

EUROPEAN PARLIAMENT



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*Directorate General for Research*

**WORKING PAPER**

**THE EUROPEAN PARLIAMENT  
AND THE ENVIRONMENT POLICY  
OF THE EUROPEAN UNION**

*Environment Series*

***ENVI - 101 EN***

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## **PREFACE**

*The European Union is an essential element of the development of environmental policy in each of the 15 member-states. Just as pollution does not stop at national frontiers, so the European Union looks for joint solutions to the environmental problems we all face as EU citizens. Since its formal introduction via the European Single Act and reinforcement in the Maastricht Treaty as a priority competence of the European Union, environment policy has gone from strength to strength.*

*Environment policy is an area in which the European Parliament can be proud of its record. The Parliament has made policy jointly with the Council in areas such as ozone depletion, global warming, novel and genetically-modified foods, water quality, air quality and waste management, thereby playing an important role in improving the living standards of all EU citizens.*

*On environmental matters, as of December 1998, a total of 131 European Union Directives, 33 Regulations, 101 Decisions and 44 Resolutions had been adopted. Due to the number and scope of these legislative measures a directory of the most important EU legislative measures in environment policy has been published recently (European Parliament, Directorate-General for Research: "Directory of the most important EU legislative measures in Environment Policy", Envi 100, En, April 1999.)*

*On the eve of the millenium, the European Union cannot be complacent about environmental matters. This new Working Document provides an indication of the challenges the European Union continues to confront as well as the progressive policy responses the European Parliament has been able to make. The purpose of this publication is to provide Members of parliament, their staff and all those who work with EU legislation with a concise overview of environment policy up to April 1999.*

*For technical reasons, this publication is only available in English. It covers the most important EU environmental policy legislative measures from the beginnings of environment policy to April 1999. It complements the existing DGIV Working Document W-20 in the Environment, Public Health and Consumer Protection series, published in April 1997, and summarizes in a textual format the main areas of EU environment policy.*

**DIRECTORATE GENERAL FOR RESEARCH**

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Luxembourg, July 1999



# CONTENTS

**Page**

<b>PART I: THE ENVIRONMENT POLICY IN THE EUROPEAN UNION</b> ..	<b>1</b>
<b>1. ENVIRONMENT POLICY</b> .....	<b>1</b>
1.1 General .....	1
1.1.1 General statistics .....	1
1.1.2 Legal basis .....	2
1.1.3 Objectives .....	2
1.1.4 Environmental protection and public opinion .....	3
1.2 Implementation .....	3
1.2.1 Environmental impact assessment .....	3
1.2.2 European Environment Agency .....	4
1.2.3 Free access to information on environmental pollution .....	5
1.2.4 Eco-label for environmentally friendly products .....	5
1.2.5 Eco-audit .....	6
1.2.6 Integrated pollution prevention and control .....	7
1.2.7 Commission Green Paper on remedying environmental damage .....	7
1.2.8 Tax on carbon dioxide emissions and energy .....	8
1.2.9 LIFE II .....	8
1.2.10 Environmental agreements between industry and national authorities .....	9
1.3 Role of the European Parliament .....	10
1.3.1 Important own-initiative resolutions .....	10
1.3.2 Fifth action programme .....	10
1.3.3 Application of Community law .....	12
1.3.4 Intergovernmental Conference .....	13
<i>Main EC legislation on general environment policy</i> .....	15
<b>2. AIR POLLUTION</b> .....	<b>17</b>
2.1 General information .....	17
2.2 Emissions from the transport sector .....	17
2.2.1 Light commercial vehicles .....	19
2.2.2 Heavy goods vehicles .....	20
2.2.3 Light commercial vehicles (maximum weight 3 500 kg) and heavy vehicles designed to carry more than six occupants .....	21
2.2.4 Mobile machinery and devices equipped with internal combustion engines .....	22
2.2.5 Motorcycles and mopeds .....	22
2.2.6 Lead in petrol .....	23
2.2.7 Sulphur in liquid fuels .....	23
2.2.8 Volatile organic compounds (VOCs) .....	23
2.2.9 Auto/Oil Programme .....	24
2.3 Emissions from immobile sources (greenhouse effect) .....	24
2.4 Emissions from power generation (sulphur dioxide) .....	27
2.5 Projected trend in emissions .....	27
2.6 Emissions from large combustion plan .....	28
2.7. Role of the European Parliament .....	28
<i>Main EC legislation on air pollution</i> .....	31
<b>3. WATER POLLUTION</b> .....	<b>36</b>
3.1 General .....	36
3.2 Water use and consumption .....	36
3.3 Water quality .....	37

