	:	:	:	:	:
1998	232.085	:	:	:	:	:	:	:	:
1999	249.207 ah)	:	:	:	:	:	:	:	:
2000	250.790 ar)	:	:	:	:	:	:	:	:
Ellada									
1992	:	:	:	:	20 c)	:	:	:	:
1993	:	:	175	:	:	:	:	:	:
1995	:	:	52	7.000	:	:	:	:	:
1996	1.800	:	:	:	:	:	:	:	:
1997	1.800	:	59	:	:	:	:	:	:
1999	1.899	:	:	:	:	:	:	:	:
2000	2.092	:	:	:	:	:	:	:	:
España									
1991	22.000	10	:	:	:	:	219	:	:
France									
1991	24.000	:	:	:	1.400	:	:	:	:
1992	25.000	:	865	:	:	:	:	:	:
1995	:	:	900	:	:	:	:	:	:
1997	23.900	:	:	:	1.400	:	:	366 bf)	:
1998	:	:	980 bc)	:	:	:	:	383 bf)	:
1999	:	:	:	:	:	:	1.500 be)	367 bf)	:
2000	:	:	:	:	1.300 bd)	405 bg)	:	367 bf)	:

Table 4: Generation of waste by selected waste streams (1 000 t) (continued)

	Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight)	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Ireland									
1993	:	:	38 aa)	:	:	:	:	:	:
1995	1.319	785	:	:	52	:	21 ab)	:	:
1998	2.705	734	38	:	30	29	74	:	:
Italia									
1991	34.400	:	3.400 o)	:	1.400	:	:	:	
1995	:	:	:	:	:	:	:	:	154 w)
1996	:	:	:	:	:	:	:	:	155 w)
1997	20.397 af)	:	:	:	2.300 af)	:	:	177 p)	313 w)r)
1998	:	:	:	:	3.271 af)	:	:	186 p)	164 w)
1999	23.880 af)	:	:	:	:	:	:	182 p)	167 w)
2000	:	:	:	:	:	:	:	188 p)	177 w)
Luxembourg									
1992	1.190	:	:	:	:	:	:	:	:
1994	860	:	:	:	:	:	:	:	:
1995	1.500 ar)	:	:	:	:	1 ar)ao)	0 ar)an)	2	0 am)
1996	868 ar)	:	:	:	:	3 ar)ao)	0 ar)an)	3	0 am)
1997	2.528 ar)	:	:	:	:	3 ar)ao)	1 ar)an)	4	1 am)
1998	3.271 ar)	:	:	:	:	4 ar)ao)	1 ar)an)	7	1 am)
1999	4.465	:	:	:	10	4 ao)	2 an)	7	1 am)
2000	7.170	:	:	:	13	4 ao)	2 an)	6	1 am)
2001	:	:	:	:	:	:	:	:	1 am)
Nederland									
1980	6.500	23.000 b)	175 b)	:	:	:	:	:	:
1985	7.700	19.000 b)	217 b)	:	547	:	:	:	:
1990	12.390	17.500 b)	562 b)	:	411	:	:	:	:
1991	:	:	:	:	369	:	:	:	:
1992	:	:	583 b)	:	306	:	:	:	:
1993	:	:	:	:	249	:	:	:	:
1994	12.400	:	566 b)	17.000	331	:	:	:	:
1995	13.000	36.382 b)	362 b)	:	350	:	:	:	:
1996	13.950	:	368 b)	:	251	:	:	:	:
1997	16.100	:	359	:	256	:	:	:	:
1998	16.100	:	358	:	241	:	:	:	:
1999	18.000	:	372	:	267	:	:	:	:
2000	19.000	:	346	:	306	:	:	:	:
2001	19.500	:	:	:	306	:	:	:	:

Table 4: Generation of waste by selected waste streams (1 000 t) (continued)

	Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight)	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Österreich									
1990	5.946 d)	111	275 e)	690	250	:	:	:	:
1991	:	:	299 f)	:	:	:	:	:	:
1993	4.559 d)	20	:	370	240	:	:	:	:
1995	:	:	391 f)	:	:	:	:	:	:
1996	5.392 d)	32	:	:	:	:	:	:	:
1997	6.403	:	309 n)	370	165	:	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	27.500	:	393	:	150	50	85	:	:
Portugal									
1995	:	:	146	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	42	:
1998	:	:	121	:	:	:	:	54	36 ap)
1999	:	:	374	:	150	:	50	:	36
2000	:	:	239	:	:	:	:	:	53 ap)
Suomi / Finland									
1980	:	:	1.100 b)	:	:	:	:	:	:
1990	7.000 h)	:	1.035 b)	22	128	:	:	:	:
1991	:	:	1.050 b)	22	:	:	:	:	:
1992	:	:	1.050 b)	22	:	:	:	:	:
1993	:	:	1.050 b)	22	:	:	:	:	:
1994	7.000 h)	3.000	1.050 b)	22	120	:	:	:	:
1995	:	:	1.050 b)	22	:	:	:	:	:
1997	32.190 a)	3.000	136 ax)	22	:	:	26	:	:
1998	:	:	158 ax)	:	:	:	28	:	:
1999	34.900 ad)	:	160 ax)	:	:	100	30	:	:
2000	:	:	160 ax)	:	:	:	:	:	:
Sverige									
1980	:	:	:	:	99 q)	:	:	:	:
1985	:	:	187 ae) ax)	:	108 q)	:	:	:	:
1990	:	:	:	:	131 q)	:	:	:	:
1991	:	:	:	:	119 q)	:	:	:	:
1992	:	:	243	:	182 q)	:	:	:	:
1993	:	:	:	:	135 q)	:	:	:	:
1994	:	:	:	:	104 q)	:	:	:	:
1995	:	:	236 ax)	:	93 q)	47	:	:	:
1996	:	:	:	:	98 q)	43	:	:	:
1997	:	:	:	:	119 q)	51	:	:	:
1998	:	:	229 ax)	:	115 q)	57	100	:	:

Table 4: Generation of waste by selected waste streams (1 000 t) (continued)

		Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Sverige (continued)	1999	:	:	:	:	130 q)	59	:	:	:
	2000	:	:	230 ax)	:	127	60	:	:	:
	2001	:	:	:	:	227	:	102 ay)	:	:
United Kingdom										
	1985	:	20.600 l)	:	:	:	:	:	:	:
	1990	70.000 m)	14.596 l)	1.052 k)	:	:	:	:	:	:
	1995	70.000 m)	20.316 l)	1.124 k)	:	:	:	:	:	:
	1996	70.000 m)	27.235 l)	1.079 k)	:	:	:	:	:	:
	1997	:	22.333 l)	1.005 k)	:	:	:	:	16.344 ar)	:
	1998	:	17.359 l)	1.058 k)	:	:	:	:	:	:
	1999	72.500 g)	32.282 l)	:	:	1.500 ar)	:	1.000 ar)	:	:
Island	1995	:	:	0	:	:	:	:	:	:
	1996	:	:	0	:	:	:	:	:	:
	1997	:	:	0	:	:	:	:	:	:
	1998	:	:	0	:	:	:	4	:	:
	1999	:	:	0	:	:	:	:	:	:
	2000	:	:	0	:	:	:	:	:	:
	2001	:	:	0	:	:	:	.	:	:
Norge	1985	:	:	75	:	:	:	:	:	:
	1990	2.000 ar)	:	100	:	72 i)	:	.	:	:
	1991	:	:	:	:	81 i)	:	:	:	:
	1992	2.000 ar)	:	100	:	82 i)	:	35	:	1.079 s)u)
	1993	3.600	:	70	:	84 i)	:	:	:	1.156 s)u)
	1994	:	:	72	:	81 i)	:	:	:	1.197 s)u)
	1995	:	:	76	:	93 i)	28 t)	:	:	964 s)bi)aq)
	1996	:	:	79	:	324 v)	31 t)	:	:	1.005 s)bi)aq)
	1997	:	:	88	:	65 i)	24 t)	144	:	1.057 s)bi)aq)
	1998	1.543 bb)	:	93	:	115 i)	30 t)	:	:	1.076 s)bi)aq)
	1999	959 bh)bb)aw)au)	:	104	:	126 i)	27 t)	:	:	1.091 s)bi)aq)
	2000	940 bh)bb)aw)au)	:	111	:	266 at)	28 t)	169 s)	:	1.102 s)bi)aq)
Schweiz/ Suisse/ Svizzera	1990	3.000 j)	:	180	:	:	:	:	:	:
	1991	3.000 j)	:	180	:	:	:	:	:	:
	1992	3.000 j)	:	190	:	:	:	:	:	:
	1993	3.000 j)	:	190	:	:	:	:	:	:
	1994	3.000 j)	:	190	:	:	:	:	:	:
	1995	:	:	190	:	:	:	:	:	:

Table 4: Generation of waste by selected waste streams (1 000t) (continued)

		Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Schweiz/										
Suisse/	1996	:	:	190	:	:	:	:	:	:
Svizzera	1997	:	:	190	:	:	:	:	:	:
(continued)	1998	6.393 z)	:	200	:	:	:	:	:	:
Balgarija		:	:	:	:	:	:	:	:	:
Cyprus										:
	1985	504 al)	:	:	:	:	:	:	:	:
	1990	636 al)	:	:	:	:	:	:	:	:
	1993	:	:	:	:	7 ac)ar)	:	10 ar)	:	:
	1994	:	:	:	:	8 ac)ar)	:	:	:	:
	1995	516 al)	:	:	:	8 ar)ak)ai)	5	:	:	4 af)
	1996	47 aj)	:	:	:	6 ar)ak)ai)	:	:	6	:
	1997	38 aj)	:	:	:	9 ar)ak)ai)	:	:	:	4 af)
	1998	33 aj)	:	:	:	11 ar)ak)ai)	5 af)	7 ar)	:	4 af)
	1999	513	:	:	:	14 ar)ak)ai)	5 af)	:	:	4 af)
	2000	:	:	:	:	12 ar)ak)ai)	5 af)	:	6	:
	2001	:	:	:	:	13 ai)	5 af)	:	:	3 af)
Ceska Republika										
	1996	468 av)	641 av)	35 av)	:	:	:	:	:	:
	1997	709 av)	3.398 ag)av)	46 av)	:	:	:	47	:	:
	1998	7.879 ag)	2.102	:	:	7	12	1	68	39
	1999	6.157	495	:	:	11	31	2	59	39
	2000	8.567	2.257	:	:	5	12	2	59	36
	2001	11.340	2.211	:	:	4	21	2	77	41
Eesti										
	1995	212	:	:	45	:	:	:	:	:
	1996	376	:	:	58	:	:	:	:	:
	1997	546	:	:	15	:	:	:	:	:
	1998	232	:	:	20	:	:	:	1	:
	1999	161	:	:	2	:	0	0	1	:
	2000	235	12	289	0	10	1	0	7	:
Magyarorszag										
	1996	:	:	84	:	:	:	:	:	:
Latvija										
	2001	39	:	:	:	0	0	:	:	:

Table 4: Generation of waste by selected waste streams (1 000t) (continued)

	Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Lietuva									
1992	:	:	597 b)	:	:	:	:	:	:
1993	:	:	146 b)	:	:	:	:	:	:
1994	:	:	234 b)	:	:	:	:	:	:
1995	:	:	458 az)	:	:	:	:	:	:
1996	:	:	418 az)	:	:	:	:	:	:
1997	:	:	486 az)	:	:	:	:	:	:
1998	:	:	453 az)	:	:	:	:	:	:
1999	:	:	535 az)	:	:	:	:	:	:
2000	220	:	257 az)	:	1	3	0	12	:
2001	242	:	242 az)	:	2	3	0	8	:
Malta									
1990	1.546	:	:	:	:	:	:	:	:
1991	1.545	:	:	:	:	:	:	:	:
1992	2.432	:	:	:	:	:	:	:	:
1993	1.052	:	:	:	:	:	:	:	:
1994	1.289	:	:	:	:	:	:	:	:
1995	1.241	:	:	:	:	:	:	:	:
1996	1.250	:	:	:	:	:	:	:	:
1997	751	:	:	:	:	:	1	:	:
1998	82	:	:	:	:	:	:	:	:
1999	150	:	:	:	:	:	:	:	:
2000	145	:	:	:	10	:	:	:	:
2001	151	:	:	:	:	:	:	:	:
Polska									
1995	:	:	1.270	:	:	:	:	:	:
1996	:	:	1.322	:	:	:	:	:	:
1997	:	:	1.397	:	:	:	:	:	:
1998	642 ba)	:	1.282	:	:	:	:	:	:
1999	614 ba)	:	1.368	:	:	:	:	:	:
2000	727 ba)	:	1.063	:	:	:	:	:	:
2001	689 ba)	:	1.047	:	:	:	:	:	:

Table 4: Generation of waste by selected waste streams (1 000t) (continued)

	Construction/ Demolition wastes	Dredged Spoils	Sewage sludges (dry weight	Excess manure (dry weight)	End-of life vehicles	Used tyres	Electric and electronic scrap	Mineral and synthetic oils	Other
Romania									
1995	487	:	2.827	2.053	82	:	:	33	88
1996	375	:	2.776	1.587	56	:	:	94	76
1997	269	:	2.086	670	334	:	25	17	149
1998	600	:	1.678	866	145	40	9	39	172
1999	1.186	:	2.484	410	331	:	11	13	128
2000	818	:	1.937	202	1.075	27	1	45	426
Slovenska Republika									
1998	510	62	420	17	28	:	:	:	:
2000	443	:	568	:	:	:	:	:	:
Slovenija									
1995	156	1	0	:	1	0	:	9	0
1998	243	293	80 as)	:	1	1	0	5	1
2001	881	49	18	:	1	1	:	3	1
Turkey	:	:	:	:	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:
Croatia									
2000	290	:	300	327	19	:	:	7	:
Macedonia (Former Yugoslav Republic of)		:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:

Table 4: Generation of waste by selected waste streams (1 000t)

FOOTNOTES

a) Includes paper and paper products and printing and publishing.
b) Wet weight.
c) Based on number of vehicles.
d) Excludes construction site waste collected by municipalities.
e) 5% dry matter component of stabilised sludge; disregarding 1 000 000 t unstabilised sludge and other sludge.
f) Source : Bundesministerium für Land- und Forstwirtschaft.
g) Data from Environment Agency Survey of Construction and Demolition Waste E&W only
h) Estimated amounts of construction waste of which 80% is surplus soil.
i) Calculated from the number of cars entering the car wreckage.
j) Waste which is directly landfilled.
k) Data from WaterUK
l) Data from Centre for Environment, Fisheries, Aquaculture and Science, for all UK waters, internal and external. Dry weight
m) Includes excavated soil and miscellaneous materials as well as hard materials, e.g. brick, concrete and road planings. Estimated in 1990, not updated
n) Industrial and municipal sewage sludge.
o) May include liquid waste.
p) Collected waste only.
q) Number of end-of-life vehicles times (x) 0.8 tonnes.
r) Includes medical waste (147,70)
s) Calculated in the Norwegian waste accounts.
t) Tyres collected for recycling only.
u) Wet-organic waste (mostly food waste).
v) Due to extraordinarily high car deposit in 1996.
w) Source: COBAT - Consorzio Obbligatorio Batterie al Piombo esauste e rifiuti piombosi
x) Soil and stone subject to taxes or non-contaminated soil exempt from taxes. Includes waste that is landfilled as material for interim daily capping of landfills. Also includes products from separation of building and construction waste.
y) Stations de plus de 400 équivalent-habitants.
z) New Data from more accurate study.
aa) Sewage sludge figure for 1993 was from Weston FTA report referred to in National Waste Database Report for 1995.
ab) Estimates of waste tyres based on Import and export data and domestic production National Waste Database report 1995 and National Waste Database report 1998.
ac) Scrapped passenger saloon cars and mechanised cycles.
ad) Includes construction waste and surplus soil from building sites, civil engineering sites and dredging, and from all sectors
ae) Data refer to 1987.
af) National estimate.
ag) Break in time series due to new methodologies.
ah) Preliminary
ai) Data refer only to scrapped passenger saloon cars and mechanised cycles.
aj) Data refer only to demolition waste. Data estimated on the basis of calculations using the number of buildings demolished.
ak) Data refer to scrapped passenger saloon cars and mechanised cycles.

al) Data refer only to construction waste. Data estimated on the basis of calculations using the number of new buildings constructed.
am) Refrigerators.
an) Not taking into qccount refrigerators separately collected.
ao) Used tyres and caoutchouc waste.
ap) Refers to clinical waste
aq) Excludes fish waste dumped in open ocean.
ar) Estimate.
as) Includes G, H, I, K, M, N, and O without O 90.
Total amount includes secondary waste. Which kind of waste from group 19 (EWC) is considered secondary waste. In group 37 and 90 of NACE there is no waste expected to be considered as secundary from EWC group 19.
General remark: Included is also waste recycled or reused internally.
Excluded dredged spoils (EWC: 17 - 17 05 02)
Included batteries and accumulators (EWC 16 06) and waste from human or animal health care and/or related research (EWC 18)
at) Includes vehicles other than those entering the car wreckage system, e.g. lorries, trains, boats below 100 GT etc.
au) Excludes about 5 000 tonnes of asphalt and about 38 000 tonnes of contaminated soils.
av) Hazardous and special waste only
aw) Excludes clean soil, gravel, stone etc.
ax) Dry matter.
ay) Collected from july - december 2001 (x) 2
az) Wet weight.
ba) Refers to waste generated by the most industrial and energy sources.
bb) Calculated from building statistics. Includes waste from construction, rehabilitation and demolition of buildings; but not other infraestructure.
bc) Source : Ifen
bd) Source: Ifen. Units in thousands of vehicles
be) source : Fédération des industries électriques, électroniques et de communications.
bf) Source : ADEME
bg) Source : société ALIAPUR
bh) Decrease due to revised estimate of the number of demolished buildings.
bi) Wet-organic waste (other places calles biodegradables, but excludes paper and wood. Contains mostly food waste, but includes in addition park and garden waste).

Table 5: Generation and collection of municipal waste in Europe (1000t)

		BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			
	Municipal waste collected	households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter containers)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	Population served (%)
Belgique/België											
1991	4 294 o)q)	3.794 n)o)q)	:	:	:	:	:	3.184 o)q)	459 o)q)	651 o)q)	100 q)
1992	4 448 o)q)	3.917 n)o)q)	:	:	:	:	:	3.132 o)q)	511 o)q)	803 o)q)	100 q)
1993	4 668 o)q)	4.095 n)o)q)	:	:	:	:	:	3.087 o)q)	577 o)q)	990 o)q)	100 q)
1994	4 897 o)q)	4.267 n)o)q)	:	:	:	:	:	3.064 o)q)	562 o)q)	1.230 o)q)	100 q)
2000	:	:	:	:	:	:	:	2.079	537	2.399	100
Danmark											
1994	2 803	2.575	228	:	1.918	582	303	1.705	582	516	100
1995	2 959	2.610	350	:	2.014	597	348 be)	1.731	597	631	100
1996	3 253	2.767	487	:	2.220	613	420 be)	1.793	613	847	100
1997	3 104	2.776	328	:	2.063	588	453 be)	1.795	588	721	100
1998	3 141	2.796	345	:	2.119	572	450 be)	1.836	572	733	100
1999	3 329	2.963	366	:	2.181	672	476 be)	1.725	672	932	100
2000	3 546	3.084	462	:	2.256	730	560 be)	1.737	730	1.079	100
Deutschland											
1993	:	:	:	:	:	:	:	:	:	:	100
1996	44 390 ah)	35.128 ah)	5.317 ah)	3.945 ah)	25.192 ah)	3.003 ah)	16.195 ah)	29.137 ah)u)	3.003 ah)	12.251 ah)r)	:
1997	45 593	36.211	5.305	4.077	23.781	3.170	18.642	27.858 u)	3.170	14.564 r)	:
1998	44 825	35.871	5.079	3.875	22.392	3.174	19.259	26.267 u)	3.174	15.384 r)	:
1999	44 245 aa)	34.003 aa)	5.306 aa)	4.936 aa)	21.816 aa)	2.219 aa)	20.210 aa)	26.751 u)aa)	2.219 aa)	15.275 r)aa)	:
2000	45 641 ay)	35.544 ay)	5.231 ay)	4.866 ay)	20.253 ay)	3.201 ay)	22.187 ay)	25.120 ay)u)	3.201 ay)	17.320 ay)r)	:
Ellada											
1980	:	:	:	:	:	:	:	:	:	:	100
1985	:	:	:	:	:	:	:	:	:	:	100
1990	:	:	:	:	:	:	:	:	:	:	100
1991	:	:	:	:	:	:	:	:	:	:	100
1992	:	:	:	:	:	:	:	:	:	:	100
1995	:	:	:	:	:	:	:	:	:	:	100
1996	:	:	:	:	:	:	:	:	:	:	100
1997	:	:	:	:	:	:	:	:	:	:	100
1998	:	:	:	:	:	:	:	:	:	:	100
1999	:	:	:	:	:	:	:	:	:	:	100
2000	:	:	:	:	:	:	:	:	:	:	100
2001	:	:	:	:	:	:	:	:	:	:	100

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

	Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)
		households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter containers)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	
España											
1991	:	:	:	:	12.821	:	:	:	:	:	:
1992	:	:	:	:	13.828	:	:	:	:	:	:
1993	:	:	:	:	14.256	:	:	:	:	:	:
1994	:	:	:	:	14.296	:	:	:	:	:	:
1998	22 423	19.685 d)	2.370 d)	368 d)	20.623 d)	1.800 d)	:	19.153 d)	1.800 d)	1.470 d)	:
1999	24 470	21.206 d)	2.836 d)	428 d)	22.472 d)	1.998 d)	:	20.898 d)	1.998 d)	1.574 d)	:
2000	26 505	23.885 d)	2.042 d)	577 d)	25.792 d)	713 d)	:	23.078 d)	713 d)	2.713 d)	:
France											
1993	27 757	22.857	4.900	:	24.741	2.144	872	23.374	2.144	2.239	100
1995	29 057 bd)	24.157 aw)bc)bd)	4.900 bd)	0 aw)bc)bd)	25.736 bd)	2.144 bd)	1.177 bd)	24.208 bd)	2.144 bd)	2.705 bd)	100 bc
1996	29 681 bd)	24.781 aw)bc)bd)	4.900 bd)	0 aw)bc)bd)	26.221 bd)	2.144 bd)	1.316 bd)	24.580 bd)	2.144 bd)	2.957 bd)	100 bc
1997	29 947 bd)	25.047 aw)bc)bd)	4.900 bd)	0 aw)bc)bd)	26.368 bd)	2.144 bd)	1.435 bd)	24.445 bd)	2.144 bd)	3.358 bd)	100 bc
1998	30 293 bd)	25.393 aw)bc)bd)	4.900 bd)	0 aw)bc)bd)	26.600 bd)	2.144 bd)	1.549 bd)	24.299 bd)	2.144 bd)	3.850 bd)	100 bc
1999	30 506 bd)	25.606 aw)bc)bd)	4.900 bd)	0 aw)bc)bd)	26.703 bd)	2.144 bd)	1.659 bd)	24.078 bd)	2.144 bd)	4.284 bd)	100 bc
2000	31 213 bd)	26.313 bc)bd)	4.900 bd)	0 bc)bd)	27.292 bd)	2.144 bd)	1.777 bd)	24.329 bd)	2.144 bd)	4.740 bd)	100 bc
Ireland											
1995	1 550 p)	982	404	47	:	:	:	1.432	:	118	:
1998	1 933	1.163	689	81	:	:	:	1.686	:	167	:
2000	2 364	1.253	989	122	:	:	:	1.971	:	271	:
Italia											
1995	25 780	:	:	:	:	:	:	:	:	:	:
1996	25 960	:	:	:	:	:	:	23.480	612	1.868	100
1997	26 605	:	:	:	:	:	:	23.552	546	2.507	100
1998	26 846	:	:	:	:	:	:	23.429	400	3.016	100
1999	28 364	:	:	:	:	:	:	24.152	495	3.717	100
2000	28 959	:	:	:	:	:	:	:	:	:	:
Luxembourg											
1991	:	:	:	:	:	:	:	:	:	:	100
1992	:	:	:	:	:	:	:	:	:	:	100
1993	:	:	:	:	:	:	:	:	:	:	100
1994	:	:	:	:	:	:	:	:	:	:	100
1995	240 o)	193 o) v)	47 v)	0 w)bl)	227 o) x) bb)	13	0	179 o) y) az)	13	48 o) z)	100
1996	242 o)	192 o) v)	44 v)	5	230 o) x) bb)	12	0	181 y)az)	12	49 o) z)	100
1997	253 o)	202 o) v)	46 v)	5	245 o) x) bb)	8	0	177 y)az)	8	68 o) z)	100
1998	266 o)	210 o) v)	54 v)	2	255 o) x) bb)	10	0	173 y)az)	10	82 o) z)	100
1999	278 o)	221 o) v)	53 v)	3	265 o) x) bb)	13	0	179 y) az)	13	85 o) z)	100

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

	Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)	
		households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter containers)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions		
Nederland												
1985	6 933	:	:	:	:	:	:	:	:	:	:	
1993	:	7.101	425	1.037	:	:	:	:	717	2.305	:	
1994	:	7.155	406	1.090	:	:	:	:	756	2.756	:	
1995	8 465	7.232	371	862	:	:	:	:	742	3.143	:	
1996	8 782	7.537	391	854	:	:	:	:	675	3.441	100	
1997	9 143	7.855	378	910	:	:	:	:	724	3.777	100	
1998	9 221	7.990	314	917	:	:	:	:	728	3.895	100	
1999	9 434	8.311	214	909	:	:	:	3.810	359	3.711	100	
2000	9 753	8.576	197	980	:	:	:	3.935	331	3.798	100	
2001	9 750	8.595 aa)	191 aa)	964 aa)	:	:	:	3.912 aa)	310 aa)al)	3.853 aa)	100	aa
Österreich												
1990	3 204	2.504	:	700	2.304	200	700	1.860	200	1.144	95	
1991	:	:	:	:	2.426 a)	:	:	:	:	:	:	
1992	:	:	:	:	2.477 a)	:	:	:	:	:	:	
1993	:	:	:	:	2.509 a)	:	:	:	:	:	:	
1994	:	:	:	:	2.569 a)	:	:	:	:	:	:	
1995	3 476	2.644	:	831	2.432	212	832	1.244	212	2.020	100	
1996	4 110	2.775	:	1.335	2.554	221	1.335	1.291	221	2.598	100	
1997	4 241	2.906	:	1.335	2.689	217	1.335	1.290	217	2.734	100	
1998	4 249	2.914	:	1.335	2.713	201	1.335	1.267	201	2.781	100	
1999	4 496	3.096	:	1.400	2.877	219	1.400	1.315	219	2.962	100	
Portugal												
1992	:	:	:	:	:	:	:	:	:	:	89	d)
1993	:	:	:	:	:	:	:	:	:	:	93	d)
1995	3 884	:	:	:	:	:	:	:	:	:	95	d)
1996	4 030	:	:	:	:	:	:	:	:	:	96	d)
1997	4 109	:	:	:	:	:	:	:	:	:	97	d)
1998	4 304	:	:	:	:	:	:	:	:	:	97	d)
1999	4 364	:	:	:	:	:	:	4.174	67	123	98	
2000	4 531	:	:	:	:	:	:	4.249	68	214	:	

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

	Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)
		households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter cont.)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	
Suomi / Finland											
1985	2 500	:	:	:	:	:	:	:	:	:	:
1990	3 100	:	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:	:	100
1997	2 200	880 ab)	:	:	:	:	:	:	:	:	100
1998	2 300	:	:	:	:	:	:	:	:	:	100
1999	2 400	960	:	:	:	:	:	:	:	:	100
2000	2 500	1.000	:	:	:	:	:	:	:	:	100
Sverige											
1980	:	:	:	:	:	:	:	:	:	:	100
1985	:	:	:	:	:	:	:	:	:	:	100
1990	:	:	:	:	:	:	:	:	:	:	100
1994	:	:	:	:	:	:	:	:	:	:	100
1998	4 000 e)f)	:	:	:	4.000 b)	:	:	:	:	1.000 b)	:
2000	3 800	:	:	:	3.800	:	:	:	:	1.090	:
United Kingdom											
1995	25 200 af)	:	:	:	:	:	:	:	:	:	:
1996	25 979 af)	22.796 af)	2.152 af)	1.030 af)	:	:	:	16.595 af)	:	:	100 af
1997	27 166 af)	23.676 af)	2.541 af)	949 af)	:	:	:	17.017 af)	:	:	:
1998	27 912 af)	23.862 af)	2.998 af)	1.052 af)	:	:	:	17.095 af)	6 af)	564 af)	:
1999	29 332 af)	25.147 af)	3.081 af)	1.104 af)	:	:	:	17.625 af)	7 af)	682 af)	:
Island											
1992	159	63	96 s)	:	:	:	:	:	:	:	99
1993	162	64	98 s)	:	:	:	:	:	:	:	99
1994	163	64	99 s)	:	:	:	:	:	:	:	99
1995	166	64	102 s)	:	:	:	:	:	:	:	99
1996	169	65	104 s)	:	:	:	:	:	:	:	99
1997	174	67	107 s)	:	:	:	:	:	:	:	99
1998	180	68	112 s)	:	:	:	:	:	:	:	99
1999	189	71	118 s)	:	:	:	:	:	:	:	99
2000	198	74	124 s)	:	:	:	:	:	:	:	99
2001	206	77	129 s)	:	:	:	:	:	:	:	99

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

			BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			
		Municipal waste collected	households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter cont.)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	Population served (%)
Norge												
	1980	1 700	680 bi)	:	:	:	:	:	:	:	:	:
	1985	1 968	655 bj)	:	:	:	:	:	:	:	:	:
	1990	2 000 bg)	800 bg)	:	:	:	:	:	:	:	:	:
	1992	2 223	1.012	:	:	:	:	:	:	:	186 g)	97
	1993	2 217	1.097	:	:	:	:	:	:	:	:	:
	1994	2 366	1.096	:	:	:	:	:	:	:	:	:
	1995	2 722	1.174	:	:	:	:	:	:	:	373 aj)	98
	1996	2 761	1.195	:	:	:	:	:	:	:	549 aj)	98
	1997	2 721	1.259	:	:	:	:	:	:	:	671 aj)	98
	1998	2 858	1.364	:	:	:	:	:	:	:	640 aj)	99
	1999	2 650	1.397	:	:	:	:	:	:	:	781 aj)	99
	2000	2 755 c)ac)	1.452	:	:	:	:	:	:	:	843 ad)aj)	99
	2001	:	1.507	:	:	:	:	:	:	:	668 bk)	99
Schweiz/ Suisse/ Svizzera	1980	:	:	:	:	:	:	:	:	:	:	96
	1985	3 387 t)	:	:	:	:	:	:	1.827 b)	:	777	98
	1990	4 090 t)	:	:	:	:	:	:	2.051 b)	:	1.160	99
	1991	4 131 t)	:	:	:	:	:	:	2.016 b)	:	1.251	99
	1992	4 097 t)	:	:	:	:	:	:	1.953 b)	:	1.307	99
	1993	4 140 t)	:	:	:	:	:	:	1.939 b)	:	1.370	99
	1994	4 161 t)	:	:	:	:	:	:	1.841 b)	:	1.531	99
	1995	4 200 t)	:	:	:	:	:	:	1.792 b)	:	1.640	99
	1996	4 246 t)	:	:	:	:	:	:	1.736 b)	:	1.766	99
	1997	4 294 t)	:	:	:	:	:	:	1.729 b)	:	1.824	99
	1998	4 369 t)	:	:	:	:	:	:	1.722 b)	:	1.909	99
	1999	4 555 t)	:	:	:	:	:	:	1.820 b)	:	1.955	99
	2000	4 730	:	:	:	:	:	:	1.810 b)	:	2.138	99
Balgarija												
	1995	4 495 bf)	:	:	:	:	:	:	4.495	:	:	77
	1996	4 031 bf)	:	:	:	:	:	:	4.031	:	:	78
	1997	3 628 bf)	:	:	:	:	:	:	3.628	:	:	75
	1998	3 197 bf)	:	:	:	:	:	:	3.197	:	:	78
	1999	3 213 bf)	2.100 o)	671 o)	443 o)	2.105 o)	:	1.108 o)ae)	3.213	:	:	78
	2000	3 318 bf)	2.282 o)	652 o)	384 o)	2.011 o)	:	1.307 o)ae)	3.318	:	:	79
	2001	3 211 bf)	1.982 o)	592 o)	637 o)	2.574 o)	:	637 o)ae)	3.211	:	:	80

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

	Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)
		households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter cont.)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	
Cyprus											
1990	369	307	61	:	:	:	:	369	:	:	:
1993	369 k)	307	61 l)	:	:	:	:	369 k)	:	:	:
1995	402 ak)	:	:	:	:	:	:	402 ak)	:	:	:
1996	438	:	:	:	:	:	:	406	:	32	:
1997	455	:	:	:	:	:	:	420	:	35	:
1998	476	:	:	:	:	:	:	434	:	42	:
1999	494	:	:	:	:	:	:	449	:	45	:
2000	513	:	:	:	:	:	:	466	:	47	:
2001	525	:	:	:	:	:	:	477	:	48	:
Ceska Republika											
1996	3 200 ay)	:	:	:	:	:	:	:	:	:	:
1997	3 280 ay)	:	:	:	:	:	:	:	:	:	:
1998	3 017	:	:	19 an)	2.231 ao)	:	73	:	:	433 am)	100 a
1999	3 365	:	:	33 an)	1.664 ao)	:	234	:	:	162	100 a
2000	3 434	:	:	35 an)	1.987 ao)	:	197	:	:	172	100 a
2001	2 798	:	:	23	2.064	:	163	:	:	178	100
Eesti											
1995	:	298	:	:	:	:	:	:	:	:	70
1996	:	449	:	:	:	:	:	:	:	:	70
1997	:	371	:	:	:	:	:	:	:	:	69
1998	:	344	174	39	:	:	:	:	:	:	69
1999	:	260	300	8	:	:	:	:	:	:	69
2000	633	200	417	16	571	:	62	571	:	62	77
Magyarorszag											
1980	2 461 ba)	:	:	:	:	:	:	:	:	:	100
1985	3 447 ba)	:	:	:	:	:	:	:	:	:	100
1990	4 171 ba)	2.468 ba)	1.703 ba)h)	:	4.171 ba)	:	:	4.171 ba)	:	:	65
1994	3 774	2.397	1.291 h)	:	3.688	:	:	3.688	:	:	70
1995	3 811 ba)	2.543 ba)	1.268 ba)h)	:	3.811 ba)	:	:	3.811 ba)	:	:	73
1996	4 023 ba)	2.716 ba)	1.307 ba)h)	:	4.023 ba)	:	:	4.023 ba)	:	:	77
1997	4 258 ba)	2.853 ba)	1.405 ba)h)	:	4.258 ba)	:	:	4.258 ba)	:	:	79
1998	4 292 ba)	2.794 ba)	1.498 ba)h)	:	4.292 ba)	:	:	4.292 ba)	:	:	82
1999	4 376 ba)	2.813 ba)	1.563 ba)h)	:	4.376 ba)	:	:	4.376 ba)	:	:	83
2000	4 084 ba)	2.674 ba)	1.410 ba)h)	:	4.084 ba)	:	:	4.084 ba)	:	:	85
2001	4 189	2.652	1.368	169	4.043	146	:	3.941	146	103	87

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

	Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)
		households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter cont.)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	
Latvija											
1997	311 ag)	:	:	:	:	:	:	:	:	:	:
1998	299 ag)	:	:	:	:	:	:	299 aq)	:	:	50 a
1999	292 ag)	:	:	:	:	:	:	292 aq)	:	:	50 a
2001	:	:	:	15	:	:	:	:	5	55	:
Lietuva											
1992	1 520	:	:	:	:	:	:	:	:	:	:
1993	1 866	:	:	:	:	:	:	:	:	:	:
1994	1 671	:	:	:	:	:	:	:	:	:	:
1995	1 546	:	:	:	1.546	:	:	1.546	:	:	:
1996	1 445	:	:	:	1.445	:	:	1.445	:	:	:
1997	1 510	:	:	:	1.510	:	:	1.510	:	:	:
1998	1 578	:	:	:	1.578	:	:	1.578	:	:	:
1999	1 236	:	:	:	1.236	:	:	1.236	:	:	:
2000	1 086	:	:	:	1.086	:	:	1.086	:	:	:
2001	1 046	:	:	:	1.046	:	:	1.046	:	:	:
Malta											:
1998	145	114	15	17	114	28	4	145	28	:	100
1999	179	103	22	53	103	28	48	179	28	:	100
2000	188	105	19	64	105	24	59	188	24	:	100
2001	215	106	19	90	106	32	77	215	32	:	:
Polska											
1980	10 055	6.330	:	:	:	:	:	:	:	:	:
1985	11 087	7.223	:	:	:	:	:	:	:	:	:
1990	11 098	7.253	:	:	:	:	:	:	:	:	:
1991	10 638	6.896	:	:	:	:	:	:	:	:	:
1992	10 621	7.122	:	:	:	:	:	:	:	:	:
1993	10 645	7.138	:	:	:	:	:	:	:	:	:
1994	11 015	7.598	:	:	:	:	:	:	:	:	:
1995	10 985	7.645	:	:	:	:	:	:	:	:	:
1996	11 621	8.265	:	:	:	:	:	:	:	:	:
1997	12 183	8.169	:	:	:	:	:	:	:	:	:
1998	11 827	8.076	:	:	:	:	:	:	:	:	:
1999	12 317	8.343	:	:	:	:	:	:	:	:	:
2000	12 226	8.480	:	:	:	:	:	:	:	:	:
2001	11 109	8.048	:	:	:	:	:	:	:	:	:

Table 5: Generation and collection of municipal waste in Europe (1000t) (continued)

		Municipal waste collected	BY ORIGIN			BY TYPE OF WASTE			BY TYPE OF COLLECTION			Population served (%)
			households	commerce, trade, small business, office, institutions	municipal service (streets and market cleaning, yard w., litter cont.)	household and similar	bulky waste	other	Traditional collection	Collection of bulky waste	Separate collection of waste fractions	
Romania												
	1995	5 758 i)	3.595	1.336	827	4.931	:	827	5.758	:	:	85 j)
	1996	5 202 i)	3.427	850	925	4.277	:	925	5.202	:	:	87 j)
	1997	3 410 i)	2.830	240	340	3.070	:	340	3.410	:	:	88 j)
	1998	5 050 i)	3.000	1.230	820	4.230	:	820	5.050	:	:	89 j)
	1999	5 699 i)	4.120	1.087	492	5.207	:	492	5.699	:	:	90 j)
	2000	6 611 i)	3.422	1.956	1.233	5.378	:	1.233	6.611	:	:	90 j)
Slovenska Republika	1995	1 620	1.215	:	:	:	:	:	:	:	:	89
	1996	1 700	1.050	:	:	:	:	:	:	:	:	91
	1997	:	:	:	:	:	:	:	:	:	:	96
	1998	1 700	1.100	:	:	:	:	:	:	:	:	:
	2000	1 706	889	:	105	1.093	141 ax)	:	889	141	102	:
Slovenija												
	1995	1 024 ar)	573 at)au)	406 as)at)au	:	979 au)	45	213 av)	962	45	17 au)	84
	1998	1 080	732	312	36	884	79	117	920	79	81	90
	2001	873	:	:	:	711	80	82	748	80	45	94
Turkey												
	1994	17 754	:	:	:	17.754	:	:	17.754	:	:	70
	1995	20 910	:	:	:	20.910	:	:	20.910	:	:	72
	1996	22 483	:	:	:	22.483	:	:	22.483	:	:	71
	1997	24 180	:	:	:	24.180	:	:	24.180	:	:	71
	1998	24 945	:	:	:	24.945	:	:	24.945	:	:	72
Bosnia and		:	:	:	:	:	:	:	:	:	:	:
Croatia												
	1999	1 990	:	:	1.990	1.691	299	:	1.623	299	68	:
Macedonia		:	:	:	:	:	:	:	:	:	:	:
Yugoslavia		:	:	:	:	:	:	:	:	:	:	:

Table 5: Generation and collection of municipal waste in Europe (1000t)

FOOTNOTES

a) Excludes own deliveries to disposal sites.
b) Includes bulky waste.
c) Surveys of municipal waste in 1992 and 1995 indicate that approximately 90 000 t of waste from building and construction activities entered the municipal waste stream. This amount is included in the Norwegian figures.
d) Source :INE.
e) Treatment of municipal waste.
f) 900 000 tonnes collected by private enterprise and reported under Commission decision 97/138/EC included.
g) Included in the total amount of municipal waste collected.
h) B2 includes B3 data.
i) Total quantity of waste collected by or on behalf of municipalities.
j) Percentage of population served by traditional collection services.
k) Data provided is based on the results of an ad-hoc survey. It refers to municipal solid waste delivered to landfills. There may exist a small proportion of recycling before disposal to landfills.
l) Waste originating from both category B2 and category B3.
m) Included in category B2.
n) Includes waste from small enterprises in several regions
o) National estimate.
p) Figure based on collected household, commercial and street cleansing and separately collected for recovery.
q) Not validated by the Belgium regional authorities.
r) Seperate collection (glass, paper, plastics, electronic parts) and Compostable waste from the bio-bin.
s) Includes waste from municipal services
t) Includes municipal waste collected by or on behalf of municipalities and municipal waste collected by the private sector
u) Including waste from garden and parks, street sweepings and market waste
v) Assumes that all fractions recovered (see line D3) are generated by households and not by retails and SMEs. It is impossible to breakdown fractions collected separately for recovery operations for what is brought to recycling centres or collected door-to-door.

w) Included in categories B1 and B2.
x) Data covers household waste (except bulky household waste), retail and small business similar to household waste, other household waste as well as fractions collected separately for recovery operations (line D3).
y) Data covers household waste (except bulky household waste), retail and small business similar to household waste and other household waste.

z) Fractions collected separately include non hazardous packaging, problematic packaging, paper & glass, other products (such as old clothes, metals, tyres, rubber,…), problematic waste, TVs, lamps, fridge, electric & electronic devices, biological and garden waste.

aa) Preliminary data.
ab) Based on estimation made in the beginning of 1990's that 40% of mw. is from households.

ac) Includes B1-B3, C1-C2
ad) Of which 581 from households.
ae) Data about wastes from hospitals, buildings, agriculture and other are included.
af) England and Wales only.
ag) These are amounts from the state statistical survey 2001 on municipal waste. Data given for previous years are very disputable, because are estimated on the basis of some provided pilot projects by the assumption that 50% of generated waste is collected. (02/10/2002 - Juris Fridmanis - Head of Statistical Data Division - Latvian Environment Agency)

ah) Time break due to new methodologies.
aj) This amount is included in the total amount of municipal waste collected.
ak) Data refer to the year 1993. They are based on the results of an ad-hoc survey. Data refer to municipal solid waste delivered to landfills. There may exist a small proportion of recycling before disposal to landfills.
al) Not including brought bulky waste; the whole timeseries will be revised next year.
am) Source : Czech Environmental Institute.
an) CZ-NACE 90, EWC code 20 03 02 + 20 03 03
ao) EWC code 20 03 01
ap) The Waste Act obliges Municipality authorities to provide a waste collection service.
aq) The type of collection is "traditional collection".
ar) Figures represent quantities collected by municipal waste collection scheme covering 84,20% of population.
as) B2 also includes unknown quantities of waste that should be reported under B3 (waste from municipal services).
at) Quantities under B1 and B2 do not include bulky waste for which only total amount is known (44,91), and can't be broken down by its origin.
au) Quantities of separately collected fractions (16,79) are suitably included within B1 and B2.
av) Inert waste and waste from waste water treatment plants are not included within the amount of 1023931 t of total municipal waste collected.
aw) Waste collected from municipal services are counted in the amount of waste from households.
ax) Source: Statistical Office of SR (includes bulky waste from households and municipalities - includes construction and demolition waste)
ay) Estimate.
az) Covers household waste (except household bulky waste), waste from commercial activities and from small business similar to household waste and other type of household waste.

ba) Data were collected in volumetric unit, for calculation up to 1999 0.22, in 2000 0.2 t/m3 coefficient of density was used.
bb) Covers household waste (except household bulky waste), waste from commercial activities and from small business similar to household waste, other type of household waste, and waste collected for recovery operations.
bc) Waste collected from municipal services are counted in the amount of waste from households
bd) Source: IFEN
be) Garden waste from households and Institutions, Commerce and Offices
bf) Source of information - statistical survey, NSI
bg) Rough estimate based on expert opinion.
bh) From 2001 the survey only covers household waste.
bi) Figure refers to 1982.
bj) Figure refers to 1983.
bk) Household waste only.
bl) Included in categories B2 and B3.