3.3.1	Inland bodies of water .....	37
3.3.1.1	Groundwater .....	37
3.3.1.2.	Rivers and lakes .....	38
3.3.2	Coastal waters and seas .....	39
3.4	Role of the European Parliament .....	42
	<i>Main EC legislation on water pollution</i> .....	43
<b>4.</b>	<b>WASTE DISPOSAL AND PROCESSING</b> .....	<b>46</b>
4.1	General .....	46
4.2	Relevant legislation .....	47
4.3	Role of the European Parliament .....	52
	<i>Main EC legislation on waste disposal and processing</i> .....	54
<b>5.</b>	<b>CHEMICAL SUBSTANCES, INDUSTRIAL RISKS AND BIOTECHNOLOGY</b> .....	<b>57</b>
5.1	General .....	57
5.2	Relevant legislation .....	57
5.2.1	Dangerous substances .....	57
5.2.2	Detergents .....	60
5.2.3	The risk of major accidents associated with certain industrial processes .....	60
5.2.4	Biotechnology .....	61
5.2.5	Export and import of dangerous substances .....	62
	<i>Main EC legislation on chemical substances</i> .....	63
	<i>Main EC legislation on industrial risks</i> .....	66
	<i>Main EC legislation on biotechnology</i> .....	67
<b>6.</b>	<b>NOISE</b> .....	<b>68</b>
6.1	General .....	68
6.2	Relevant legislation .....	69
6.2.1	Motor vehicles .....	69
6.2.2	Motorized two-wheelers .....	70
6.2.3	Aircraft .....	70
6.2.4	Railways .....	71
6.2.5	Trade and industry .....	72
6.3	Proposals for future Community noise abatement measures .....	73
6.4	Role of the European Parliament .....	74
	<i>Main EC legislation on noise</i> .....	75
<b>7.</b>	<b>NATURE CONSERVATION</b> .....	<b>77</b>
7.1	Background .....	77
7.2	International conventions for the protection of fauna and flora .....	77
7.3	Main provisions and fields covered .....	78
7.3.1	Wild birds .....	78
7.3.2	Conservation of natural habitats and of wild fauna and flora .....	79
7.3.3	Whaling .....	79
7.3.4	Protection of animals prized for their fur .....	80
7.3.5	Import of skins of certain seal pups and products derived therefrom .....	80
7.3.6	Animal experiments .....	80
7.3.7	Tropical rainforests .....	80
7.3.8	Community's forests .....	81
7.3.9	Zoological gardens .....	81

7.3.10	Desertification .....	82
7.3.11	The Alps .....	82
7.3.12	LIFE .....	83
7.4	The Role of the European Parliament .....	84
	<i>Main EC legislation on nature conservation</i> .....	86
<b>8.</b>	<b>INTERNATIONAL COOPERATION</b> .....	<b>89</b>
8.1	General .....	89
8.2	Agreements .....	91
8.2.1	Conventions of international scope .....	91
8.2.2	Conventions of regional importance .....	92
8.2.3	Bilateral agreements .....	92
8.3	Action at international level - participation in international bodies .....	92
8.3.1	General .....	92
8.3.2	Relations with Central and Eastern Europe .....	93
8.3.3	Relations with EFTA and EEA .....	96
8.3.4	Relations with Asia .....	96
8.3.5	Relations with Mediterranean countries .....	97
8.3.6	Relations with Third World countries .....	97
8.3.7	Rio de Janeiro Conference .....	98
	<i>Main EC legislation on international cooperation</i> .....	101
<b>9.</b>	<b>IMPLEMENTATION OF ENVIRONMENT POLICY</b> .....	<b>104</b>
9.1	General - information systems .....	104
9.2	Research programmes .....	106
9.3	Cohesion Fund .....	107
9.4	Promoting investment to improve the environment .....	107
9.5.	Environment and employment .....	109
9.6.	Integration of the environment into other EU policies .....	110
9.7.	Socio-economic policies .....	112
	<b>PART II: TERMS OF REFERENCE OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND CONSUMER PROTECTION</b> .	<b>113</b>
	<b>BIBLIOGRAPHY</b> .....	<b>114</b>
	<b>INDEX</b> .....	<b>115</b>