Table 6: Treatment and disposal of municipal waste, by method (1000 t)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Belgique/België							
1990	4.356	318 h)k)s)	247 h)k)s)	983 h)k)s)	576 h)k)s)	2.232 h)k)s)	:
1991	:	402 a)h)k)	243 a)h)k)	1.031 a)h)k)	538 a)h)k)	2.228 a)h)k)	:
1992	:	519 a)h)k)	277 a)h)k)	1.097 a)h)k)	499 a)h)k)	2.127 a)h)k)	:
1993	:	625 a)h)k)	287 a)h)k)	1.066 a)h)k)	461 a)h)k)	2.203 a)h)k)	:
1994	:	801 a)h)k)	324 a)h)k)	1.111 a)h)k)	422 a)h)k)	2.174 a)h)k)	:
1995	4.875	951 h)k)s)	327 h)k)s)	1.106 h)k)s)	384 h)k)s)	2.107 h)k)s)	:
1996	5.033	1.253 h)k)s)	510 h)k)s)	1.058 h)k)s)	327 h)k)s)	1.885 h)k)s)	:
1997	5.525	1.664 h)k)s)	748 h)k)s)	1.184 h)k)s)	280 h)k)s)	1.649 h)k)s)	:
1998	5.668	1.982 h)k)s)	831 h)k)s)	1.149 h)k)s)	233 h)k)s)	1.473 h)k)s)	:
Danmark							
1993	:	203	206	1.500	:	468	:
1994	:	479	264 f)	1.549	:	511	511
1995	:	605	317 t)	1.534	:	503	503
1996	:	802	405 t)	1.616	:	432	432
1997	:	662	436 t)	1.662	:	344	344
1998	:	710	420 t)	1.654	:	357	357
1999	:	820	476 t)	1.672	:	361	361
2000	:	775	560 t)	1.852	:	355	355
Deutschland							
1993	40.017 b)	1.384 b)	2.241 b)	8.552 b)	:	27.840 b)	:
1997	:	15.901	2.935	9.077	:	17.680	:
1998	:	15.967	3.308	9.219	:	16.331	:
1999	:	16.229 ae)	3.185 ae)	9.884 ae)	:	14.947 ae)	:
2000	:	16.517 h)	4.022 h)	10.497 h)	:	14.605 h)	:
Ellada							
1985	3.000	:	:	:	:	:	:
1990	3.000	179	:	:	:	:	1.745
1992	:	226	:	:	:	:	:
1995	3.200	:	:	:	:	:	:
1996	3.600	:	:	:	:	:	:
1997	3.900	328	32	:	:	:	1.780
1998	4.082	331	32	:	:	:	1.871
1999	4.264	346	32	:	:	:	1.955
2000	4.447	359	32	:	:	:	2.280
2001	4.559	:	:	:	:	:	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
España							
1991	:	:	1.898 m)	476 m)	159 m)	10.289 m)	6.278 m)
1992	:	:	1.468 m)	516 m)	133 m)	11.710 m)	7.053 m)
1993	:	:	1.560 m)	496 m)	139 m)	12.061 m)	7.799 m)
1994	:	:	1.770 m)	447 m)	178 m)	11.901 m)	8.362 m)
1998	:	2.067 c)	:	2.981 c)	:	13.431 c)	13.431 c)
1999	:	2.997 c)	:	2.421 c)	:	11.462 c)	11.462 c)
2000	:	1.778 c)	3.106 c)	1.724 c)	:	10.253 c)	10.253 c)
France							
1993	:	1.927	2.105	7.013	3.036	13.677	:
1995	:	2.149	2.597	7.766	2.893	13.651	13.651
1996	:	2.272	2.804	7.528	2.682	14.394	14.394
1997	:	2.562	2.694	7.698	2.503	14.489	14.489
1998	:	2.948	2.698	8.002	2.067	14.577	14.577
1999	:	3.280	2.601	8.628	1.569	14.426	14.426
2000	:	3.627	2.964	8.787	1.527	14.306	14.306
Ireland							
1995	:	118	:	:	:	1.432 aa)	:
1998	:	161	6	:	:	1.767 aa)	1.767
2000	:	271	17	:	:	2.093	2.093
Italia							
1995	:	:	:	:	:	24.000	24.000
1996	:	1.199 p)	1.329	:	:	21.623	21.623
1997	:	1.874 p)	2.542	1.222	524	21.275	21.275
1998	:	:	:	1.949 ax)	:	20.768	20.768
1999	:	2.595 p)	2.209	2.121 ax)	:	21.745	21.745
Luxembourg							
1991	:	:	:	142	:	:	:
1992	:	:	:	142	:	:	:
1993	:	:	:	135	:	73	73
1994	:	:	:	132	:	67	67
1995	209 h)	1 h)q)	17 r)	127	:	65 h)	:
1996	206 h)	1 h)q)	12 r)	126	:	67	:
1997	208 h)	1 h)q)	22 r)	125	:	60	:
1998	214 h)	1 h)q)	30 r)	122	:	62	:
1999	227 h)ae)	1 h)q)ae)	33 r)ae)	133 ae)	:	60 ae)	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Nederland							
1985	:	212	300	1.535	625	3.795	:
1991	:	578	475	2.325	:	3.610	3.610
1994	:	1.265	1.834	2.092	100	2.870	2.870
1996	:	1.454	2.248	2.732 ax)	:	1.693	1.693
1998	:	1.937	2.301	3.702 ax)	:	1.280	1.280
1999	:	2.292	2.230	3.859 ax)	:	1.136	1.136
2000	:	2.334	2.349	3.691 ax)	:	1.377	1.377
2001	:	2.415 ae)	2.301 ae)	3.704 ae)ax)	:	1.314 ae)	1.314 ae)
Österreich							
1990	3.204	399	814	312	:	1.977	1.977
1991	2.426 a)	511	308	341	:	1.596	1.596
1992	2.477 a)	581	332	399	:	1.495	1.495
1993	2.509 a)	640	451 i)	410	:	1.372 j)	1.372
1994	2.569 a)	785	485	404	:	1.230	1.230
1995	3.476	820	936	431	:	1.626	1.626
1996	4.110	879	1.674	431	:	1.476	1.476
1997	4.241	941	1.752	445	:	1.506	1.506
1998	4.249	987	1.744	440	:	1.483	1.483
1999	4.496	1.061	1.852	456	:	1.553	1.553
Portugal							
1993	:	:	448 c)	:	5 c)	1.488 c)	:
1994	:	:	190 c)	:	:	3.610 c)	:
1995	:	:	498 c)	:	:	2.007 c)	:
1996	:	:	634 c)	:	:	2.331 c)	:
1997	:	:	285 c)	:	:	2.675 c)	:
1998	:	:	159 c)	:	:	3.102 c)	:
1999	4.364	193	226	349	:	3.596	2.603
2000	4.531	347 u)	275	930	:	3.410	2.820
Suomi /							
1990	:	600	50	50	:	2.400	2.400
1992	:	:	:	:	:	1.955	:
1993	:	:	:	:	:	1.682	:
1994	2.100	:	:	50	:	1.258	:
1995	:	:	:	:	:	1.366	:
1997	2.200	:	:	113	:	1.444	:
1998	2.300	:	:	143	:	1.514	:
1999	2.400	:	:	196	:	1.446	:
2000	2.500	:	:	270	:	1.580	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Sverige							
1980	2.510	:	:	700	200	1.600	:
1985	2.650	:	:	1.200	200	1.100	:
1990	3.200	400	100	1.300	:	1.400	:
1994	3.200	500	100	1.300	:	1.200	:
1998	:	1.000	300	1.400	:	1.300	:
2000	:	1.090	360	1.460	:	1.223 ac)	:
United							
1995	28.900 ab)	2.020 ab)ad)	:	1.450 ab)	1.160 ab)	23.990 ab)	:
1996	29.442 ab)	1.974 ab)ad)	:	1.446 ab)	614 ab)	25.261 ab)	:
1997	31.109 ab)	2.300 ab)ad)	:	1.624 ab)	66 ab)	26.880 ab)	:
1998	31.769 ab)	2.770 ab)ad)	:	2.146 ab)	17 ab)	26.693 ab)	:
1999	33.344 ab)	3.413 ab)ad)	:	2.325 ab)	8 ab)	27.493 ab)	:
2000	34.013 ab)	3.764 ab)ad)	:	2.479 ab)	20 ab)	27.608 ab)	:
Island							
1992	154	3	2	:	13	80	80
1993	157	3	2	2	13	85	85
1994	156	4	2	2	13	90	90
1995	160	7	2	2	13	126	99
1996	160	9	2	2	13	129	104
1997	166	8	2	2	13	138	114
1998	171	11	2	4	11	141	129
1999	179	14	2	4	11	147	140
2000	192	17	3	6	11	155	154
2001	198	18	3	6	11	160	159
Norge							
1980	:	:	:	41 e)	27 e)	1.632 v)	:
1985	:	:	:	220 e)l)	:	1.748 v)	:
1990	:	100 h)	:	:	:	:	:
1992	:	176	9	20 e)	294 e)	1.723	1.577
1993	:	230	10	41 e)	300 e)	1.637	:
1994	:	265	13	47 e)	303 e)	1.739	:
1995	:	322	51	314 e)	53 e)	1.982	:
1996	:	467	82	353 e)	z)	1.859	:
1997	:	548	124	367 e)	z)	1.683	:
1998	:	482	158	374 e)	z)	1.843	:
1999	:	579	202	410 e)	z)	1.459	:
2000	:	606 x)	237 y)	405 e)h)	z)	1.507	:
2001	:	459 x)	209 y)	356 e)h)	z)	471	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Schweiz/Suisse/Svizzera							
1985	:	578	200	2.000 ay)	:	1.150	550 ay)
1990	:	900	260	2.250 ay)	:	1.280	580 ay)
1991	:	855	300	2.200 h)	:	1.290	590 h)
1992	:	989	320	2.140	:	1.240	590
1993	:	1.022	350	2.120	:	1.240	590
1994	:	1.163	371	2.040	:	1.190	600
1995	:	1.240	400	2.020	:	1.140	600
1996	:	1.315	451	1.990	:	1.090	600
1997	:	1.349	475	1.990	:	1.080	600
1998	:	1.406	503	1.990	:	1.070	600
1999	:	1.448	510	2.130	:	1.070	600
2000	:	1.497	641	2.300	:	990	700
Balgarija							
1995	:	:	:	:	:	4.467	3.130
1996	:	:	:	:	:	3.996	3.070
1997	:	:	:	:	:	3.614	2.749
1998	:	:	:	:	:	3.167	2.320
1999	:	:	:	:	:	3.197	2.194
2000	:	:	:	:	:	3.271	2.281
2001	:	:	:	:	:	3.198	2.347
Cyprus							
1990	:	:	:	:	:	369	369
1995	:	:	:	:	:	402	402
1996	407	1	:	:	:	406	406
1997	421	1	:	:	:	420	420
1998	435	1	:	:	:	434	434
1999	450	:	:	:	:	449	449
2000	:	:	:	:	:	466	466
2001	:	:	:	:	:	477	477
Ceska							
1994	1.992 d) n)o)	2 d) o)h)	2 d) o)h)	:	:	:	:
1998	:	433 o)h)	:	176 o)h)	4 o)h)	:	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Eesti							
1995	533	:	3	:	:	529	:
1996	565	:	1	:	:	564	:
1997	593	:	1	:	:	592	182
1998	557	:	1	:	:	556	399
1999	569	:	0	:	:	569	460
2000	620	13	2	0	0	601	583
Magyarorsza							
1980	2.461	:	:	:	:	:	:
1985	3.447	:	:	:	:	:	:
1990	4.171	:	:	300 w)	:	3.961	:
1994	:	:	:	300	:	3.568	:
1995	3.811	:	:	330 w)	:	3.576	:
1996	4.023	:	:	330 w)	:	3.788	:
1997	4.258	:	:	330 w)	:	4.023	:
1998	4.292	:	:	356 w)	:	4.067	3.752
1999	4.376	:	:	352 w)	:	4.146	3.866
2000	4.084	:	:	348 w)	:	3.847	3.237
2001	4.189	57	17	353	:	3.821	3.685
Lietuva							
1995	1.546	:	:	:	:	1.546	:
1996	1.445	:	:	:	:	1.445	:
1997	1.510	:	:	:	:	1.510	:
1998	1.578	:	:	:	:	1.578	:
1999	1.236	:	:	:	:	1.236	:
2000	1.086	:	:	:	:	1.086	:
2001	1.046	:	:	:	:	1.046	:
Latvija							
1995	328	:	:	:	:	:	:
1996	325	:	:	:	:	:	:
1997	311	:	:	:	:	:	:
1998	299	:	:	:	:	:	:
1999	292	:	:	:	:	:	:
2001	:	14	16	27	0	911	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Malta							
1993	:	:	10	:	:	:	:
1994	:	:	22	:	:	:	:
1995	:	:	23	:	:	:	:
1996	:	:	14	:	:	:	:
1997	:	:	10	:	:	:	:
1998	145	:	23	:	:	:	:
1999	179	1	25	:	:	137	:
2000	188	1	30	:	:	131	:
2001	215	1	31	:	:	185	:
Polska							
1980	10.055	:	:	:	:	:	:
1985	11.087	:	:	:	:	:	:
1990	11.098	:	:	:	:	:	:
1995	10.985	:	201	:	:	10.784	:
1996	11.621	:	219	:	:	11.402	:
1997	12.183	:	369	:	:	11.813	:
1998	11.827	13	222	:	:	11.592	:
1999	12.317	18	225	:	:	12.074	:
2000	12.226	13	248	:	:	11.965	:
2001	11.109	147	309	:	14	10.638	:
Romania							
1995	5.758	:	:	:	:	5.758 g)	:
1996	5.202	:	:	:	:	5.202 g)	180
1997	3.410	:	:	:	:	3.410	200
1998	5.050	:	:	:	:	5.050	600
1999	5.699	:	:	:	:	5.699	700
2000	6.611	:	:	:	:	6.611	1.000
Slovenska Republika							
2000	1.706	:	:	:	:	1.056	1.056
Slovenija							
1995	:	21	3	:	:	908	908
1998	1.078	90	21	:	:	1.017	1.017
2001	872	14	65	:	:	792	792

Table 6: Treatment and disposal of municipal waste, by method (1000 t) (continued)

	Municipal waste managed in the country[1)]	RECOVERY OPERATIONS			DISPOSAL OPERATIONS		
		Recycling	Composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Turkey							
1994	:	:	192	:	:	16.565	809
1995	:	:	159	0	:	19.975	1.444
1996	:	:	179	3	:	21.493	2.847
1997	:	:	180	9	:	22.982	4.364
1998	:	:	166	15	:	24.002	5.258
Bosnia and Herzegovina	:	:	:	:	:	:	:
Croatia							
1999	:	112	:	433	432	923	:
Macedonia	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:

Table 6: Treatment and disposal of municipal waste, by method (1000 t)

FOOTNOTES

a) Household waste only.
b) Source: Statistisches Bundesamt, Germany. Refuse disposal in manufacturing industry and hospitals in 1993.
c) Source :INE.
d) New survey referring to about 80% of municipal waste generated.
e) Residuals from incineration (20%) that have been landfilled excluded..
f) Garden waste only, not food waste.
g) Final disposal only on uncontrolled landfills (dumping sites).
h) National estimate.
i) Excludes 400 000 tonnes of public garden waste.
j) 2 000 000 tonnes of mixed construction waste and 383 000 tonnes of residues from other operations excluded..
k) Not validated by the Belgium regional authorities.
l) Includes incineration without energy recovery.
m) Household and similar waste.
n) Municipal waste managed.
o) Source: Czech Environmental Institute
p) Includes waste from sorting operations, which is sent to landfill.
q) Data refer to screens, TVs and fridges collected separately for recovery operations. This refuse is only dismantled in Luxembourg, then fractions obtained are sent abroad for recycling.
r) Biological waste ('green dustbins') as well as garden waste
s) Data refer to household waste only.
t) Refers only to garden waste, not food waste.
u) Of which 62 (1000 t) are slags resulting from incineration.
v) A small amount was composted.
w) Data based on mass unit information.
x) Equals separately collected waste other than food waste and park-and-garden waste. Rejects and residues from the recycling process are not subtracted.

y) Equals separately collected food waste and park-and-garden-waste.
z) All waste incineration plants in Norway now have a greater or lesser degree of energy recovery.
aa) Municipal waste is the sum of household waste + commercial waste + street cleansing waste.
ab) UK estimates, based on England and Wales proportions
ac) Household waste, residues from incineration of household waste, park waste and yard waste.
ad) Recycling and composting.
ae) Preliminary data.

Table 7: Composition of municipal waste (1000 t)

	TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
	1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
Belgique/België																		
1980	3.499 d)	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1991	4.294 d)	1.110	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1992	4.448	1.314	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1993	4.668	1.567	:	:	:	:	:	:	:	:	:	:	:	:	12	:	:	:
1994	4.897	1.792	18	:	3	:	6	:	5	:	4	:	:	:	11	:	23	:
1995	5.014 c)d	1.842	18	:	3	:	6	:	5	:	4	:	:	:	9	:	27	:
1996	5.047 c)d	2.266	18	:	3	:	6	:	4	:	4	:	:	:	10	:	28	:
1997	5.386 d)	2.840	16	:	4	:	6	:	3	:	4	:	:	:	10	:	35	:
1998	5.373	:	17	:	4	:	6	:	3	:	4	:	:	:	9	:	38	:
1999	5.462	:	17	:	4	:	6	:	3	:	4	:	:	:	8	:	40	:
Danmark																		
1985	1.900	:	22	:	5	:	4	:	2	:	3	:	:	:	:	:	9	:
1994	2.803	1.329	20	246	:	:	5	4	4	95	2	29	:	339	:	546	22	70
1995	2.959	1.531	:	354	:	:	:	5	:	92	:	34	:	396	:	560	:	91
1996	3.253	1.792	:	333	:	:	:	4	:	99	:	188	:	487	:	564	:	117
1997	3.104	1.698	:	361	:	:	:	5	:	88	:	40	:	522	:	549	:	133
1998	3.141	1.689	:	412	:	:	:	5	:	103	:	23	:	512	:	532	:	102
1999	3.329	1.604	:	401	:	:	:	7	:	105	:	14	:	547	:	672	:	:
2000	3.546	1.809	:	409	:	:	:	9	:	101	:	32	:	627	:	730	:	:
Deutschland																		
1996	44.390	19.199	22	:	:	:	:	:	:	:	:	:	12	:	7	:	59	:
1997	45.593	:	26	:	:	:	:	:	:	:	:	:	13	:	7	:	54	:
1998	44.094	:	27	:	:	:	:	:	:	:	:	:	15	:	7	:	51	:
Ellada																		
1980	2.499	:	20	:	:	:	7	:	3	:	4	:	:	:	:	:	66	:
1985	3.000	:	19	:	4	:	7	:	3	:	4	:	:	:	:	:	5	:
1990	3.000	:	22	:	4	:	11	:	4	:	4	:	:	:	:	:	8	:
1992	3.200	:	20	:	5	:	9	:	5	:	5	:	:	:	:	:	9	:
1996	3.600	:	18	:	4	:	10	:	3	:	3	:	:	:	:	:	11	:

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
	1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
España																		
1991	12.821 e)	:	20	:	2	:	7	:	8	86	4	:	49	:	:	:	10	:
1992	13.828	:	21	:	5	:	11	:	7	105	4	:	44	:	:	:	8	:
1993	14.256	:	21	:	5	:	11	:	7	138	4	:	44	:	:	:	8	:
1994	14.296 e)	:	21	:	5	:	11	:	7	159	4	:	44	:	:	:	8	:
1998	20.953	3.270	21	469	5	16	11	60	7	520	4	15	44	205	:	1.800	8	186
1999	22.896	3.572	19	518	4	3	12	106	8	508	4	51	49	201	:	1.998	6	287
2000	23.792	3.426	19	586	4	3	12	158	8	612	4	72	49	295	:	713	6	987
France																		
1993	24.500	:	26	200	3	:	11	7	13	1.005	4	10	:	:	:	:	13	:
1995	29.057	4.749	26	220	3	:	11	14	13	1.160	4	14	:	1.197	:	2.144	13	:
1996	29.681	4.973	:	237	:	:	:	19	:	1.210	:	18	:	1.345	:	2.144	:	:
1997	29.947	5.303	:	314	:	:	:	31	:	1.305	:	20	:	1.489	:	2.144	:	:
1998	30.293	5.787	25	454	3	:	11	44	13	1.516	4	20	:	1.609	:	2.144	15	:
1999	30.506	6.188	:	614	:	:	:	50	:	1.626	:	27	:	1.727	:	2.144	:	:
2000	31.213	6.501	:	730	:	:	:	71	:	1.661	:	28	:	1.867	:	2.144	:	:
Ireland																		
1995	1.550	:	33	84	2	4	9	1	6	29	3	1	:	:	:	:	19	:
1998	1.933	:	33	94	2	3	10	7	6	36	3	5	:	6	:	:	22	15
Italia																		
1995	25.780	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	25.960	2.480	:	576	:	:	:	69	:	550	:	3	:	:	:	612	:	:
1997	26.605	3.054	:	782	:	:	:	97	:	643	:	6	:	:	:	546	:	:
1998	26.846	3.416	:	1.001	:	:	:	151	:	666	:	134	:	891	:	400	:	173
1999	28.364	4.212	:	1.204	:	23	:	160	:	726	:	183	:	1.113	:	495	:	309
2000	28.959	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
	1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
Luxembourg																		
1995	240	61	:	12	:	1	:	1	:	8	:	3	:	17	:	13	:	7
1996	242	61	:	17	:	1	:	1	:	8	:	4	:	12	:	12	:	7
1997	253	77	:	19	:	2	:	1	:	10	:	5	:	22	:	8	:	9
1998	266	92	:	23	:	2	:	1	:	13	:	4	:	30	:	10	:	9
1999	278	98	:	23	:	2	:	1	:	12	:	4	:	33	:	13	:	10
Nederland																		
1994	7.155	:	25	716	2	29	5	5	6	298	3	45	:	:	:	:	20	281
1995	7.232	3.066	26	727	2	35	5	5	6	302	3	48	:	:	:	:	17	278
1996	7.537	3.334	27	840	2	41	5	3	6	306	2	54	:	:	:	:	18	345
1997	7.855	3.792	26	922	2	41	5	4	6	316	2	66	:	:	:	:	19	608
1998	7.990	3.924	27	1.012	2	43	5	2	5	317	3	76	:	:	:	:	17	692
1999	7.880	4.070	29	1.035	2	48	6	2	6	321	3	65	41	1.866	5	359	8	374
2000	8.063	4.128	28	1.022	2	52	6	2	7	330	3	67	40	1.929	4	331	10	397
2001	8.075	4.163	28	1.005	2	54	6	2	7	337	3	72	40	1.947	4	310	11	436
Österreich																		
1990	2.504	:	27	209	3	11	8	2	8	122	7	53	:	:	:	:	19	11
1991	2.426	:	:	273	:	11	:	4	:	144	:	71	:	:	:	:	:	14
1992	2.477	:	:	308	:	13	:	7	:	159	:	90	:	:	:	:	:	16
1993	2.509	:	27	349	3	12	6	9	11	169	7	87	:	:	:	:	16	17
1994	2.569	:	:	393	:	18	:	62	:	187	:	110	:	:	:	:	:	19
1995	2.644	:	:	406	:	17	:	84	:	185	:	112	:	:	:	:	:	22
1996	2.775	:	24	439	3	18	16	90	9	183	7	126	:	:	:	221	12	24
1997	2.906	:	:	468	:	20	:	89	:	178	:	144	:	:	:	218	:	25
1998	2.914	:	:	492	:	22	:	95	:	178	:	142	:	:	:	206	:	21
1999	3.096	:	23	209	3	21	10	100	7	180	7	147	23	478	7	219	21	23
Portugal																		
1995	3.884	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	4.030	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	4.109	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	4.304	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	4.364	:	:	32	:	:	:	:	:	42	:	7	:	:	:	67	:	28
2000	4.531	294	24	52	3	1	11	3	6	62	2	15	36	37	:	68	18	56

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
	1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
Suomi / Finland																		
1985	2.500	:	35	:	:	:	7	:	4	:	3	:	11	:	:	:	40	:
1990	3.095	:	37	:	1	:	5	:	2	:	3	:	40	:	:	:	12	:
1994	2.100	:	33	:	2	:	3	:	2	:	5	:	33	:	:	:	21	:
1997	2.510	:	33	:	2	:	3	:	2	:	5	:	33	:	:	:	22	:
2000	2.600	:	40	:	2	:	10	:	5	:	5	:	33	:	:	:	5	:
Sverige																		
1980	2.510	:	43	:	3	:	10	:	5	:	6	:	:	:	:	:	7	:
1990	3.200	:	44	:	2	:	7	:	8	:	2	:	:	:	:	:	7	:
1994	3.200	:	:	400	:	:	:	:	:	83	2	:	:	:	:	:	:	:
1998	4.000	1.000	:	720	:	:	:	30	:	140	:	10	:	:	:	100	:	:
2000	3.800	1.090	:	810	:	:	:	20	:	145	:	10	:	:	:	40	:	65
United Kingdom																		
1995	25.200	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	25.979	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	27.166	:	32 j)	:	2 j)	:	11 j)	:	9 j)	:	8 j)	:	21 j)	:	:	:	17 j)	:
1998	27.912	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	29.045	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Island																		
1995	166	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	169	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	174	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	180	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	189	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	198	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	206	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Norge																		
1980	1.700	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1985	1.968	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1990	2.000	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1992	2.223	186	:	91	:	1	:	3	:	15	:	37	:	:	:	:	:	30
1993	2.217	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1994	2.366	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1995	2.722	373	:	170	:	4	:	2	:	18	:	48	:	:	:	:	:	64
1996	2.761 a)	549	36	222	4	7	9	2	3	20	4	64	30	:	:	:	14	132

Table 7: Composition of municipal waste (1000 t) (continued)

		TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
		Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
		1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
Norge (continued)	1997	2.721 a)	671	36	280	4	7	9	9	3	24	4	101	30	:	:	:	14	97
	1998	2.858 a)	640	36	245	4	8	9	3	3	26	4	61	30	:	:	:	14	139
	1999	2.650 a)	781	36	278	4	8	9	6	3	30	4	67	30	:	:	:	14	190
	2000	2.755 a)	581 m)	:	253	:	8	:	5	:	32	:	44	:	:	:	:	:	79 k)
	2001	1.507 m)	668 m)	:	237	:	8	:	4	:	33	:	33	:	:	:	:	:	144 k)l)
Schweiz/Suisse/Svizzera																			
	1980	1.694	:	31	:	3	:	13	:	9	100	6	:	33	:	:	:	5	:
	1985	:	:	:	445	:	:	:	:	:	132	:	:	:	:	:	:	:	:
	1990	:	:	:	715	:	:	:	:	:	179	:	4	:	:	:	:	:	:
	1991	:	:	:	732	:	12	:	1	:	199	:	7	:	:	:	:	:	:
	1992	:	:	:	745	:	17	:	3	:	212	:	9	:	:	:	:	:	:
	1993	1.939	:	28	754	3	21	14	6	3	229	3	10	28	:	:	:	21	:
	1994	:	:	:	875	:	23	:	9	:	242	:	13	:	:	:	:	:	:
	1995	:	:	:	926	:	27	:	13	:	263	:	13	:	:	:	:	:	:
	1996	:	:	:	999	:	30	:	14	:	259	:	13	:	:	:	:	:	:
	1997	:	:	:	1.003	:	32	:	17	:	283	:	14	:	:	:	:	:	:
	1998	:	:	:	1.061	:	31	:	19	:	281	:	14	:	:	:	:	:	:
	1999	:	:	:	1.094	:	32	:	23	:	283	:	14	:	:	:	:	:	:
	2000	:	:	:	1.137	:	32	:	25	:	289	:	14	:	:	:	:	:	:
Balgarija																			
	1995	4.495 b)	:	12	:	3	:	7	:	6	:	4	:	:	:	:	:	30	:
	1996	4.031	:	11	:	3	:	6	:	6	:	4	:	:	:	:	:	35	:
	1997	3.628	:	11	:	4	:	7	:	6	:	3	:	:	:	:	:	31	:
	1998	3.197	:	11	:	4	:	7	:	6	:	4	:	:	:	:	:	27	:
	1999	3.213	:	9	:	3	:	8	:	5	:	2	:	:	:	:	:	31	:
	2000	3.318	:	9	:	3	:	9	:	5	:	2	:	:	:	:	:	32	:

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard paper products		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total	Amount from separate collection	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*	Total	*of which from separate collection*
	1000 t	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t	%	1000 t
Cyprus																		
1990	369	:	29	:	7	:	12	:	1	:	2	:	42	:	:	:	8	:
1993	369	:	29	:	7	:	12	:	1	:	2	:	42	:	:	:	8	:
1995	402	:	29	:	7	:	12	0	1	1	2	:	42	:	:	:	7	:
1996	438	32	27	5	6	:	11	1	1	2	8	24	39	:	:	:	7	2
1997	455	35	27	5	6	:	11	1	1	2	8	25	38	:	:	:	8	2
1998	476	42	27	6	6	:	11	1	1	0	9	33	38	:	:	:	7	2
1999	494	45	27	6	6	:	11	1	1	0	9	35	38	:	:	:	7	2
2000	513	47	27	6	6	:	11	1	1	1	9	36	38	:	:	:	7	2
2001	525	48	27	7	6	:	11	2	1	1	9	37	38	:	:	:	7	3
Ceska Republika																		
1996	3.200	:	8	:	2	:	4	:	4	:	2	:	18	:	:	:	61	:
1997	3.280	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	3.017	:	:	:	1	:	8	:	:	:	:	:	:	:	:	:	:	:
1999	3.365	162	:	32	:	1	:	19	:	31	:	17	:	2	:	:	:	60
2000	3.434	172	:	54	:	1	:	23	:	35	:	27	:	3	:	:	:	29
2001	2.798	178	:	59	:	2	:	30	:	42	:	25	:	8	:	:	:	11
Eesti																		
2000	633	62	:	10	:	:	:	1	:	10	:	1	:	27	:	:	:	11
Magyarorszag																		
1980	2.461	:	17	:	6	:	5	:	4	:	5	:	29	:		:	37	:
1985	3.447	:	16	:	4	:	3	:	6	:	4	:	39	:		:	28	:
1990	4.171	:	20	:	7	:	5	:	5	:	6	:	32	:		:	26	:
1994	3.688	:	18	:	5	:	6	:	5	:	4	:	:	:		:	29	:
1995	3.811	:	17	:	4	:	4	:	3	:	4	:	35	:		:	33	:
1996	4.023	:	19	:	3	:	5	:	3	:	4	:	32	:		:	34	:
1997	4.258	:	19	:	6	:	12	:	3	:	2	:	28	:		:	30	:
1998	4.292	:	18	:	6	:	12	:	5	:	4	:	31	:		:	23	:
1999	4.376	:	20	:	5	:	15	:	4	:	3	:	31	:		:	21	:
2000	4.084	:	14	:	4	:	11	:	3	:	2	:	41	:		:	27	:
Latvija																		
1995	657	:	14	:	3	:	7	:	8	:	4	:	:	:	:	:	16	:
1997	621	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	597	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	584	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	1.127	60	:	3	:	0	:	1	:	1	:	6	:	0	:	5	:	44

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total 1000 t	Amount 1000 t	Total %	*of which from* 1000 t	Tota %	*of which from* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t
Lietuva																		
1995	1.546	:	1	:	:	:	:	:	:	:	15	:	25	:	:	:	59	:
1996	1.445	:	:	:	:	:	:	:	:	:	19	:	38	:	:	:	43	:
1997	1.510	:	1	:	1	:	:	:	2	:	19	:	40	:	:	:	37	:
1998	1.578	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	1.236	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	1.086	:	20	:	:	:	8	:	8	:	2	:	50	:	:	:	13	:
2001	1.046	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Malta																		
1998	145	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	179	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	188	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	:	14	14	:	5	:	10	:	4	:	4	:	60	:	:	:	3	:
Polska																		
1998	:	13	:	2	:	:	:	1	:	10	:	:	:	:	:	:	:	:
1999	:	18	:	4	:	:	:	1	:	13	:	:	:	:	:	:	:	:
2000	:	13	:	4	:	:	:	1	:	8	:	:	:	:	:	:	:	:
2001	:	147	:	42	:	:	:	13	:	86	:	7	:	:	:	:	:	:
Romania																		
1995	5.758	:	14	:	5	:	6	:	5	:	5	:	56	:	:	:	9	:
1996	5.202	:	14	:	6	:	7	:	6	:	6	:	51	:	:	:	10	:
1997	3.410	:	17	:	6	:	7	:	6	:	6	:	56	:	:	:	2	:
1998	5.050	:	17	:	6	:	9	:	6	:	5	:	53	:	:	:	5	:
1999	5.699	:	18	:	6	:	10	:	6	:	5	:	53	:	:	:	2	:
2000	6.611	:	16	:	6	:	11	:	6	:	5	:	49	:	:	:	7	:
Slovenija																		
1995	1.024	62	15	:	:	:	10	:	5	:	7	:	32	:	:	:	31	:
1998	1.080	160	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	953	125	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Slovenska Republika																		
1995	1.620	:	15	54	4	1	8	1	6	5	9	85	:	:	:	:	31	3
1996	1.700	:	13	59	3	1	9	2	6	6	8	97	:	:	:	:	35	6
1998	1.700	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	1.706	243	13	29	:	1	7	3	8	37	3	22	:	:	:	:	31	1
Turkey																		
1993	:	:	6	:	1	:	3	:	2	:	1	:	64	:	:	:	23	:
1995	20.910	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	22.483	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	24.180	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	24.945	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 7: Composition of municipal waste (1000 t) (continued)

	TOTAL Amount		Paper, paperboard		Textiles		Plastics		Glass		Metals		Organic material		Bulky waste		Other waste	
	Total 1000 t	Amount 1000 t	Total %	*of which from* 1000 t	Tota %	*of which from* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t	Total %	*of which* 1000 t
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Croatia 1999	1.990	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Macedonia	:	:	:	;	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 7: Composition of municipal waste (1000 t)

FOOTNOTES

a) Surveys of municipal waste in 1992 and 1995 indicate that approximately 90 000 t of waste from building and construction activities entered the municipal waste stream. This amount is included in the Norwegian figures.

b) Total municipal waste and to waste collected by municipalities.

c) NSI estimate.

d) Not validated by the Belgium regional authorities.

e) Household and similar waste.

j) Estimate used in waste strategy 2000

k) Mostly wood waste

l) Includes EE scrap and hazardous waste

m) Household waste only

Table 8: Hazardous waste generated - national definition (1000t)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Belgique/België	:	:	:	:	776 i)s)t)	:	:	:	:	:	:	:
Danmark	:	:	:	:	194 h)	:	:	:	:	:	:	:
Deutschland	13.079	:	:	9.093 a)h)		:	18.281	18.860	19.473	17.020 i)	15.542	:
Ellada	450 h)	:	450 h)	:	:	350 h)	:	:	380	376	391	:
España	1.708 h)	:	:	:	:	3.394 h)	:	:	:	:	3.063 h)	:
France	7.000 i)g)	:	:	:	:	:	:	:	:	:	:	:
Ireland	:	:	:	:	:	248 b)h)	328 b)h)k)	:	370 b)h)l)p)q)	:	:	:
Italia	3.246 h)	3.387 h)	:	:	:	2.708 h)	:	3.401	4.058	:	:	:
Luxembourg	: h)	:	:	86 h)	81 h)	200 h)r)	160 h)r)	143 h)r)	201	201	197	:
Nederland	1.040 h)	:	1.430 h)	867 h)	885 h)	1.004 h)	1.016 h)	1.277 h)	1.600 h)	1.500	:	:
Österreich	:	:	398 c)h)	478 c)h)	513 e)h)	595 e)h)	607 e)h)	629 e)h)	918 e)h)	972	:	:
Portugal	:	:	:	:	:	668 h)	:	595 h)	:	:	:	:
Suomi / Finland	:	:	559 h)	:	:	:	:	485 h)	:	:	1.202	:
Sverige	154 v)	:	:	:	139 n)v)	:	:	:	:	:	:	:
United Kingdom	:	:	2.452 h)	2.077 h)	:	:	:	:	4.833	5.196 c)	:	:
Island	:	:	:	:	6 v)	6 v)	7 v)	7 v)	7 v)	8 v)	7 v)	8 v)
Norge	:	:	:	:	640 h)i)	650 h)i)	608 h)i)	596 h)i)	709 h)i)	631 h)i)	631 h)i)	:
Schweiz/SuisseSvizzera	:	729 h)	813 h)	829 h)	854 h)	831 h)	874 h)	948 h)	1.043 h)	:	:	:
Balgarija	:	:	1.493	14.859 d)	14.257 d)	:	1.741	1.098	548 x)f)	853	758	756
Cyprus	:	:	:	:	68 v)	50 v)	53 v)	52 v)	:	:	:	:
Ceska Republika	:	:	:	:	:	6.005 h)j)	6.669 h)j)	6.436 h)j)	3.417 h)y)n)o)	2.393 h)y)o)	2.630 o)	2.817 o)
Eesti	:	:	:	:	:	7.273 h)	7.679 h)	7.361 h)	6.272 h)	5.860 h)	5.966	:
Magyarorszag	4.691 h)	:	:	3.895 h)	3.338 h)u)	2.274 m)	861	601	908	914	951	:
Lietuva	:	:	212 h)	215 h)	130 h)	153 h)	101 h)	132 h)	132 h)	106 h)	114 h)	111
Latvija	:	:	:	:	60 h)	48 h)	50 h)	180	106	96	93	82
Malta	:	:	:	:	:	:	:	:	7	8	5	4
Polska	:	:	3.444 h)	:	3.188 h)	3.866 h)	5.164 h)	4.007 h)	1.105 w)	1.134 w)	1.601 w)	1.308 w)
Romania	:	:	:	:	:	5.710 z)	3.203 z)	2.757 z)	2.299 z)	2.174 z)	897	:
Slovenska Republika	:	:	:	:	:	1.168 v)	1.242 v)	1.501 v)	1.400 v)	1.420	1.630	:
Slovenija	:	:	:	:	:	170	:	:	46	:	:	68
Turkey	:	:	:	:	9 at)	17 at)	25 at)	71 at)	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	:	:	24	:
Macedonia	:	:	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:	:	:

Table 8: Hazardous waste generated - national definition (1000t)

FOOTNOTES

a) Source: Statistisches Bundesamt, Germany. Refuse disposal in manufacturing industry and hospitals in 1993.
b) Includes recovery on site.
c) Source of information on hazardous waste is Executive Environment Agency - Bulgaria. Data - according to a waste classification based on EWC

d) Data for 1993 and 1994 include about 13 million tonnes of waste from excavation, production and treatment of mineral resources, this kind of waste is not considered as hazardous after 1994.
e) Comprises only 'primary waste', documented by the national consignment note system as having been reported by the national producer.

f) Preliminary data
g) National classification. Estimation of the total amount of industrial hazardous waste generated.
h) National classification.
i) National estimate
j) Hazardous and special waste only.
k) Source : Proposed National Hazardous Waste Management Plan. Total Figure is based on reported waste (230,000) tonnes and unreported waste (98,000). Disposal and recovery figures relate to reported waste only.
l) Source : National Waste Database Report for 1998.Total Figure is based on reported waste (296,000) tonnes and unreported waste (74,000). Disposal and recovery figures relate to reported waste only.
m) Excludes red mud.
n) Break in time series due to new methodologies and /or legislation
o) Cover municipal hazardous waste
p) Hazardous waste generated from NACE C, D, and E was estimated based on the extrapolation of the reported quantity of hazardous waste (tonnes) to an estimated total quantity generated. The reported quantities for recovery and disposal are based solely on reported figures without extrapolation.

q) Differences between reported totals of hazardous waste being treated and the total reported arising (296 000 t) is due to 23000 t for which the treatment is unknown.

r) Source : Administration de l´Environnement.
s) Not validated by the Belgium regional authorities.
t) Includes All hazardous wastes according to regional definitions
u) Hazardous waste treated > hazardous waste generated (due to double counting of secondary waste)
v) According to the Basel Convention.
w) Data according to a new waste classification based on EWC.
x) Excludes waste from excavation, production and treatment of mineral resources.
y) Includes municipal hazardous waste.
z) According to Hazardous Waste List.