## LIST OF TABLES

Table 1:	General statistics .....	1
Table 2:	Number of motor vehicles (1970-1991) in the EU Member States, in millions .....	18
Table 3:	Limit values for petrol and diesel engines since 1996 .....	19
Table 4:	Limit values for heavy goods vehicles (Stage 2) .....	21
Table 5:	Limit values for light commercial vehicles .....	22
Table 6:	Carbon dioxide emissions from fossil fuels in the EU .....	29
Table 7:	Carbon dioxide emissions by sector .....	30
Table 8:	Water consumption in various countries - Households and small businesses .....	36
Table 9:	General statistics on waste disposal .....	46
Table 10:	EC noise limit values to HGVs .....	70
Table 11:	PHARE environmental programmes, 1990-1995, in ECU million .....	94
Table 12:	Resources entered in the budget under 'environment' (in ECU) .....	109

### NOTICE

**The references in this directory are based on internal databases (CELEX etc.). When special information concerning references to proposals by the Commission or respective opinions of the European Parliament were not available in the databases, an attempt was made to find the references from other information sources. But, despite considerable efforts being made, unfortunately some of these references could not be traced, either because Parliament did not deliver an opinion on the subject, or because the electronic databases did not provide the relevant information.**

## PART I: THE ENVIRONMENT POLICY IN THE EUROPEAN UNION

### 1. ENVIRONMENT POLICY

#### 1.1 General

##### 1.1.1 General statistics

In 1998 the population of the 15 Member States of the EU totalled 374 million, equivalent to 6.5% of the world's population, compared to 9.8% in 1960 and 4.2% expected in the year 2000. The EU population's share is declining because it is growing less quickly than the world population as a whole.

Population density in the EU averages 117 inhabitants per km<sup>2</sup>. In the densely populated areas stretching from the Northwest of England through Belgium, the Netherlands, the German Ruhr district to northern Italy the average is 350 per km<sup>2</sup>.

Population, population density and population growth vary widely among the Member States (see Table 1). The most densely populated Member State of the EU (377 inhabitants per km<sup>2</sup>), which also has the highest population growth rate (33% from 1960 to 1990), is the Netherlands, the EC population as a whole having grown by 17% from 1960 to 1990.

In 1994 there were 146 million households in the EU, each averaging 2.7 people.

**Table 1: General statistics**

Countries	EUR 15	A	B	D	DK	E	F	FIN	GR	I	IRL	L	NL	P	S	UK
Total area (1000 km <sup>2</sup> ) thereof:	3236	84	31	357	43	506	544	338	132	301	70	3	42	92	450	244
Utilized agricultural area (1000 km <sup>2</sup> ) <sup>(1)</sup>	:	34	14	173	:	297	56	22	:	:	:	1.5	20	40	32	:
Forested area (%) <sup>(2)</sup>	:	39	20	29	10	31	28	69	22		5	34	8	34	50	10
Inhabitants/km <sup>2</sup>	117	95	332	228	121	78	107	15	79	190	52	158	377	108	22	242

(1) 1997

(2) 1995

### 1.1.2 Legal basis

European environmental protection law dates back to a conference of Heads of State or Government in October 1972 that affirmed the need to implement a common policy on the environment. Currently (24 June 1996), 332 items of Community legislation concerning the environment - 212 directives, 43 regulations and 77 decisions - are in force. The framework for this legislation is provided by the various action programmes. The fifth action programme, the 'Community programme of policy and action in relation to the environment and sustainable development', was adopted by the Council of Ministers at its meeting in December 1992. It was the Single European Act of 1987 which integrated, for the first time in the treaties, the call for a Community legal protection of the environment (Title VII). On the other hand, the new Article 130s(1) subjects this question to a mere consultation procedure with the Parliament. Since 1993, when the Treaty of Rome was reformed by the Maastricht Treaty on European Union, the legal basis for Community environment policy has been Articles 130r to 130t of the EC Treaty (Title XVI). Article 130s(1), which is the main basis for implementing the objectives on the protection of the environment, is now subject to the cooperation procedure of Article 189c, which sets up a genuine 'institutional dialogue' between the EP and the Council (see also Article 130s(2) and (3) for alternative bases in the legislative process). Finally, the Treaty of Amsterdam (signed on 2 October 1997) has changed the legislative process of environmental policy, since Article 130s (Article 175 in the new numbering) is now subject to the procedure of codecision (also called procedure of conciliation and veto), which is the one that makes the greater place to the European Parliament in the legislative process (Article 189b, corresponding to Article 251 in the new numbering). Note that the procedure of codecision has been simplified.

### 1.1.3 Objectives

Under Article 130r(2) of the EC Treaty Community environment policy is guided by the following principles: the preventive principle, the polluter-pays principle, the integration principle (i.e. environmental requirements should also be taken into account when drawing up and implementing other policies) and the source principle (i.e. environmental damage should be rectified at source). Moreover, Article 100a(3) of the EC Treaty expressly provides that 'health, safety, environmental protection' shall be based on 'a high level of protection'. This Article, before the amendments of the Treaty of Amsterdam, was subject to a legislative process different from that applying to Title XVI (Article 189b) and, hence, conflicts have arisen among institutions (usually the EP and the Council) when both legal bases were claimed to regulate the question under consideration.

The Union pursues an active policy to protect the soil, water, the climate, air, fauna and flora. In accordance with the subsidiarity principle enshrined in Article 3b(2) of the EC Treaty, however, it takes action to deal with environmental problems only to the extent that they can be more effectively solved at Community level than at national or regional level. To that extent, Community intervention introduces only a minimum standard, which States might choose to exceed. Indeed, Article 130t indicates that the measures adopted 'shall not prevent any Member State from maintaining or introducing protective measures compatible with this Treaty'. Article 100a as amended by the Treaty of Amsterdam (Article 95 in the new numbering) develops the procedure to be applied when a Member State deems it necessary to maintain national provisions when a harmonisation measure has been adopted.

### 1.1.4 Environmental protection and public opinion

The most recent major, Europe-wide survey of concern about the environment was carried out by Eurobarometer in 1995<sup>1</sup> and revealed that

- 82% of Europeans regarded environmental protection as a current and urgent problem;
- 72% of Europeans believed that, while economic growth should be ensured, the environment should also be protected;
- Europeans felt that the following factors were a serious threat to the environment:
  - factories discharging dangerous chemicals into the air or water (68%);
  - global environmental degradation, such as the clearance of tropical forests, the depletion of the ozone layer and the greenhouse effect (48%);
  - pollution of the seas and coastal areas by oil (40%);
  - storage of nuclear waste (39%);
- most Europeans were already taking six practical measures to protect the environment (not throwing paper or other waste on the ground (95%), conserving energy (81%), sorting domestic waste for recycling (84%), conserving (82%), making less noise (79%) and buying environmentally friendly products (67%)) or said they were frequently or in principle prepared to do so;
- 72% of the respondents felt that decisions relating to environmental protection should be taken at Community rather than national level.

## 1.2 Implementation

### 1.2.1 Environmental impact assessment

The Directive on environmental impact assessment - EIA - (85/337/EEC) is a significant instrument in the implementation of the principles of Community environment policy. It lays down a systematic procedure to assess the potential environmental damage which might be caused by individual projects and plans and includes the stipulation that the public must be involved. However, problems remained with the transposition of the directive in the Member States. In the meantime the Council has adopted supplementary Directive 97/11/EC (OJ L 73/5, 14.3.1997), which contains a list of information that must at least be covered by environmental impact assessment. It also concerns the production and enrichment of nuclear fuels, waste incineration plants, groundwater abstraction and certain forms of intensive livestock farming.

By Directive 97/11/EC (OJ L 73/5, 14.3.1997), the Council amended Directive 85/337/EEC, for it considered that the main principles of the assessment of environmental effects should be harmonised, and that the Member States may also lay down stricter rules to protect the environment. The amendment notably includes the principle that Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, *inter alia*, of their nature, size or location are made subject to a requirement for development consent and an

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<sup>1</sup> European Commission, Quoted from: 'How is the European Union protecting our environment?', p. 5

assessment with regard to their effects. Furthermore, the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect effects of a project on, notably, human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage (opinion of the EP delivered on 13 November 1996; see OJ C 362/103, 2.12.1996).