Table 9: Treatment and disposal of hazardous waste, by method (1000 t)

		RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
	TOTAL AMOUNT GENERATED	TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Belgique/België														
1992	:	598 x)aj)ak)	:	:	:	:	:	:	:	114 x)aj)ak)	527 x)aj)ak)	:	:	:
1993	:	543 x)aj)ak)	:	:	:	:	:	:	:	71 x)aj)ak)	440 x)aj)ak)	:	:	:
1994	776 x)aj)ak)	526 x)aj)ak)	:	:	:	:	:	:	:	75 x)aj)ak)	530 x)aj)ak)	:	:	:
1995	:	508 x)aj)ak)	:	:	:	:	:	:	:	97 x)aj)ak)	527 x)aj)ak)	:	:	:
1996	:	606 x)aj)ak)	:	:	:	:	:	:	:	:	:	:	:	:
1997	:	581 x)aj)ak)	:	:	:	:	:	:	:	:	:	:	:	:
1998	:	542 x)aj)ak)	:	:	:	:	:	:	:	113 x)aj)ak)	636 x)aj)ak)	:	:	:
1999	:	634 x)aj)ak)	:	:	:	:	:	:	:	129 x)aj)ak)	631 x)aj)ak)	:	:	:
Danmark														
1994	194 j)	:	:	:	:	:	:	:	:	:	62	:	:	:
1995	:	200	145 y)	55	:	:	52	:	:	:	52	:	:	:
1996	:	204	145 y)	59	:	:	59	:	:	:	59	:	:	:
1997	:	205	143 y)	62	:	:	47	:	:	:	47	:	:	:
1998	:	224	156 y)	68	:	:	57	:	:	:	57	:	:	:
1999	:	230	115	115	:	:	117	:	:	:	117	:	:	:
2000	:	185	99	86	:	:	103	:	:	:	103	:	:	:
Deutschland														
1990	13.079	:	:	:	:	:	:	:	:	:	:	:	:	:
1993	9.093 a)j)	:	:	:	:	:	:	:	:	2.034 a)	3.253	:	:	:
1996	18.281	11.838	2.301	2.903	6.633	:	6.443	1.823	:	:	4.620	:	:	:
1997	18.860	11.179	2.734	2.242	6.203	:	7.681	1.827	:	:	5.854	:	:	:
1998	19.473	12.055	2.663	2.450	6.942	:	7.418	1.975	:	:	5.443	:	:	:
1999	17.020 av)	10.465	2.210	2.247	6.008	:	6.555	2.331	:	:	4.224	:	:	:
2000	15.542 x)	:	:	:	:	:	:	:	:	:	:	:	:	:
Ellada														
1990	450 j)	121	:	:	:	:	:	:	:	:	:	:	:	:
1992	450 j)	88	:	:	:	:	:	:	:	:	:	:	:	:
1995	350 j)	100	:	:	:	:	:	:	:	:	:	:	:	:
1998	380	124	18	106 al)	:	:	:	:	:	1	:	:	:	246 c)
1999	376	100	16	84 al)	:	:	:	:	:	1	:	:	:	267 c)
2000	391	114	19	95 al)	:	:	:	:	:	3 g)	:	:	:	265 c)

Table 9: Treatment and disposal of hazardous waste, by method (1000 t)

		RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
	TOTAL AMOUNT GENERATED	TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
España														
1990	1.708 j)	:	:	:	:	:	:	488	:	:	:	:	:	:
1995	3.394 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	:	:	168	1.197	208	:	:	686	25	:	:	:	:	:
2000	3.063 j)	1.300	204	982	114	:	:	950	140	84	1.472	:	:	:
France														
1990	7.000 j)x)	:	:	:	:	:	1.942	377 ac)be)	:	899 ac)be)	658 ac)be)	:	:	8 be)bf)
1991	:	:	:	:	:	:	:	343 ac)	:	910 ac)	618 ac)	:	:	:
1992	:	:	:	:	:	:	:	368 ac)	:	984 ac)	773 ac)	:	:	:
1993	:	:	:	:	:	:	:	344 ac)	:	1.022 ac)	719 ac)	:	:	:
1994	:	:	:	:	:	:	:	340 ac)	:	1.210 ac)	728 ac)	:	:	:
1995	:	172	:	172 be)	:	:	2.271	324 ac)be)	:	1.193 q)ac)be)	747 ac)be)	:	:	7 be)bf)
1996	:	171	:	171 be)	:	:	2.279	301 ac)be)	:	1.288 q)ac)be)	689 ac)be)	:	:	1 be)bf)
1997	:	209	:	209 ac)be)	:	:	2.234	288 ac)be)	:	1.238 q)ac)be)	707 ac)be)	:	:	1 be)bf)
1998	:	222	:	222 ac)be)	:	:	2.466	302 ac)be)	:	1.361 q)ac)be)	803 ac)be)	:	:	
Ireland														
1995	248 b)j)	103	:	:	:	:	144	7	63	50	5	:	:	19
1996	328 b)j)s)	139 s)	7	:	:	:	88 s)	7	:	46	33	:	:	:
1998	370 b)j)t)ad)ae)	153 ad)af)	5	115	25	6	120 ad)af)	3	10	66	41	:	:	:
Italia														
1990	3.246 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1991	3.387 j)	:	:	:	:	:	:	3.090	:	:	284	:	:	:
1995	2.708 j)	125	:	:	:	:	:	:	:	112	643	:	:	:
1997	3.401	:	92 k)	629 l)	159 m)	:	:	:	1.132 n)	282	791	:	:	620 o)
1998	4.058	1.903	134 k)	666	133	970	2.982	908	291	497	10 az)	0	595 ay)	680
Luxembourg														
1993	86 j)	:	:	:	:	:	:	:	:	:	20 f)	:	:	:
1994	81 j)	:	:	:	:	:	:	:	:	:	44 f)	:	:	:
1995	200 j)ai)bj)	: ai)	:	:	:	:	:	:	:	:	17 ai)	:	:	:
1996	160 j)ai)bj)	: ai)	:	:	:	:	:	:	:	0 ag)ai)	0 ah)ai)	:	:	:
1997	143 j)ai)bj)	43 ai)	:	43	:	:	0	0	:	0 ag)ai)	0 ah)ai)	:	:	:
1998	201 bj)	34 ai)	:	31	:	2	6	6	:	0 ag)ai)	0 ah)ai)	:	:	:
1999	201 bj)	76	:	72	:	4	9	9	:	0 ag)	0 ah)	:	:	:
2000	197 bj)	72	:	68	:	4	11	11	:	0 ag)	0 ah)	:	:	:

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

		RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
	TOTAL AMOUNT GENERATED	TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Nederland														
1990	1.040 j)	38 ax)	:	:	:	:	566 ax)	116 ax)	:	180 ax)	270 ax)	:	:	:
1992	1.430 j)	36	:	:	:	:	:	165	:	165	430	:	:	:
1993	867 j)	81	:	:	:	:	:	195	:	149	188	:	:	:
1994	885 j)	92	:	:	:	:	:	170	:	165	204	:	:	:
1995	1.004 j)	144 ax)	:	:	:	:	553 ax)	198 ax)	:	182 ax)	173 ax)	:	:	:
1996	1.016 j)	153 ax)	:	:	:	:	513 ax)	234 ax)	:	162 ax)	117 ax)	:	:	:
1997	1.277 j)	138 ax)	:	:	:	:	650 ax)	355 ax)	:	149 ax)	146 ax)	:	:	:
1998	1.600 j)	278 ax)	:	:	:	:	1.219 ax)	601 ax)	:	246 ax)	372 ax)	:	:	:
1999	1.500	283 ax)	:	:	:	:	1.175 ax)	532 ax)	:	290 ax)	353 ax)	:	:	:
2000	:	339 ax)	:	:	:	:	1.406 ax)	627 ax)	:	389 ax)	390 ax)	:	:	:
Österreich														
1990	:	:	60	:	:	:	:	:	:	:	:	:	:	:
1992	398 j)	:	:	:	:	:	:	:	:	105	:	:	:	:
1993	478 j)	:	:	:	:	:	:	:	:	95	:	:	:	:
1994	513 j)	:	:	:	:	:	:	:	:	99	:	:	:	:
1995	595 e)j)	:	90	:	:	:	:	:	:	:	:	:	:	:
1996	607 e)j)	:	106	:	:	:	:	:	:	:	:	:	:	:
1997	629 e)j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	918 e)j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	972	:	110	:	:	:	:	:	:	:	:	:	:	:
Portugal														
1995	668 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	595 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
Suomi / Finland														
1992	559 j)	204	:	:	:	:	:	44	:	44	23	:	:	:
1997	485 j)	61	42	19 u)	:	92 w)as)	365	59	3	59	234 v)	10 am)	:	:
2000	1.202 j)	135	69	66	:	239 as)	828	:	:	35	793	:	:	:
Sverige														
1990	154 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1994	139 z)an)	:	:	:	:	:	:	:	:	:	:	:	:	:
United Kingdom														
1992	2.452 j)	168	:	:	:	:	:	512	:	158	1.490	:	:	:
1993	2.077 j)	196	:	:	:	:	:	620	:	185	931	:	:	:
1998	4.833	562	51	507	:	:	4.338	1.584 i)	:	98	2.142	:	211	303 ab)
1999	5.196	1.045	56	989	:	:	3.762	1.576 i)	:	102	2.054	:	13	407 ab)

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

	TOTAL AMOUNT GENERATED	RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
		TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Island														
1994	6 an)	5	:	:	:	:	:	:	:	:	:	:	:	:
1995	6 an)	5	5	:	:	:	:	:	:	:	:	:	:	:
1996	7 an)	6	6	:	:	:	:	:	:	:	:	:	:	:
1997	7 an)	6	6	:	:	:	:	:	:	:	:	:	:	:
1998	7 an)	6	6	:	:	:	:	:	:	:	:	:	:	:
1999	8 an)	6	6	:	:	:	:	:	:	:	:	:	:	:
2000	7 an)	6	6	:	:	:	:	:	:	:	:	:	:	:
2001	8 an)av)	6	6	:	:	:	:	:	:	:	:	:	:	:
Norge														
1985	120 ba)	:	:	:	:	:	:	:	:	:	:	:	:	:
1990	:	30	:	:	:	:	:	:	:	:	:	:	:	:
1992	:	40	:	:	:	:	:	:	:	:	:	:	:	:
1994	640 j)	83 p)	:	:	:	:	:	:	:	:	:	:	:	:
1995	650 j)	:	:	:	:	:	:	:	:	:	:	30 au)	:	:
1996	608 j)	:	:	:	:	:	:	:	:	:	:	30 au)	:	:
1997	596 j)	:	:	:	:	:	:	:	:	:	:	30 au)	:	:
1998	709 j)	:	119	:	:	:	535	335 bd)	:	:	170 bb)	30 au)	:	:
1999	631 j)	:	110	:	:	:	453	293 bd)	:	:	110 bb)	50 au)	:	:
2000	631 j)av)	:	:	:	:	:	:	:	:	:	:	:	:	:
Schweiz/Suisse/Svizzera														
1991	729 j)	40	:	:	:	:	:	204	:	224	142	:	:	:
1992	813 j)	38	:	:	:	:	:	229	:	255	171	:	:	:
1993	829 j)	56	:	:	:	:	:	231	:	254	170	:	:	:
1994	854 j)	38	:	:	:	:	:	220	:	295	201	:	:	:
1995	831 j)	51	:	:	:	:	687	228	:	282	177	:	:	:
1996	874 j)	47	:	:	:	:	717	246	:	298	173	:	:	:
1997	948 j)	46	:	:	:	:	800	246	:	334	220	:	:	:
1998	1.043 j)	73	:	:	:	:	867	277	:	371	219	:	:	:

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

	TOTAL AMOUNT GENERATED	RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
		TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Balgarija														
1992	1.493	48	:	:	:	:	:	:	:	:	1.446	:	:	:
1993	14.859 d)	1.235	:	:	:	:	:	:	:	:	13.625	:	:	:
1994	14.257 d)	248	:	:	:	:	:	:	:	:	14.009	:	:	:
1996	1.741	290	:	:	:	:	:	:	:	:	1.450	:	:	:
1997	1.098	317	:	:	:	:	:	:	:	:	780	:	:	:
1998	548 ap)h)	311	:	:	:	:	:	:	:	:	237	:	:	:
1999	853	336	:	:	:	:	:	:	:	:	517	:	:	:
2000	758	280	:	:	:	:	:	:	:	:	478	:	:	:
2001	756	238	:	:	:	:	:	:	:	:	518	:	:	:
Cyprus														
1994	68 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1995	50 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	53 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	52 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
Ceska Republika														
1995	6.005 j)r)	557	:	:	557 r)	:	2.223	887 r)	934 r)	33 r)	176 r)	:	193 r)	:
1996	6.669 j)r)	396	:	:	396 r)	:	1.661	467 r)	838 r)	33 r)	131 r)	:	192 r)	:
1997	6.436 j)r)	547	:	:	547 r)	:	1.546	551 r)	792 r)	26 r)	143 r)	:	34 r)	:
1998	3.417 j)aq)z)	1.002	518 z)	49 z)	435 z)	:	1.742	1.077 z)	106 z)	16 z)	276 z)	:	131 z)	136 z)aw)
1999	2.393 j)aq)	381	37	28	316	:	1.525	1.071	132	5	147	:	70	100 aw)
2000	2.630 aq)	1.008	37	47	924	:	1.258	520	234	6	299	:	119	80 aw)
2001	2.817 aq)	1.003	46	60	897	:	1.371	555	269	5	394	:		148 aw)
Eesti														
1995	7.273 j)	372	:	:	:	:	:	:	:	1	6.517	7	:	10
1996	7.679 j)	744	:	:	:	:	:	2	:	:	6.729	1	:	0
1997	7.361 j)	674	:	:	:	:	:	6	:	:	6.675	1	:	0
1998	6.272 j)	46	:	:	:	:	:	7	:	0	6.050	1	:	1
1999	5.860 j)	78	:	:	:	:	:	7	:	0	5.748	:	:	6
2000	5.966	141	3	59	79	1	5.773	2	:	0	5.768	:	:	3

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

		RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
	TOTAL AMOUNT GENERATED	TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Magyarorszag														
1990	4.691 j)	348	:	:	:	:	:	1.358	:	1.709	2.393	:	:	:
1993	3.895 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1994	3.338 j)at)	499	:	:	:	:	:	1.388	:	:	1.424	:	:	:
1995	2.274 bc)	489	:	:	:	:	:	1.362	:	1.488	1.397	:	:	:
1996	861	365	:	:	:	:	:	1.015	:	1.110	1.035	:	:	:
1997	601	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	908	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	914	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	951	:	:	:	:	:	:	:	:	:	:	:	:	:
Lietuva														
1992	212 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1993	215 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1994	130 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1995	153 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	101 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	132 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	132 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	106 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	114 j)	89	0	:	89	:	2	:	:	1	1	:	:	:
2001	111	84	3	:	81	:	5	:	:	1	3	:	:	:
Latvija														
1994	60 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1995	48 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	50 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	180	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	106	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	96	:	:	:	:	:	:	34	:	2	:	:	:	:
2000	93	:	:	:	:	:	:	41	:	2	:	:	:	:
2001	82	:	:	:	:	:	:	23	:	5	:	:	:	:
Malta														
1998	7	:	:	:	:	:	:	:	:	:	:	:	:	:
1999	8	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	5	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	4	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

	TOTAL AMOUNT GENERATED	RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
		TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Polska														
1992	3.444 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1994	3.188 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1995	3.866 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	5.164 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	4.007 j)	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	1.105 ao)	367 ao)	:	:	:	:	738 ao)	:	:	:	160 ao)	:	:	:
1999	1.134 ao)	400 ao)	:	:	:	8 ao)	734 ao)	:	:	:	113 ao)	:	:	:
2000	1.601 ao)	491 ao)	:	:	:	14	1.110 ao)	:	:	:	96 ao)	:	:	:
2001	1.308 ao)	406 ao)	:	:	:	37	902 ao)	:	:	:	63 ao)	:	:	:
Romania														
1995	5.710 ar)	244	:	244	:	:	5.466	1.200	:	35	4.061	:	:	170
1996	3.203 ar)	275	:	275	:	:	2.928	820	:	15	1.975	:	:	118
1997	2.757 ar)	568	:	568	:	:	2.189	416	:	11	1.762	:	:	:
1998	2.299 ar)	341	1	340	:	:	1.959	:	:	3	1.875	:	:	81
1999	2.174 ar)	414	3	411	:	:	1.759	:	:	5	1.318	:	:	436
2000	897	218	9	144	43	22	679	40	:	1	386	4	167	81
Slovenska Republika														
1995	1.168 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1996	1.242 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1997	1.501 an)	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	1.400 an)	:	68	158	:	:	:	592	103	68	292	:	25	:
1999	1.420	:	:	:	:	:	:	:	:	:	:	:	:	:
2000	1.630	:	:	:	:	:	:	:	:	:	:	:	:	:
Slovenija														
1995	170	:	:	:	:	:	:	:	:	:	:	:	:	:
1998	46	:	:	:	:	:	:	:	:	:	:	:	:	:
2001	68	:	:	:	:	:	:	:	:	:	:	:	:	:
Turkey														
1994	9	6	:	6	:	:	3	:	:	:	3	:	:	:
1995	17	4	:	4	:	:	13	:	:	:	8	5	:	:
1996	25	11	:	11	:	:	14	:	:	:	14	:	:	:
1997	71	24	0	24	:	:	47	:	:	:	3	44	:	:

Table 9: Treatment and disposal of hazardous waste, by method (1000 t) (continued)

		RECOVERY OPERATIONS					DISPOSAL OPERATIONS							
	TOTAL AMOUNT GENERATED	TOTAL	Incineration with energy recovery	Recycling, compost. etc.	Other recovery operations	Preparatory activities	TOTAL	Physico/ chemical treatment	Biological treatment	Incineration without energy recovery	Landfill & other deposit into or onto land	Release into water bodies	Permanent storage	Preparatory activities
Bosnia and Herzegovina	:			:	:	:	:	:	:	:	:	:	:	:
Croatia														
2000	24	:	1	:	:	:	:	:	:	5	16	:	2	:
Macedonia	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 9: Treatment and disposal of hazardous waste, by method (1000 t)

FOOTNOTES

a) Statistisches Bundesamt, Germany. Refuse disposal in manufacturing industry and hospitals.
b) Includes recovery on site.
c) Values refer to temopary storage, prior to final disposal.
d) Data for 1993 and 1994 include about 13 million tonnes of waste from excavation, production and treatment of mineral resources, this kind of waste is not considered as hazardous after 1994.
e) Comprises only 'primary waste', documented by the national consignment note system as having been reported by the national producer.
f) Waste landfilled includes non-hazardous waste.
g) Includes the quantity of clinical waste incinerated.
h) Source of information on hazardous waste is Executive Environment Agency - Bulgaria. Data - according to a waste classification based on EWC.
i) Includes biological treatment.
j) National classification.
k) R1 'use principally as a fuel or other means to generate energy '. (Directive 75/442/EEC, annex II B).
l) Excludes R2-R11, R9.
m) R9 only.
n) Includes D8 and D9.
o) Includes D15 and R13.
p) In addition to the amounts specified, about 170 000 tonnes of hazardous waste are treated at the site where it is generated (e.g. diluted and emptied into the sewage). 20 000-30 000 tonnes are assumed to be treated illegally.
q) Total incineration, with or without energy recuperation.
r) Hazardous and special waste only.
s) Source : Proposed National Hazardous Waste Management Plan. Total Figure is based on reported waste (230,000) tonnes and unreported waste (98,000). Disposal and recovery figures relate to reported waste only.
t) Source : National Waste Database Report for 1998.Total Figure is based on reported waste (296,000) tonnes and unreported waste (74,000). Disposal and recovery figures relate to reported waste only.
u) Recycling includes all recovery operations, R2-R11.
v) Landfilling does not include D2, D2 is included in point 'release into water bodies'.
w) Preparatory activities include R and D -operations related to prep. Activities in this table. Prep. Activities are not included in totals.
x) National estimate.
y) Includes special treatment, which means that the waste is intended for separate treatment in a special treatment operation. Includes treatment of hazardous waste, including hospital waste.
z) Break in time series due to new methodologies and /or legislation.
aa) D1 (landfill).
ab) Short term transfer.
ac) Amounts of industrial hazardous waste disposed of in treatment installations for that purpose. The amounts of industrial waste that are treated or stocked inside the industries are mostly unknown.

FOOTNOTES (continued)

ad) Hazardous waste generated from NACE C, D, and E was estimated based on the extrapolation of the reported quantity of hazardous waste (tonnes) to an estimated total quantity generated. The reported quantities for recovery and disposal are based solely on reported figures without extrapolation.

ae) Differences between reported totals of hazardous waste being treated and the total reported arising (296 000 t) is due to 23000 t for which the treatment is unknown.

af) Discrepancies between totals for disposal and recovery and their breakdown is due to 970 t of waste recovered without information on the method of recovery and 300 t disposed without information on the method of disposal.

ag) Luxembourg does not incinerate hazardous waste within its borders for years; those wastes are sent abroad.

ah) 1996 onwards there are no more hazardous wastes landfills in Luxembourg.

ai) Source : Administration de l´Environnement.

aj) Not validated by the Belgium regional authorities.

ak) Includes all hazardous wastes according to regional definitions

al) Recycling includes regeneration and reuse procerdures.

am) Includes D2.

an) According to the Basel Convention.

ao) Data according to a new waste classification based on EWC.

ap) Excludes waste from excavation, production and treatment of mineral resources-

aq) Includes municipal hazardous waste-

ar) According to Hazardous Waste List-

as) Preparatory activities include R and D -operations related to prep. activities in this table. Prep. activities are not included in totals. Year 2000: preparatory activities are included in totals and prep.act. may contain small amount of waste treated physico/chemically or biologically.

at) Hazardous waste treated > hazardous waste generated (probably double counting of secondary waste).

au) Estimate of illegal treatment of hazardous waste in 1994 (30 000 tonnes).

av) Preliminary data.

aw) Only temporary storage.

ax) Including exports.

ay) It includes D1+D5+D12.

az) It includes only D2

ba) Excluding amounts treated on-site, amounts exported directly from producer and estimated illegal treatment.

bb) Refers to treatment at the site where the waste is generated (e.g. diluted and emptied into the sewage or landfilled).

bc) Excludes red mud.

bd) Refers to specially engineered landfill for inorganic hazardous waste where the waste undergoes p/c treatment in connection with landfilling.

be) Amounts of industrial hazardous waste disposed of in treatment installations for that purpose. The amounts of industrial waste that are treated or stocked inside the industries are mostly unknown. Source : ADEME, Agences de l'eau.

bf) Decontamination of materials contaminated with PCB.