The Commission has also put forward a proposal on environmental impact assessment in a trans-boundary context (Espoo Convention); the amended proposal may be found in OJ C 112, 22.04.1993, p. 15. This provides for cross-border public consultation on the construction of certain installations, such as power stations and incineration plants for hazardous waste, and on the deforestation of large areas.

### **1.2.2 European Environment Agency**

On 7 May 1990 the Council adopted a regulation on the establishment of the European Environment Agency and the European Environment Information and Observation Network (Regulation No 1210/90). The Agency is to be a central Community body which will:

- provide the Community, the Member States and third countries wishing to become involved with the objective information required for drawing up and implementing effective environmental protection policies;
- supply the information, in particular technical, scientific, and economic information, required for laying down, preparing and implementing measures and laws related to environmental protection;
- develop forecasting techniques to enable appropriate preventive measures to be taken in good time;
- ensure that European environmental data are incorporated into international environmental programmes, for example those of the United Nations and its agencies.

The Regulation establishing the European Environment Agency entered into force on 30 November 1993, after the Brussels European Council agreed on 29 October 1993 to locate the agency's seat in Copenhagen.

In view of the delay in the commencement of the agency's work the Council has approved a Commission proposal (COM(95)0325) deferring the decision on further tasks for the agency until 30 October 1997. The national environment information networks were to be raised to an appropriate level and agreements concluded with third-country institutions by 1996. In 1997 and 1998, the Commission issued two other proposals for an amendment of Regulation No 1290/90 (COM(97)0282 and COM(98)0289). These led to Council Regulation (EC) No 933/1999 of 29 April 1999 (OJ L 117/1, 5.5.1999). According to this Regulation, the Agency shall conduct an evaluation of its performance and efficiency before 15 September 1999 and submit a report to the management board, the Commission, the Council and the EP. Not later than 31 December 2003, on the basis of a report from the Commission, the Council shall review the progress of, and tasks undertaken by, the Agency in relation to the Community's overall policy on the environment. Furthermore, the tasks of the Agency were reviewed and clarified, notably taking into account amendments proposed by the Parliament at first reading on the Commission's 1998 amended proposal (OJ C 80/134, 16.3.1998). The Parliament proposed to reinforce the need for the work covered by Article 2(ii) of the Regulation to be built into the Agency's Multi-annual Work Programme, and to clarify that other EU Institutions, as well as the Commission, may request support on the monitoring of environmental measures.

On 21 March 1997 the Agency, having been granted legal personality and legal autonomy, issued its own rules on public access to European Environment Agency documents. The purpose of the decision is to set up the rules following which the public is entitled to apply for available documents without having to prove an interest (see OJ C 282/5, 18.9.1997).

### **1.2.3 Free access to information on environmental pollution**

This Directive (90/313/EEC), which was to be transposed into national law by 31 December 1992, aims to guarantee free access to and dissemination of information on the environment held by public authorities and to set out the basic terms under which such information should be made available. The general rule is that national authorities are required to make information on the environment available to any natural or legal person on request and without the person concerned having to prove an interest.

Furthermore, a person who considers that a request for information has been rejected or ignored without reason, or who has not received a conclusive answer from a public authority, has the right under the Directive to take the matter further in the courts or through administrative channels in accordance with the law of the country concerned.

### **1.2.4 Eco-label for environmentally friendly products**

A Regulation on a Community eco-label award scheme was adopted on 23 March 1992 (Regulation No 880/92).

The Regulation provides that the manufacturer or first importer of a product may apply for an eco-label to the competent body in the Member State in which the product is manufactured or first marketed or imported. The body concerned decides whether to award a label after assessing the product in accordance with the principles enshrined in the Regulation and in line with the specific criteria laid down for individual product groups. The product groups and specific criteria are established by the Commission in close cooperation with a committee set up for that purpose. It is made up of Member State representatives. Before a decision is taken, representatives of the main interest groups from industry, trade, consumer and environmental organisations are consulted. The criteria applied to product groups, a list of products which have been awarded the eco-label and the names and addresses of the competent national bodies are published in the Official Journal of the European Communities.

The Commission has already adopted criteria for the following product groups: soil improvers, toilet paper, kitchen rolls, detergents, washing machines, dishwashers, indoor paints and varnishes, single- and double-ended light bulbs (fluorescent tubes), bed linen, T-shirts and copying paper and refrigerators not containing HFCs or HCFCs. Most recently, the Commission established the ecological criteria for the award of the EC eco-label to tissue paper, paints, textile, footwear and personal computers, and detergents for dishwashers.