Table 10hw: Waste Treatment and disposal facilities for hazardous waste

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Belgique/België	:	:	:	:	:	:	:	:	:	:
Danmark										
1996	:	:	37 c)	:	13	:	:	:	:	:
1998	:	:	37 c)	:	13	:	:	:	:	:
Deutschland	:	:	:	:	:	:	:	:	:	:
Ellada	:	:	:	:	:	:	:	:	:	:
España										
1996	132	2.115	30	:	:	:	:	:	59	:
2000	64 k)	1.090 k)	43 k)	288 k)	:	:	:	:	131 k)	2.630 k)
France										
1992	:	:	45	:	11	:	:	:	:	:
1994	:	:	48	:	13	:	:	:	:	:
1996	14 d)	:	51 d)	:	12 d)	:	:	:	:	:
1997	:	:	57 d)	:	13 d)	:	:	:	:	:
1998	16 d)	:	57 d)	:	13 d)	:	:	:	:	:
Ireland										
1995	:	:	7	:	:	:	:	:	:	:
1996	8 e)	:	:	:	:	:	:	:	:	:
1998	10	:	6	:	:	:	:	:	5 f)	:
Italia										
1997	22	:	51	:	10 m)	:	:	:	:	:
1998	:	:	169 n)	:	9 m)	:	:	:	:	:
Luxembourg										
1990	:	:	:	:	1	:	:	:	:	:
1992	:	:	:	:	1	:	:	:	:	:
1994	:	:	:	:	1	:	:	:	:	:
1995	:	:	:	:	1	:	:	:	1 j)	:
1996	:	:	:	:	1	:	:	:	1 j)	:
1997	:	:	:	:	:	:	:	:	1 j)	:
1998	:	:	:	:	:	:	:	:	1 j)	:
1999	:	:	:	:	:	:	:	:	1 j)	:
2000	8	:	:	:	:	:	:	:	1 j)	:
2001	9	:	:	:	:	:	:	:	1 j)	:
Nederland										
1992	:	:	2	:	:	:	:	:	:	:
1994	:	:	2	:	:	:	:	:	:	:
1996	:	:	2	:	:	:	:	:	:	:
2000	:	:	3	:	:	:	:	:	:	:

Table 10hw: Waste Treatment and disposal facilities for hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t
Österreich										
1990	47	200	5	55	:	:	:	:	:	:
1993	78	1.100	7	110	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:	:
1997	28	465	9	174	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:	:	:
1999	32	500	14	233	:	:	:	:	148	500
Portugal										
1995	:	:	:	:	1	:	:	:	:	:
1999	11	:	:	:	1	40	:	:	:	:
2000	13	:	:	:	1	:	:	:	:	:
2001	15	:	:	:	1	:	:	:	:	:
Suomi / Finland										
1990	:	:			3	:	:	:	:	:
1993	:	:	1	150	11	:	:	:	:	:
1994	75	:	1 a)	150 a)	11	:	:	:	:	:
1995	:	:	;	:	2	:	:	:	:	:
1997	65	:	3	150	11	:	:	:	:	:
1998	:	:	;	:	7	:	:	:	:	:
2000	:	:	;	:	13	:	:	:	:	:
Sverige	:	:	:	:	:	:	:	:	:	:
United Kingdom	:	:	:	:	:	:	:	:	:	:
Island										
1995	:	:	:	:	:	:	:	:	1 l)	:
1996	:	:	:	:	:	:	:	:	1 l)	:
1997	:	:	:	:	:	:	:	:	1 l)	:
1998	:	:	:	:	:	:	:	:	1 l)	:
1999	:	:	:	:	:	:	:	:	1 l)	:
Norge										
1995	25	:	1	20	1 b)	:	:	:	:	:
1997	25	:	1	20	1 b)	:	:	:	:	:
1999	42	:	1	33	:	:	:	:	:	:
2001	42	:	1	33	:	:	:	:	:	:
Schweiz/Suisse/Svizzera										
1990	:	350	13	150	5	:	:	:	:	:
1991	:	350	46	254	30	:	:	:	:	:
Balgarija	:	:	:	:	:	:	:	:	:	:
Cyprus	:	:	:	:	:	:	:	:	:	:

Table 10hw: Waste Treatment and disposal facilities for hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t
Ceska Republika										
1996	:	:	87	100	24	:	:	:	:	:
1997	:	:	76	130	65	:	:	:	:	:
1998	172	2.692	79	125	49	:	:	:	:	:
1999	172	2.692	75	121	52	:	:	:	:	:
Eesti										
1997	:	:	1	:	32	:	:	:	:	:
1998	:	:	1	:	32	:	:	:	:	:
1999	:	:	1	:	29	:	:	:	:	:
2000	:	:	7	:	26	:	:	:	:	:
Magyarorszag										
1990	217	:	36	100	1	:	:	:	:	:
Latvija										
1999	:	:	:	:	:	:	3	2	:	:
2000	:	:	:	:	:	:	3	2	:	:
2001	42	:	:	:	:	:	:	:	:	:
Lietuva										
2000	25 i)k)	:	21 i)k)	:	:	:	3 k)	:	:	:
2001	26 i)	:	27 i)	:	:	:	3	:	:	:
Malta	:	:	:	:	:	:	:	:	:	:
Polska	:	::	:	:	:	:	:	:	:	:
Romania										
1996	:	:	:	:	73 g)	:	206	:	:	:
1997	:	:	:	:	50 g)	:	168	:	:	:
1998	:	:	:	:	62 g)	:	196	:	:	:
1999	:	:	:	:	71 g)	:	209	:	:	:
2000	:	:	:	:	80	:	200	:	:	:
Slovenska Republika										
2000	20	:	65	273	41	5.139 h)	:	:	:	:
Slovenija							:	:	:	:
Turkey										
1995	:	:	1	9	:	:	:	:	:	:
1996	:	:	1	9	:	:	:	:	:	:
1997	:	:	2	44	:	:	:	:	:	:
1998	:	:	2	44	:	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	:	:
Macedonia	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:

Table 10hw: Waste Treatment and disposal facilities for hazardous waste

FOOTNOTES

a) 100% with energy recovery.
b) Controlled sites for final waste only.
c) 2 plants for special treatment of hazardous waste included.
d) Source : ADEME (ITOM) non-hazardous waste.
e) Source : Irish Proposed National Hazardous Waste Management Plan.
f) Hazardous waste transfer stations.
g) Small part of the industrial waste disposal sites, made for hazardous waste included.
h) Remaining capacity in m3.
i) General plants (not special plants).
j) Storage of hazardous waste
k) Estimate
l) Waste oils burned as fuel at the Cement Factory.
m) 2nd category, type C landfills.
n) It includes: MSWI (n°43), Incinaration plants for non hazardous waste and incinaration plants for hazardous waste (n°126

Table 10hwnhw: Waste Treatment and disposal facilities for hazardous & non-hazardous waste

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Belgique/België	:	:	:	:	:	:	:	:	:	:
Danmark	:	:	:	:	:	:	:	:	:	:
Deutschland	:	:	:	:	:	:	:	:	:	:
Ellada	:	:	:	:	:	:	:	:	:	:
España	:	:	:	:	:	:	:	:	:	:
France	:	:	:	:	:	:	:	:	:	:
Ireland	:	:	:	:	:	:	:	:	:	:
Italia										
1997	207	:	49	:	148 f)	:	:	:	:	:
1998	:	:	:	:	152 f)	:	:	:	:	:
Luxembourg										
1985	:	:	1	140	:	:	:	:	:	:
1990	:	:	1	140	4 m)	:	:	:	:	:
1995	:	:	1	140	6 o)n)	:	:	:	2 i)	:
1996	:	:	1	140	6 o)n)	:	:	:	3 i)	:
1997	:	:	1	140	8 o)n)	:	:	:	3 i)	:
1998	:	:	1	140	11 o)n)	:	:	:	3 i)	:
1999	:	:	1	140	12 o)n)	:	:	:	4 i)	:
2000	47	:	1	140	14 o)n)	:	:	:	4 i)	:
2001	49	:	1	140	14 o)n)	:	:	:	4 i)	:
Nederland										
1995	:	:	:	:	46 d)e)	80.000	:	:	:	:
1996	:	:	:	:	47 d)e)	76.000	:	:	:	:
1997	:	:	:	:	44 d)e)	73.874	:	:	:	:
1998	:	:	:	:	42 d)e)	69.436	:	:	:	:
1999	:	:	:	:	38 d)e)	64.073	:	:	:	:
2000	:	:	:	:	36 d)e)	58.024	:	:	:	:
Österreich										
1999	694	5.300	53	1.900	53	23.000	:	:	175	700
Portugal										
1995	:	:	1	:	342	:	:	:	:	:
1999	:	:	:	:	120	:	:	:	:	:
Suomi / Finland	:	:	:	:	:	:	:	:	:	:
Sverige										
1985	:	:	:	:	417	:	:	:	:	:
1990	10	200	:	:	282	:	:	:	:	:
1996	:	:	:	:	274 c)	:	:	:	:	:
1998	:	:	:	:	280 a)l)	130.000 b)	:	:	:	:
2000	:	:	:	:	243 l)	127.000	:	:	:	:

Table 10hwnhw: Waste Treatment and disposal facilities for hazardous & non-hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
United Kingdom	:	:	:	:	:	:	:	:	:	:
Island										
1995	:	:	5	:	12	:	:	:	38 k)	:
1996	:	:	5	:	14	:	:	:	21 k)	:
1997	:	:	5	:	16	:	:	:	15 k)	:
1998	:	:	5	:	19	:	:	:	12 k)	:
1999	:	:	5	:	21	:	:	:	9 k)	:
2000	:	:	6	:	26	:	:	:	:	:
2001	:	:	6	:	24	:	:	:	:	:
Norge	:	:	:	:	:	:	:	:	:	:
Schweiz/Suisse/Svizzera	:	:	:	:	:	:	:	:	:	:
Balgarija	:	:	:	:	:	:	:	:	:	:
Cyprus	:	:	:	:	:	:	:	:	:	:
Ceska										
1998	:	:	:	:	3	:	:	:	:	:
Eesti										
2000	:	:	17	:	170	:	:	:	:	:
Magyarorszag	:	:	:	:	:	:	:	:	:	:
Latvija										
1997	:	:	:	:	558 g)	:	:	:	:	:
1998	:	:	:	:	550 g)	:	:	:	:	:
1999	:	:	:	:	550 g)	:	3 g)	2 g)	:	:
2000	:	:	:	:	503 g)	:	3 g)	2 g)	:	:
2001	42	:	:	:	341	:	3	2	:	:
Lietuva										
2000	7	:	7	:	:	:	:	:	:	:
2001	7	:	7	:	:	:	:	:	:	:
Malta	:	:	:	:	:	:	:	:	:	:
Polska	:	:	:	:	:	:	:	:	:	:
Romania										
1996	:	:	:	:	140 j)	:	:	:	:	:
1997	:	:	:	:	155 j)	:	:	:	:	:
1998	:	:	:	:	172 j)	:	:	:	:	:
1999	:	:	:	:	182 j)	:	:	:	:	:
2000	:	:	:	:	180	:	:	:	:	:

Table 10hwnhw: Waste Treatment and disposal facilities for hazardous & non-hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Slovenska Republika										
2000	50	:	67	492	141	31.497 b)	:	:	:	:
Slovenija										
1995	:	:	:	:	58 h)	:	5	26	:	:
1998	:	:	2	:	54	:	9	17	4	:
2001	29	:	7	:	51	:	:	:	4	:
Turkey										
1995	:	:	1	9	:	:	:	:	:	:
1996	:	:	1	9	:	:	:	:	:	:
1997	:	:	2	44	:	:	:	:	:	:
1998	:	:	2	44	:	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:
Croatia										
2000	118	221	193	980	200	15.656	33	32	518	1.214
Macedonia	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:

Table 10hwnhw: Waste Treatment and disposal facilities for hazardous & non-hazardous waste

FOOTNOTES

a) Excludes installations with permits to handle less than 50 tonnes excluded. Excludes installations with permits to handle only sludge deposits .
b) Cubic meters.
c) 1992 data.
d) Number of sites being exploited.
e) Last Date December 31.
f) 2nd category, type B landfills.
g) In 2000 Regulations of the Cabinet of Ministers entered into force requiring permits for the disposal of waste at dumpsites, thus the number of operationing dumpsites decreased significantly.
h) Figures include only data on the number of municipal landfill sites. Data given previously in JQ included also number of industrial landfill sites which are not considered reliable.
i) Installations for sorting etand storage for hazardous waste.
j) Part of municipal waste landfills (not mentioned on page for non-hazardous waste) which receive both non-hazardous and potentially hazardous waste included.
k) Waste oils burned as fuel at the Cement Factory
l) Installations with permits to handle less than 50 tonnes excluded.. Excluding installations with permits to handle only sludge deposits .
m) For household waste and similar.
n) Of which, 2 controlled landfills for household waste and similar.
o) Only controlled landfill.

Table 10nhw: Waste Treatment and disposal facilities for non-hazardous waste

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Belgique/België	:	:	:	:	:	:	:	:	:	:
Danmark										
1998	:	:	31	:	133	:	:	:	:	:
Deutschland	:	:	:	:	:	:	:	:	:	:
Ellada										
1999	:	:	:	:	2.196 aa)	:	:	:	:	:
2000	:	:	:	:	2.211	:	:	:	:	:
España										
1990	33	2.564	17	:	:	:	:	:	19	:
1995	26	2.086	21	:	:	:	:	:	65	:
1996	22	2.394	19	:	:	:	:	:	81	:
1997	27	3.004	13	:	:	:	:	:	82	:
1998	29	3.014	13	:	:	:	:	:	92	:
1999	32	3.309	13	:	:	:	:	:	113	:
2000	38	4.114	11	:	:	:	:	:	127	:
France										
1997	143 d)e)	:	254 d)	:	:	:	:	:	128 d)f)	:
1998	175 d)e)	:	248 d)	:	:	:	:	:	153 d)f)	:
1999	227 d)	:	232 d)	:	:	:	:	:	283 d)	:
Ireland										
1995	:	:	0	:	118	:	:	:	454 j)	:
1998	:	:	0	:	126	:	:	:	867 j)	:
Italia										
1996	:	:	34 al)	:	:	:	:	:	:	:
1997	236	:	64	:	631 ak)	:	:	:	68	:
1998	:	:	169 aq)	:	524 ak)	:	:	:	:	:
1999	:	:	41 al)	:	:	:	:	:	:	:
Luxembourg										
1985	:	:	1	140	:	:	:	:	: aj)	:
1990	:	:	1	140	3 ai)	:	:	:	: aj)	:
1995	:	:	1	140	5 ag)ah	:	:	:	1 aj)	:
1996	:	:	1	140	5 ag)ah	:	:	:	2 aj)	:
1997	:	:	1	140	8 ag)ah	:	:	:	2 aj)	:
1998	:	:	1	140	11 ag)ah	:	:	:	2 aj)	:
1999	:	:	1	140	12 ag)ah	:	:	:	3 aj)	:
2000	39	:	1	140	14 ag)ah	:	:	:	3 aj)	:
2001	40	:	1	140	14 ag)ah	:	:	:	3 aj)	:

Table 10nhw: Waste Treatment and disposal facilities for non-hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Nederland										
1998	:	:	12	5.253 k)l)	:	:	:	:	:	:
1999	:	:	12	5.447 k)l)	:	:	:	:	:	:
2000	:	:	12	5.447	:	:	:	:	:	:
Österreich										
1999	662	4.800	39	1.667	53	23.000	:	:	27	200
Portugal										
1995	:	:	1 n)ab)	:	341	:	:	:	:	:
1999	23	:	4 o)ac)	956 r)ad)	139	:	:	:	:	:
2000	30	:	3 ae)	1.182 af)	110	:	:	:	1 ad)	:
2001	32	:	3	1.182	67	:	:	:	1	:
Suomi / Finland										
1990	13 ap)	:	:	:	564	:	:	:	:	:
1995	35 ap)	:	:	:	466	:	:	:	:	:
1998	71	:	1 ar)	:	359 m)	:	:	:	:	:
2000	150 ap)	:	25 ar)	:	278	:	:	:	:	:
Sverige	:	:	:	:	:	:	:	:	:	:
United Kingdom										
1998	842 z)u)	12.890 z)u)	55 z)u)	4.452 z)u)	1.890 z)u)	776.641 z)u)	:	:	237 z)x)u)	8.380 z)x)u)
Island										
1995	:	:	5	:	12	:	:	:	37 an)	:
1996	:	:	5	:	14	:	:	:	20 an)	:
1997	:	:	5	:	16	:	:	:	14 an)	:
1998	:	:	5	:	19	:	:	:	11 an)	:
1999	:	:	5	:	21	:	:	:	8 an)	:
2000	:	:	6	:	26	:	:	:	3 an)	:
2001	:	:	6	:	24 ao)	:	:	:	2 an)	:
Norge										
1985	12 c)	:	37	:	230 b)	:	:	:	:	:
1995	:	:	12	:	208 b)	:	:	:	:	:
1996	88 c)	:	:	:	:	:	:	:	:	:
1998	:	:	8	:	149 b)	:	:	:	:	:
2001	71	:	20	:	112	:	:	:	:	:
Schweiz/Suisse/Svizzera										
1998	262	:	28	2.830	56 i)	25.512 a)	:	:	:	:
1999	262	:	28	2.830	56 i)	25.512 a)	:	:	:	:
Balgarija	:				:	:	:	:	:	:

Table 10nhw: Waste Treatment and disposal facilities for non-hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Cyprus										
1995	:	:	:	:	8	:	:	:	:	:
1996	:	:	:	:	8	2.000	:	:	:	:
1997	:	:	:	:	8	1.800	:	:	:	:
1998	:	:	:	:	8	1.500	:	:	:	:
1999	:	:	:	:	8	1.150	:	:	:	:
2000	:	:	:	:	8	800	:	:	:	:
2001	:	:	:	:	8	450	:	:	:	:
Ceska Republika										
1996	:	:	1	240	440	:	:	:	44	:
1998	74	2.742	3	646	292	:	:	:	:	:
1999	74	2.742	3	646	295	:	:	:	:	:
Eesti										
1997	:	:	:	:	268	:	:	:	:	:
1998	:	:	:	:	268	:	:	:	:	:
1999	:	:	:	:	232	:	:	:	:	:
2000	:	:	10	:	144	:	:	:	:	:
Magyarorszag										
1996	:	:	:	:	702	22.105 g)	:	:	:	:
1997	:	:	:	:	726	23.371 g)	:	:	:	:
1998	:	:	1 h)	356 h)	731 g)	20.471 g)	:	:	:	:
1999	12 y)	1.928 y)	1 h)	352 h)	728 g)	21.945 g)	:	:	:	:
2000	14 y)	2.138 y)	1 h)	348 h)	701 g)	18.569 g)	:	:	:	:
2001	:	:	1	353	665	15.389	:	:	:	:
Latvija										
1997	:	:	:	:	558	:	:	:	:	:
1998	:	:	:	:	550	:	:	:	:	:
1999	:	:	:	:	550	:	:	:	:	:
2000	:	:	:	:	503	:	:	:	:	:
2001	:	:	:	:	341	:	:	:	:	:
Lietuva										
1997	:	:	:	:	298	:	:	:	:	:
1998	:	:	:	:	314	:	:	:	:	:
1999	:	:	:	:	335	:	:	:	:	:
2000	52 am)	:	58 am)	:	:	:	:	:	:	:
2001	94	:	67	:	:	:	:	:	:	:

Table 10nhw: Waste Treatment and disposal facilities for non-hazardous waste (continued)

	Treatment plants		Incineration plants		Landfill sites		Permanent storage		Other	
	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)	Number	Capacity (1000t)
Malta										
1985	:	:	:	:	2	:	:	:	:	:
1990	:	:	:	:	2	:	:	:	:	:
1995	1	80	:	:	2	:	:	:	:	:
1996	1	80	:	:	2	:	:	:	:	:
1997	1	80	:	:	2	:	:	:	:	:
1998	1	80	:	:	2	:	:	:	:	:
1999	1	80	:	:	2	:	:	:	:	:
2000	1	80	:	:	2	:	:	:	:	:
2001	1	80	:	:	2	:	:	:	:	:
Polska										
1985	:	:	:	:	1.077	:	:	:	:	:
1990	:	:	:	:	1.251	:	:	:	:	:
1995	:	:	:	:	1.345	:	:	:	:	:
1996	:	:	:	:	1.393	:	:	:	:	:
1997	:	:	:	:	1.455	:	:	:	:	:
1998	:	:	:	232	1.428	:	:	:	:	:
1999	:	2.793 w)	:	192	1.401	:	:	:	:	:
2000	:	2.835 w)	:	187	1.390	:	:	:	:	:
2001	:	3.414 w)	:	259	1.408	:	:	:	:	:
Romania										
1996	:	:	:	:	493 s)	:	197 t)	:	:	:
1997	:	:	:	:	396 s)	:	186 t)	:	:	:
1998	:	:	:	:	463 s)	:	216 t)	:	:	:
1999	:	:	:	:	512 s)	:	251 t)	:	:	:
2000	:	:	:	:	512	:	250	:	:	:
Slovenska Republika										
2000	30	:	2	219	100 v)	26.358 a)	:	:	:	:
Slovenija						:	:	:	:	:
Turkey										
1994	:	:	:	:	2 q)	9.250	:	:	:	:
1995	:	:	:	:	6 q)	202.527	:	:	:	:
1996	:	:	:	:	6 q)	202.527	:	:	:	:
1997	:	:	:	:	8 q)	206.690	:	:	:	:
1998	:	:	:	:	8 q)	206.690	:	:	:	:
2000	:	:	:	:	12 q)	261.282	:	:	:	:
2001	:	:	:	:	2.252 p)	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	:	:
Macedonia	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:

Table 10nhw: Waste Treatment and disposal facilities for non-hazardous waste

FOOTNOTES

a) Cubic meters.
b) Excludes sites receiving less than 50 tonnes of waste per year, dumps exclusively meant for bulky waste, private installations for industrial waste.
c) Installations for grinding/composting.
d) Source : ADEME (ITOM) non-hazardous waste.
e) Number of composting and methanising installations.
f) Number of sorting plants, of manufacture of solid fuels.
g) Municipal waste landfill sites.
h) Municipal waste incineration plants.
i) Excludes landfill sites for inert materials.
j) Made up of numbers of civic waste facilities and bring bank facilities reported in the national waste database reports for those years.
k) Max. Capacity by permit.
l) Excludes incineration of sewage sludge, including human infectious health care wastes.
m) Landfills for non-hazardous and inert waste only.
n) Data refer to a cement factory, which burns used tyres.
o) Data refer to a cement factory which burns used tyres, a power plant that burns forestry waste and two incineration plants for municipal waste.
p) Data refers to total amount of controlled and uncontrolled landfill sites.
q) Data refers to only controlled landfill sites.
r) Two incinerator plants for municipal waste .
s) Part of the municipal waste landfills, part of the industrial waste disposal sites and all the slag and ash landfills included.

t) All the disposal sites for mining non hazardous waste included
u) From EA Strategic Waste Management Survey.
w) Data refer to waste treated in other way than landfill and incineration.
x) Includes non-permanent storage facilities, mobile plant, lagoons and boreholes, and facilities of unspecified type.
y) Data refer to the data provision of firms under ISIC/NACE 37.
z) England and Wales only.
aa) Values are estimations due to controlled landfill sites being under construction, for the period 1998 - 2000.
ab) Refers to a cement factory, which burns used tyres.
ac) Refers to a cement factory which burns used tires, a power plant that burns forestry waste and two incineration plants for municipal waste.
ad) Refers to a cement factory which burns used tyres.
ae) Refers to 3 incinerator plants for urban waste.
af) 1000 t/year
ag) Only concerns controlled landfill.
ah) Of which 2 landfills for household waste and similar.
ai) For householdl waste and similar
aj) Installations for sorting.
ak) 2nd category, type A landfills for inert waste.The number of landfills doesn't include MSW landfill
al) MSW Incinaration plants.
am) Estimate
an) The apparently decreasing number of landfills not controlled is due to the fact that at some facilities open pit burning is terminated and waste landfilled instead.
Total number of waste treatment facilities has been decreasing during the decade of report as municipalities tend to merge their waste management activities in bigger units with combined recycling and disposal
ao) All figures for 2001 are preliminary.
ap) Plants permitted to treat municipal waste.
aq) It includes: MSWI (n°43), Incinaration plants for non hazardous waste and incinaration plants for hazardous waste (n°126)
ar) Plants designed to incinerate municipal waste as main fuel (3 plants/2000) and coincineration plants (22 plants/2000).

Table 11: Hazardous waste generated by economic sector (1 000t)

	Agriculture and Forestry	Mining and quarrying	Manu-facturing industry	Energy production	Water purification, distribution	Construction	Sewage and refuse disposal	Muni-cipal	Other
Belgique/België	:	:	:	:	:	:	:	:	:
Danmark									
1994	:	:	85	:	:	:	:	:	:
1995	:	:	79	:	:	45	:	55	38
1996	:	:	116	:	:	21	:	36	33
1997	:	:	104	:	:	28	:	47	33
1998	:	:	117	:	:	21	:	49	34
1999	:	:	100	:	:	41	:	36	31
2000	:	:	87	:	:	8	:	88	33
Deutschland	:	:	:	:	:	:	:	:	:
Ellada	:	:	:	:	:	:	:	:	:
España									
1999	:	12 p)	1.292 p)	:	:	:	:	:	:
2000	:	4 p)	1.345 p)	27 p)	:	:	:	:	:
France	:	:	:	:	:	:	:	:	:
Ireland									
1998	:	:	:	1	:	:	:	:	:
Italia									
1997	9 b)	4	2.166	:	48 c)	26	273	:	874 d)
1998	6	6	2.522	119	2	83	380	:	941 n)
Luxembourg	:	:	:	:	:	:	:	:	:
Nederland									
1994	2	16	357	8	64	31	189	:	216
1996	3	50	418	4	3	20	245	:	276
1997	3	:	:	:	.	27	379	:	298
1998	:	65 h)	497 h)	8 h)	2 h)	:	:	:	298
2000	:	65 h)o)	497 h)o)	8 h)	2 h)	:	:	:	:
2001	:	65 h)o)	497 h)o)	8 h)	2 h)	:	:	:	:
Österreich	:	:	:	:	:	:	:	:	:
Portugal									
1998	:	6	211	40	:	12	:	:	
1999	:	5	139	9	:	0	:	:	61
2000	:	3	300	2	:	:	:	:	
Suomi / Finland									
1985	:	:	:	:	:	:	:	1.200	:
1990	:	:	:	:	:	:	:	1.300	:
1994	:	:	:	:	:	:	:	87	:
1997	:	:	:	:	:	1	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	:	:	510	:	:	:	:	:	4
2000	:	:	1.100	68	:	:	:	:	3
Sverige									
1998	:	2 e)	801 f)	:	:	:	:	:	:
2000	:	:	:	:	:	:	:	20 j)k)	:
United Kingdom									
1998	6 q)r)	12 q)	:	:	:	1.007 q)	234 q)	84 q)	17 q)
Island									
1992	:	:	:	:	:	:	:	0	4 a)
1993	:	:	:	:	:	:	:	1	4 a)
1994	:	:	:	:	:	:	:	1	5 a)
1995	:	:	:	:	:	:	:	1	5 a)
1996	:	:	:	:	:	:	:	1	6 a)
1997	:	:	:	:	:	:	:	1	6 a)
1998	:	:	:	:	:	:	:	1	6 a)
1999	:	:	:	:	:	:	:	2	6 a)
2000	:	:	:	:	:	:	:	1	6 a)
2001	:	:	:	:	:	:	:	2	6 a)
Norge									
1996	:	:	401	:	:	:	:	:	:
1997	1	81	403	3	:	3	:	:	:
1998	1	97	404	4	:	4	:	:	:
1999	1	86	406	3	:	4	:	:	:
2000	1	86	406 l)	3	:	4	:	:	:
Schweiz/Suisse/Svizzera	:	:	:	:	:	:	:	:	:
Balgarija									
2001	0	1	734	2	12	0	0	:	8
Cyprus	:	:	:	:	:	:	:	:	:

Table 11: Hazardous waste generated by economic sector (1 000t) (continued)

	Agriculture and Forestry	Mining and quarrying	Manu-facturing industry	Energy production	Water purification, distribution	Construction	Sewage and refuse disposal	Muni-cipal	Other
Ceska Republika									
1998	17 i)	45 i)	1.691 i)	1.154 i)	16 i)	305 i)	37 i)	18 i)	146 i)m)
1999	33	8	1.641	224	2	294	81	13	97 m)
2000	34	11	1.638	459	4	160	175	27	122 m)
2001	26	14	1.660	522	9	162	265	32	127 m)
Eesti	:	:	:	:	:	:	:	:	:
Magyarorszag	:	:	:	:	:	:	:	:	:
Latvija									
1997	0	0	78	0	41	0	37	:	25
1998	0	:	65	1	34	0	3	:	4
1999	0	:	60	0	32	0	1	:	3
2000	0	:	89	1	:	0	0	:	3
2001	0	:	79	0	:	0	0	:	3
Lietuva	:	:	:	:	:	:	:	:	:
Malta	:	:	:	:	:	:	:	:	:
Polska	:	:	:	:	:	:	:	:	:
Romania									
1998	:	:	2.183	:	:	:	:	:	
1999	:	44	2.004	3	:	:	:	:	
2000	2	80	797	1	0	:	:	:	16
Slovenska Republika	:	:	:	:	:	:	:	:	:
Slovenija									
1998	:	0	42	0	0	2	0	:	2
2001	:	5	59	1	0	1	0	:	3
Turkey									
1994	:	:	10 g)	:	:	:	:	:	:
1995	:	:	17 g)	:	:	:	:	:	:
1996	:	:	25 g)	:	:	:	:	:	:
1997	:	:	71 g)	:	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:
Croatia									
1999	:	:	78	:	:	:	:	:	:
2000	:	:	24	:	:	:	:	:	:
Macedonia	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:

Table 11: Hazardous waste generated by economic sector (1 000t)

FOOTNOTES

a) Waste oils from goods and passenger transport.

b) Includes NACE from 01 to 05.

c) Includes NACE 40, 41.

d) Includes NACE from 91 to 99 (167,85 x 1000t of which hazardous Waste 47,53 x 1000t) and NACE from 50 to 55 (4.063,88 x 1000t of which hazardous waste 506,52 x 1000t) and NACE from 60 to 85 (2961,48 x 1000t of which hazardous waste 319,97 x 1000t)

e) Excludes NACE 10-12.

f) Excludes NACE 37.

g) Data is for 43 establishments for 1994, 57 establishments for 1995, 87 establishments for 1996 and 101 establishments for 1997.

h) Hazardous waste data from 1997.

i) A new law about Waste Act No. 125/1997 Coll. and new Catalogue of waste came into force with effect from Jan.1st 1998.

j) Includes batteries.

k) Estimated amount based on collected municipal waste.

l) Estimate in the Norwegian waste accounts

m) Covers NACE 51, 55, 60, 64, 74, 85, 93

n) It includes NACE from 50 to 55, from 60 to 85 and from 91 to 99.

o) Change of definition: including residues (waste sold as by-product), which are all re-used.

p) Source: INE

q) Figures given come from the Environment Agency's Commercial and Industrial waste survey and refer to 'special waste' arising in England and Wales only.

r) Special waste category packaging, cloths, filter materials.

Table 12: Collection and recycling of paper, paperboard and paper products (1 000t)

	Waste generated	Waste collected for recycling	Waste recycled in country
Belgique/België			
1992	1.298 d)	:	783 d)
1993	1.853 d)	:	1.197 d)
1994	1.918 d)	:	959 d)
1995	1.852 d)	:	1.076 d)
1996	2.346 d)	:	1.566 d)
1997	2.470 d)	:	1.704 d)
1998	2.494 d)	:	2.125 d)
1999	2.716 d)	:	2.373 d)
Danmark			
1996	:	615	391
1997	:	607	407
1998	:	656	409
1999	:	593	411
2000	:	735	424
Deutschland			
1980	9.678	3.282	3.168
1985	10.775	4.668	4.300
1990	15.461	6.803	6.212
1991	15.937	7.500	6.420
1992	15.739	7.917	6.742
1993	15.649	8.564	6.995
1994	16.335	9.704	8.160
1995	15.823	10.670	8.599
1996	15.553	10.898	8.888
1997	16.127	11.493	9.457
1998	17.073	12.164	9.917
1999	17.766	12.904	10.307
2000	19.112	13.570	10.992
Ellada			
1995	:	:	280
1996	:	:	265
1997	780	:	260
España			
1990	2.509	1.691	:
1991	2.564	1.735	:
1992	2.929	1.777	:
1993	3.017	1.736	:
1994	3.025	1.823	:
1995	3.159	2.116	:
1996	3.242	2.125	:
1997	3.638	2.354	:
1998	3.689	2.635	:
1999	3.400	2.963	:
2000	3.501	3.319	:
France			
1997	:	4.467 h)	4.715 h)
1998	:	4.931 h)	5.247 h)
1999	:	4.978 h)	5.216 h)
2000	:	5.302 h)	5.778 h)
Ireland	:	:	:
Italia			
1997	:	3.082	3.955
1998	:	3.301	4.112
1999	:	3.629	4.207

Table 12: Collection and recycling of paper, paperboard and paper products (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Luxembourg			
1985	:	12 j)	:
1990	:	22	:
1995	:	48	:
1996	:	46	:
1997	:	54	:
1998	:	85	:
1999	:	54	:
2000	:	61	:
Nederland			
1995	3.520	1.850	:
1997	3.870	2.145	:
1998	4.087	2.529	:
1999	4.225	2.600	:
2000	3.050 l)	1.775 l)	:
2001	2.934 l)	1.749 l)	:
Österreich			
1999	1.267	1.240	:
Portugal			
1994	:	:	266
1995	:	:	288
1996	:	:	329
1997	:	:	362
1998	:	:	392
1999	:	:	433
Suomi / Finland			
1995	:	505	:
1996	:	563	:
1997	:	635	:
1998	:	665	:
1999	:	697	715
2000	:	734	703
2001	:	739	713
Sverige			
1990	:	300	:
1994	:	374 c)	:
1995	:	401 c)	:
1996	:	385 c)	:
1997	:	425 c)	:
1998	:	435 c)	:
1999	:	427	:
2000	:	454	:
2001	:	441	:
United Kingdom			
1980	6.837 n)	2.185 n)	2.009 n)g)
1985	7.711 n)	2.171 n)	2.067 n)g)
1990	9.362 n)	3.121 n)	2.876 n)g)
1995	11.398 n)	3.997 n)	3.997 n)g)
1996	11.477 n)	4.508 n)	4.323 n)g)
1997	12.225 n)	4.983 n)	4.618 n)g)
1998	12.474 n)	4.999 n)	4.654 n)g)

Table 12: Collection and recycling of paper, paperboard and paper products (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Island			
1992	:	2	:
1993	:	2	:
1994	:	2	:
1995	:	4	:
1996	:	6	:
1997	:	6	:
1998	:	5	:
1999	:	7	:
2000	:	7	:
2001	:	7 m)	:
Norge			
1980	687 i)b)	116 a)	:
1985	829 i)b)	131 a)	:
1990	1.050 i)	182 a)	:
1991	928 i)	211 a)	:
1992	941 i)	242 a)	:
1993	931 i)	271 a)	:
1994	929 i)	320 a)	:
1995	1.011 i)	346 a)	:
1996	1.032 i)	367 a)	:
1997	1.120 i)	432 a)	:
1998	1.131 i)	453 a)	:
1999	1.102 i)	535 a)	:
2000	1.334 i)	514 a)	:
Schweiz/Suisse/Svizzera			
1997	1.596	1.003	1.032
1998	1.652	1.062	1.082
1999	1.719	1.094	1.111
Balgarija	:	:	:
Cyprus			
1990	105 k)	:	:
1995	115 k)	:	:
1996	120	5	:
1997	125	5	:
1998	129	6	:
1999	134	6	:
2000	139	6	:
2001	143	7	:
Ceska Republika			
1996	18	:	:
1997	122	:	:
1998	96 e)	:	:
1999	89 e)	:	:
2000	92 e)	:	:
2001	120	:	:
Eesti			
1999	5	12	1
2000	4	11	1
Latvija			
1996	60	:	:
2001	13	:	:
Lietuva			
1996	:	:	29
1997	14	:	32
1998	18	:	36
1999	17	:	44
2000	:	38	64
2001	:	53	80
Magyarorszag	:	:	:

Table 12: Collection and recycling of paper, paperboard and paper products (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Malta			
1999	2	0	0
2000	3	1	1
2001	2	:	:
Polska			
1998	:	2 f)	:
1999	:	4 f)	:
2000	:	4 f)	:
2001	:	42 f)	:
Romania			
1995	80	80	78
1996	60	60	34
1997	40	40	32
1998	48	48	38
1999	43	43	26
2000	90	90	73
Slovenija	:	:	:
Slovenska Republika			
2000	:	:	:
Turkey			
1994	:	472	527
1995	:	565	640
1996	:	590	622
1997	:	736	797
1998	:	720	760
1999	:	785	847
2000	:	988	1.050
2001	:	886	978
Bosnia and Herzegovina	:	:	:
Croatia			
2000	51	:	:
Macedonia	:	:	:
Yugoslavia	:	:	:

TABLE 12: Collection and recycling of paper, paperboard and paper products (1 000t)

FOOTNOTES

a) Includes all paper collected for recycling.
b) Production residues are excluded.
c) Newspapers, journals, telephone catalogues, etc.
d) Estimate : Extrapolation of figures for Flanders on the basis of the population.
e) EWC code 200 101.
f) Municipal waste only.
g) Based on waste paper consumption at mills only, so may differ from estimates given previously..
h) Source :COPACEL (Confédération de l'industrie française des papiers, cartons et celluloses).
i) Calculated in the Norwegian waste accounts (waste = production + imports - exports).
j) Refers to 1984.
k) Data refer to municipal waste delivered to landfills. There may exist a small proportion of recycling before disposal to landfills.
l) NACE 10-41 and households.
m) All figures for 2001 are preliminary, as not all the year reports from the municipalities were received.
n) Data from British Paper & Board Industry Federation.

Table 13: Collection and recycling of glass (1 000t)

	Waste generated	Waste collected for recycling	Waste recycled in country
Belgique/België			
1992	383 d)	:	245 d)
1993	388 d)	:	243 d)
1994	493 d)	:	320 d)
1995	445 d)	:	335 d)
1996	481 d)	:	398 d)
1997	400 d)	:	338 d)
1998	534 d)	:	476 d)
1999	658 d)	:	570 d)
Danmark			
1996	:	126	78
1997	:	115	80
1998	:	126	82
1999	:	126	85
2000	:	129	83
Deutschland			
1990	4.205	:	:
1991	4.637	2.495	:
1992	4.426	2.576	:
1993	4.223	2.809	:
1994	4.127	2.857	:
1995	3.954	3.004	:
1996	3.811	3.145	:
1997	3.750	3.147	2.924
1998	4.165	3.460	3.262
2000	4.147	3.530	3.317
Ellada			
1995	:	:	40
1996	:	:	39
1997	176	:	40
España			
1990	981	304	:
1991	1.003	310	:
1992	958	312	:
1993	981	328	:
1994	984	371	:
1995	1.033	402	:
1996	1.060	456	:
1997	1.190	521	:
1998	1.207	567	:
1999	1.397	575	:
2000	1.438	481	:
France			
1997	:	:	1.400 d)
1998	:	:	1.550 d)
1999	:	:	1.650 d)
2000	:	:	1.840 d)
Ireland	:	:	:
Italia			
1997	:	920	1.000
1998	:	920	1.020
1999	:	960	1.060

Table 13: Collection and recycling of glass (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Luxembourg			
1985	:	3	:
1990	:	8	:
1995	:	16	:
1996	:	14	:
1997	:	16	:
1998	:	19	:
1999	:	20	:
2000	:	23	:
Nederland			
1996	542 i)	377 i)	:
1998	582 i)	411 i)	:
2000	630 i)	416 i)	:
2001	580 i)	423 i)	:
Österreich			
1999	230	210	:
Portugal			
1994	:	:	71
1995	:	:	91
1996	:	:	120
1997	:	:	117
1998	:	:	120
1999	:	:	132
Suomi / Finland	:	:	:
Sverige			
1990	:	45	:
1994	:	84	:
United Kingdom			
1985	1.800 j)	210 j)	215 j)
1990	1.810 j)	372 j)	372 j)
1995	1.900 j)	512 j)	412 j)
1996	2.000 j)	519 j)	430 j)
1997	2.100 j)	520 j)	520 j)
1998	2.200 j)	574 j)	505 j)
Island			
1992	2	1	:
1993	2	1	:
1994	2	1	:
1995	2	1	:
1996	2	1	:
1997	2	1	:
1998	2	1	:
1999	2	1	:
2000	2	2	2
2001	2	2	2
Norge			
1990	72 b)c)	15 c)	:
1992	:	30 c)	:
1994	123 a)	37 c)	:
1995	159 a)	33 c)	:
1996	155 a)	34 c)	:
1997	148 a)	34 c)	:
1998	145 a)	35	:
1999	146 a)	45	:
2000	146 a)	39 c)	:

Table 13: Collection and recycling of glass (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Schweiz/Suisse/Svizzera			
1997	311	283	184
1998	308	281	171
1999	305	283	163
Balgarija	:	:	:
Cyprus			
1990	4 h)	:	:
1995	5	1	0
1996	6	2	1
1997	7	2	1
1998	6	0	0
1999	6	0	0
2000	6	1	:
2001	6	1	:
Ceska Republika			
1996	247	:	:
1997	144	:	:
1998	13 e)	:	:
1999	28 e)	:	83 f)
2000	16 e)	:	174 f)
2001	35	:	166
Eesti			
1999	2	10	9
2000	0	10	7
Magyarorszag	:	:	:
Latvija			
1996	39	:	:
2001	2	:	:
Lietuva			
1996	:	:	17
1997	31	:	40
1998	27	:	45
1999	47	:	51
2000	:	49	49
2001	:	47	48
Malta			
2000	:	0	0
2001	:	30	:
Polska			
1998	:	10 g)	:
1999	:	13 g)	:
2000	:	8 g)	:
2001	:	86 g)	:
Romania			
1995	172	172	83
1996	129	129	120
1997	140	140	72
1998	471	471	404
1999	96	96	88
2000	136	136	130
Slovenska Republika			
2000	:	22	35
Slovenija	:	:	:

Table 13: Collection and recycling of glass (1 000t) (continued)

	Waste generated	Waste collected for recycling	Waste recycled in country
Turkey			
1994	:	61	61
1995	:	58	58
1996	:	75	75
1997	:	99	99
1998	:	100	100
1999	:	102	102
2000	:	108	108
2001	:	123	123
Bosnia and Herzegovina	:	:	:
Croatia			
2000	8	:	:
Macedonia	:	:	:
Yugoslavia	:	:	:

TABLE 13: Collection and recycling of glass (1 000t)

FOOTNOTES

a) Calculated in the Norwegian waste accounts.
b) Excludes returnable glass bottles.
c) Packaging only.
d) National estimate
e) EWC code 200 102.
f) Figure covers waste from storage and waste taken over.
g) Municipal waste only
h) Data refer to municipal waste delivered to landfills. There may exist a small proportion of recycling before disposal to landfills.
i) NACE 10-41 and households.
j) Data from British Glass Manufacturers Confederation/ and the Environment Agency.

Table 14: Collection and recycling of packaging waste (1 000 t)

	Total Waste	Paper			Glass			Plastics			Metals		
	Generated	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recyclec in countr
Belgique/België													
1995	:	:	:	:	:	:	210 e)	:	:	6 e)	:	:	40 e)
1996	:	:	:	:	:	:	324 e)	:	:	19 e)	:	:	60 e)
1997	:	:	:	:	:	:	338 e)	:	:	34 e)	:	:	83 e)
1998	:	:	:	:	:	:	378 e)	:	:	41 e)	:	:	93 e)
1999	:	208 e)	:	:	556 e)	:	420 e)	101 e)	:	60 e)	151 e)	:	106 e)
Danmark													
1994	761	396	:	:	138	:	:	126	:	:	35	:	:
1995	900	409	:	:	176	:	:	151	:	:	64	:	:
1996	:	412	:	:	185	:	:	150	:	:	61	:	:
1997	:	463	:	:	193	:	:	183	:	:	58	:	:
1998	:	435	:	:	176	:	:	172	:	:	55	:	:
1999	:	469	278	193	188	137	99	153	19	22	45	16	5
2000	:	475	:	:	168	137	115	157	20	23	52	:	:
Deutschland													
1990	:	5.618	:	:	4.205	:	:	1.464	:	:	1.262	:	:
1991	:	5.791	:	:	4.637	:	:	1.628	:	:	1.337	:	:
1992	:	5.605	:	:	4.426	:	:	1.568	:	:	1.242	:	:
1993	:	5.333	:	:	4.223	:	:	1.485	:	:	1.135	:	:
1994	:	5.425	:	:	4.127	:	:	1.527	:	:	1.152	:	:
1995	:	4.398	:	:	3.954	:	:	1.551	:	:	1.134	:	:
1996	:	5.380	:	:	3.811	:	:	1.477	:	:	1.110	:	:
1997	:	5.448	4.770	3.595	3.750	3.132	2.909	1.502	916	857	1.121	923	914
1998	:	5.677	5.006	3.747	3.712	3.141	2.943	1.611	953	900	1.109	915	907
1999	:	5.939	5.178	3.833	3.795	3.191	3.033	1.639	960	890	1.137	907	892
2000	:	6.090	5.509	4.059	3.763	3.146	2.933	1.740	960	906	1.171	898	879
Ellada													
1997	600	320	208	201	138	34	35	193	6	7	60	7	6
1998	:	340	218	211	160	34	35	223	8	9	72	7	6
1999	:	356	230	223	179	34	34	245	8	9	76	7	6
España													
1997	:	2.410	:	1.350	1.398	:	521	1.032	:	65	341	:	77
1998	:	2.598	:	1.439	1.393	:	567	1.147	:	83	360	:	85
1999	:	2.599	:	1.484	1.532	:	575	1.111	:	146	400	:	103

Table 14: Collection and recycling of packaging waste (1 000 t) (continued)

	Total Waste	Paper			Glass			Plastics			Metals		
	Generated	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recyclec in countr
France													
1997	:	3.846 m)	:	1.927 m)	3.243	:	1.388 k)	1.571 m)	:	102 m)	677 m)	:	331 m)
1998	:	4.123	:	2.515	3.460	:	1.576 k)	1.628	:	131	681	:	308
1999	:	4.311	:	2.542	3.344	:	1.686 k)	1.699	:	153	704	:	318
2000	:	4.472	:	2.638	3.364	:	1.691 k)	1.780	:	199	733	:	361
Ireland													
1995	:	282	:	:	97	:	:	138	:	:	30	:	:
1998	:	300	45	:	111	:	36	169	4	:	41	3	:
Italia													
1996	:	3.060	:	:	2.049	:	:	1.685	:	:	477 a)	:	:
1997	:	:	1.505	1.427	:	800	720	:	:	164	:	:	29
1998	:	:	1.579	1.489	:	840	740	:	:	190	:	:	40
1999	:	:	:	1.621	:	930	800	:	:	228	:	:	57
Luxembourg													
1997	77	28	13	:	21	15	:	9	1	.	5	1	:
1998	77	28	14	:	21	17	:	9	1	:	5	1	:
1999	79	29	10	:	22	16	:	9	3	:	5	2	:
Nederland													
1985	2.300	:	:	:	:	:	:	:	:	:	:	:	:
1993	2.708	1.461	:	:	500	:	:	531	:	:	:	:	:
1994	2.699	1.415	:	:	463	:	:	613	:	:	:	:	:
1995	2.641	1.366	:	:	455	:	:	601	:	:	219	:	:
1996	2.710	1.401	:	:	472	:	:	613	:	:	224	:	:
1997	:	1.449	:	:	469	:	:	611	:	:	216	:	:
1998	:	1.336	931	:	490	385	:	500	71	:	236	:	:
1999	:	1.402	999	:	495	397	:	479	85	:	217	:	:
2000	:	1.374	924	:	507	396	:	482	109	:	194	:	:
Österreich													
1992	482	248	:	:	175	:	:	60	:	:	:	:	:
1993	303	105	:	:	169	:	:	7	:	:	:	:	:
1997	1.170	:	:	:	:	:	:	:	:	:	:	:	:
1999	:	1.240	:	:	210	:	:	134	:	:	:	:	:

Table 14: Collection and recycling of packaging waste (1 000 t) (continued)

	Total Waste	Paper			Glass			Plastics			Metals		
	Generated	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recyclec in countr
Portugal													
1998	1.025	478	:	227	289	:	120	259	:	9	:	:	0
1999	1.211	485	:	254	315	:	138	268	:	10	76	:	1
Suomi / Finland													
1990	420	:	:	:	:	:	:	:	:	:	:	:	:
1994	420	84	:	:	52	:	:	99	:	:	30	:	:
1997	:	244	178 d)	139	52	25	25	90	20 d)	9	31	3	3
1998	:	246	177 d)	140	56	35	35	89	18 d)	9	32	5	5
2000	:	257	159	159	58	37	37	87	12	12	39	10	10
Sverige													
1985	:	:	:	:	: b)	8	:	:	:	:	:	:	:
1990	:	:	:	:	: b)	45	:	:	:	:	:	:	:
1994	:	:	:	:	: b)	84	:	:	:	:	:	:	:
1997	:	:	392	:	:	134	:	:	43	:	:	32	:
1999	:	:	446	:	:	146	:	:	75	:	:	31	:
2000	:	:	403	:	:	144	:	:	52	:	:	42 l)	:
2001	:	:	420	:	:	144	:	:	50	:	:	47 l)	:
United Kingdom													
1998	:	:	1.894 o)	:	:	504 o)	:	:	126 o)	:	:	197 o)	:
1999	:	3.855 p)	1.821 o)	:	2.155 p)	583 o)	:	1.600 p)	198 o)	:	860 p)	241 o)	:
Island													
1991	:	18	:	:	6	:	:	11	:	:	3	:	:
1995	60	22	:	:	5	:	:	15	:	:	4	:	:
1998	:	27	:	:	2	:	:	18	:	:	7	:	:
2000	:	30	:	:	2	:	:	20	:	:	8	:	:
Norge													
1990	:	:	.	:	:	15	:	94 n)		:		:	:
1995	:	:	:	:	59	33	:	125 n)	1	:	31 n)	:	:
1996	:	276	:	:	56 c)	34	:	128 c)n)	6	:	33 c)n)	:	:
1997	:	:	:	:	56	34	:	125 n)	7	:	41 n)	:	:
1998	:	228	169	:	48	34	:	137 c)n)	15	:	37 n)	1	:
1999	:	232	169	:	48	38	:	141 c)n)	18	:	37 n)	10 c)	:
2000	709	379	185	:	46	39	:	132 n)	21	:	35 n)	10	:

Table 14: Collection and recycling of packaging waste (1 000 t) (continued)

	Total Waste	Paper			Glass			Plastics			Metals		
	Generated	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recyclec in countr
Schweiz/Suisse/Svizzera													
1980	:	376	:	:	:	:	:	:	:	:	:	:	:
1985	:	455	:	:	133	:	:	:	:	:	:	:	:
1990	925	715	:	:	250	:	:	25	:	:	:	:	:
1992	1.000	745	:	:	320	:	:	35	:	:	:	:	:
1993	920	130	:	:	290	:	:	500	:	:	:	:	:
1994	524	167	:	:	288	:	:	39	:	:	30	:	:
1995	:	:	:	:	309	:	:	:	:	:	:	:	:
1996	556	174	:	:	290	259	:	45	:	:	28	:	:
1997	:	:	:	:	311	283	:	:	:	:	:	:	:
1998	:	100	64	:	308	281	171	:	47	47	28	14	14
1999	:	105	65	65	305	283	163	590	50	65	28	14	14
Balgarija													
1994	38	:	:	:	:	:	:	:	:	:	:	:	:
1995	19	:	:	:	:	:	:	:	:	:	:	:	:
1996	14	:	:	:	:	:	:	:	:	:	:	:	:
1997	30	:	:	:	:	:	:	:	:	:	:	:	:
Cyprus													
2000	:	40	:	:	22	:	:	35	:	:	7	:	:
Ceska Republika													
1996	269	3	:	:	247	:	:	20	:	:	:	:	:
1997	169	5	:	:	132	:	:	24	:	:	8	:	:
1998	70	23 f)	:	:	:	:	:	10 g)	:	:	3 h)	:	:
1999	96	37 f)	:	:	:	:	:	12 g)	:	:	4 h)	:	:
2000	132	31 f)	:	:	:	:	:	17 g)	:	:	6 h)	:	:
2001	123	38	:	:	:	:	:	21	:	:	5	:	:
Eesti	:	:	:	:	:	:	:	:	:	:	:	:	:
Magyarorszag													
1980	358	358	:	:	:	:	:	:	:	:	:	:	:
1985	384	384 k)	:	:	:	:	:	:	:	:	:	:	:
1990	779	:	:	:	:	:	:	:	:	:	:	:	:
1994	715	:	:	:	:	:	:	:	:	:	:	:	:
1995	620	:	:	:	:	:	:	:	:	:	:	:	:
1996	700	305	:	:	140	:	:	195	:	:	62	:	:

Table 14: Collection and recycling of packaging waste (1 000 t) (continued)

	Total Waste	Paper			Glass			Plastics			Metals		
	Generated	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recycled in country	Generated	Collected for recycling	Recyclec in countr
Latvija	:	:	:	:	:	:	:	:	:	:	:	:	:
Lietuva	:	:	:	:	:	:	:	:	:	:	:	:	:
Malta													
2001	:	2	:	1	:	:	:	1	:	0	0	:	:
Polska													
1998	:	:	:	:	:	:	:	:	1 i)	:	:	:	:
1999	:	:	:	:	:	:	:	:	1 i)	:	:	:	:
2000	:	:	:	:	:	:	:	:	1 i)	:	:	:	:
2001	:	:	:	:	:	:	:	:	13 i)	:	:	:	:
Romania													
1995	206	:	:	:	:	:	:	:	:	:	:	:	:
1996	242	:	:	:	:	:	:	:	:	:	:	:	:
1997	168	21	21	20	139	139	72	5	5	2	3	3	2
1998	507	31	31	29	468	468	404	6	6	5	3	3	:
1999	139	13	13	10	77	77	73	2	2	2	46	46	11
2000	157	47	47	43	:	:	:	13	13	13	62	62	61
Slovenska Republika	:	:	:	:	:	:	:	:	:	:	:	:	:
Slovenija	:	:	:	:	:	:	.	:	:	:	:	:	:
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:
Bosnia and Herzegovina	:	:	:	:	:	:	:	:	:	:	:	:	:
Croatia			:										
2000	:	9	:	:	0	:	:	:	:	:	:	:	:
Macedonia	:	:	:	:	:	:	:	:	:	:	:	:	:
Yugoslavia	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 14: Collection and recycling of packaging waste (1 000 t)

FOOTNOTES

a) Source : Instituto Italiano Imballagi. Estimates
b) These data refer to waste collected for recycling and have therefore been moved (to the line below).
c) Revised data.
d) Collected for total recovery.
e) Provisional estimate on the basis of figures from OVAM and FOST+
f) EWC code 150 101
g) EWC code 150 102
h) EWC code 150 104
i) Municipal waste only.
k) Estimate.
l) Steel, aluminium and cans.
m) Source : Ademe.
n) Calculated in the Norwegian waste accounts (waste = production + imports - exports).
o) GB only, from packaging waste consultation paper.
p) Secondary production.

Table 15: Generation, treatment and disposal of non-hazardous waste from the manufacturing industry in Europe, by method (1000 t)

			RECOVERY OPERATIONS		DISPOSAL OPERATIONS		
		Non-hazardous industrial waste generated	Recycling	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Belgique/België		:	:	:	:	:	:
Danmark							
	1995	2.484	1.427	277	:	780	780
	1996	2.516	1.359	357	:	800	800
	1997	2.632	1.545	380	:	707	707
	1998	2.691	1.521	424	:	746	746
	1999	2.553	1.517	457	:	578	578
	2000	2.861	1.870	382	:	609	609
Deutschland							
	1996	43.012	:	:	:	:	:
	1997	48.088	21.150	2.964	2.209	21.681	:
	1998	48.650	22.496	2.898	2.758	19.739	:
	1999	45.952	25.283	2.205	2.544	15.883	:
	2000	44.889	:	:	:	:	:
Ellada		:	:	:	:	:	:
España		:	:	:	:	:	:
France							
	1995	:	14.359 d)l)	1.907 d)	:	4.092 d)	:
	1999	:	12.337 d)l)	3.415 d)	95 d)	3.879 d)	:
Ireland							
	1998	:	:	82	4	:	:
Italia							
	1997	20.827	11.120	452 b)	207 j)	20.358	20.358
	1998	25.900	18.639 k)	1.061 b)	820 l)	22.387	22.387
Luxembourg		:	:	:	:	:	:
Nederland							
	1995	7.851	2.991	632 o)	:	3.986	:
	1996	8.475	5.407 n)	704 o)	:	2.194	:
	1998	9.282	6.018 n)	852 o)	:	2.203	:
	2000	18.651 m)	15.944 m)n)	930 o)	:	1.382	:
	2001	18.507 m)	15.770 m)n)	1.075 o)	:	1.259	:
Österreich		:	:	:	:	:	:
Portugal							
	1998	18.046	:	:	:	:	:
	1999	12.087	2.951	1.215	29	2.955	:
	2000	8.057	2.266	730	17	1.506	:
Suomi / Finland							
	1997	:	4.820	5.365	1	4.100	4.100
	2000	14.466	5.178	5.932	44	2.900	2.900
Sverige							
	1998	18.979 c)	7.602 c)	5.596 c)	770 c)	2.570 c)	2.570 c)

Table 15: Generation, treatment and disposal of non-hazardous waste from the manufacturing industry in Europe, by method (1000 t) (continued)

			RECOVERY OPERATIONS		DISPOSAL OPERATIONS		
		Non-hazardous industrial waste generated	Recycling	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
United Kingdom							
	1998	38.297 p)r)	17.892 q)r)	555 r)	139 r)	15.578 r)	:
Island							
	1995	10	:	:	:	:	:
	1996	10	:	:	:	:	:
	1997	10	:	:	:	:	:
	1998	10	:	:	:	:	:
	1999	10	:	:	:	:	:
	2000	10	:	:	:	:	:
	2001	10 g)	:	:	:	:	:
Norge							
	1996	2.731	1.134 i)	546	7	957 h)	:
	1999	3.115	928	508	24	1.303 h)	:
Schweiz/Suisse/ Svizzera		:	:	:	:	:	:
Balgarija							
	1995	5.846 a)	81	103	:	251.247	:
	1996	4.328 a)	76	85	17	173.287	:
	1997	3.624 a)	70	77	9	230.105	:
	1998	3.052 a)	74	67	11	218.106	:
	1999	3.136 f)	283	:	58	174.067	:
	2000	2.441 f)	276	:	40	91.306	:
	2001	2.411 f)g) s)	366	:	42	85.142 t)	:
Cyprus		:	:	:	:	:	:
Ceska Republika							
	1998	10.984 e)	429 e)	220 e)	66 e)	1.354 e)	:
	1999	7.466 e)	313 e)	282 e)	85 e)	736 e)	:
	2000	7.980	341	179	221	1.930	:
	2001	8.098	162	197	69	944	:
Eesti		:	:	:	:	:	:
Magyarorszag							
	1990	30.980	:	:	:	:	:
	1995	6.692	:	:	:	:	:
	1996	1.795	:	:	:	:	:
	1997	2.022	:	:	:	:	:
	1998	2.099	:	:	:	:	:
	1999	3.618	1.732	77	19	:	430
	2000	2.605	1.832	149	0	:	345
Latvija							
	2001	344	57	27	:	198	:
Lietuva							
	2000	:	187	89	1	922	:
	2001	:	276	116	0	1.451	:

Table 15: Generation, treatment and disposal of non-hazardous waste from the manufacturing industry in Europe, by method (1000 t) (continued)

			RECOVERY OPERATIONS		DISPOSAL OPERATIONS		
		Non-hazardous industrial waste generated	Recycling	Incineration with energy recovery	Incineration without energy recovery	Landfill	
						Total	of which controlled
Malta		:					
	1991	:	:	:	:	16	:
	1992	:	:	:	:	130	:
	1993	:	:	:	:	153	:
	1994	:	:	:	:	185	:
	1998	31	:	:	:	31	:
	1999	30	:	:	:	30	:
	2000	20	:	:	:	20	:
	2001	24	:	:	:	24	:
Polska							
	1990	32.846	:	:	:		
	1995	22.608	:	:	:	5.974	5.974
	1996	21.876	:	:	:	6.043	6.043
	1997	22.547	:	:	:	6.230	6.230
	1998	57.426 f)	:	:	190 f)	12.947 f)	12.947 f)
	1999	58.176 f)	:	:	171 f)	11.727 f)	11.727 f)
	2000	58.975 f)	:	:	153 f)	10.429 f)	10.429 f)
	2001	57.746 f)	:	:	208 f)	10.173 f)	10.173 f)
Romania							
	1995	9.435	2.359	95	:	6.986	:
	1996	20.586	6.176	206	:	14.214	:
	1997	17.500	6.312	169	:	11.190	:
	1998	12.301	5.828	289	:	5.963	:
	1999	9.791	6.323	127	:	3.348	:
	2000	11.799	2.346	250	:	9.203	300
Slovenska Republika		:	:	:	:	:	:
Slovenija		:	:	:	:	:	:
Turkey							
	1994	10.524	:	:	:	4.956	13
	1995	11.344	:	0	:	1.874	24
	1996	12.445	:	0	:	1.431	45
	1997	12.838	:	4	:	2.202	53
Bosnia and Herzegovina		:	:	:	:	:	:
Croatia							
	1999	1.922	456	:	:	:	:
	2000	1.576	:	354	42	:	:
Macedonia			:	:	:	:	:
Yugoslavia		:	:	:	:	:	:

Table 15: Generation, treatment and disposal of non-hazardous from the manufacturing industry in Europe, by method (1000 t)

FOOTNOTES

a) National classification.
b) R1 'use principally as a fuel or other means to generate energy '. (Directive 75/442/EEC, annex II B).
c) Excludes NACE 37.
d) Source : ADEME. enquiry DIB, Metropolitan France. Ordinary industrial waste from establishments of more than 10 workers.
e) Treatment and disposal operations in the producers own facilities.
f) Data according to a new waste classification based on EWC.
g) Preliminary data.
h) Includes ordinary landfilling and use of clean mass in land engineering.
i) Might include a certain amount of composting.
j) Corresponds to B.1 (Incineration without energy recovery); but 'Incineration with Energy recovery' is a disposal operation (directive 75/442/EEC, annex II A). The correspondent data is 130,71 x 1000t.
k) Includes: R2,R4,R5,R6,R7,R8,R9,R10
l) It includes incineration with and without energy recovery.
m) Change of definition: including residues (waste sold as by-product), which are all re-used.
n) Including A.2 Composting.
o) Including B.1 Incineration without energy recovery.
p) Manufacturing sectors 15-37 apart from sector 23, from EA industrial and commercial waste survey E&W only.

q) Includes reuse.
r) Includes hazardous and non-hazardous waste.
s) Manufacturing waste
t) Total industrial waste

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