A study shows, however, that the eco-label has achieved little of what was expected of it. It has so far been awarded to few products. One reason for its lack of success is the award system: as, according to the study, the criteria have been set too low, firms have little incentive to market innovative products and apply for an eco-label.

The Commission has therefore submitted a proposal for the amendment of Regulation No 880/92. To improve consumer understanding of the scheme, the proposal provides for EU eco-labels to be awarded

by a given rating system and for this award system to be more closely coordinated with national systems. An independent Eco-label Organisation (EEO) is also to be established to develop new award criteria, and a ceiling is to be imposed on the annual fee for the use of the eco-label, with reduced fees payable by small and medium-sized enterprises in developing countries (COM(96)0603) For the Commission, the scope of the scheme should include products and environmental factors which are of supreme Community interest from the point of view both of the internal market and of the environment; the procedural and methodological approach for setting eco-label criteria should be updated in the light of scientific and technical progress and of the experience gained in this area, to ensure consistency with relevant internationally recognised standards which are evolving in this area.

Pursuant to Article 189a(2) of the EC Treaty, the Commission submitted on 18 January 1999 an amended proposal on the eco-label award scheme (COM(99)021). This proposal takes account of some amendments of the Parliament which were adopted at its Plenary Session on 13 May 1998. The amended version notably underlines that environment NGOs and consumer organisations have an important role in the decision-making process, and that medical services are to be excluded from the scope of the Regulation. On the contrary, the Commission rejected an amendment of the EP to the effect that the original idea of establishing the EEO would have been rejected, and replaced by a Technical Committee for the Eco-label (TCEL). The main difference with the proposed EEO is that the TCEL would have no legal personality and, hence, only perform technical tasks.

By analogy with Directive 94/62/EC, the Commission has also drawn up a proposal for a directive concerning the marking of reusable packaging with a given symbol (COM(96)0191). The intention is that the consumer should be informed about the nature of the packaging purchased, collect it for re-use and so contribute to an environmentally appropriate reduction of packaging waste. Provision is also made for an assessment procedure for determining the conformity of packaging.

### **1.2.5 Eco-audit**

Regulation No 1836/93 on the voluntary participation of undertakings in a Community eco-audit system has been enacted. It creates a new system designed to improve environmental protection by companies through the introduction of environmental management. Companies which, besides complying with current legislation, commit themselves to the continuous improvement of their environmental protection may draw attention to the advanced level of environmental protection by displaying an EU symbol at their registered sites. The Regulation lists the requirements for the establishment of environmental management systems and for environmental reviews at a company's sites and stipulates that the environmental statement prepared by the company must be validated by an independent environmental verifier. The aim is to 'internalise' environmental protection as part of a company's activities and to show that environmentally aware production eventually leads to cost reductions.

By Decision 97/264/EC of 16 April 1997 (OJ L 104/35, 22.4.1997), the Commission recognised that accreditation according to the criteria laid down in any one of the following approaches to the accreditation of certification bodies will ensure that appropriate certification procedures are employed by certification bodies, acting within the scope of their accreditation, who have been accredited according to these requirements and guidelines:

- the 622<sup>nd</sup> Austrian Federal Law of 1995;
- the guidelines issued in September 1996 by the German Ministry for the Environment;
- the European accreditation of certification guidelines of June 1996.

By Decision 97/265/EC of 16 April 1997, the Commission recognised the international standard ISO 14001:1996 and the European standard EN ISO 14001:1996, establishing specification for environmental management systems, since they are identical and include specification for environmental management systems and audit corresponding to certain requirements of Regulation No 1836/93 (OJ L 104/37, 22.4.1997).

On 30 October 1998 the Commission issued a proposal for a Council Regulation allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (COM(98)0622). The objective of EMAS shall be to promote continual improvements in the environmental performance of organisations by:

- the establishment and implementation of environmental management systems by organisations;
- the systematic, objective and periodic evaluation of the performance of such systems;
- the provision of information of environmental performance to the public and other stakeholders;
- the involvement of employees.

An 'organisation' is defined as a company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration. 'Environmental audit' means a management tool comprising a systematic, documented, periodic and objective evaluation of the performance of the organisation, management system and processes designed to protect the environment. EMAS is to be open to any organisation dedicated to improving its overall environmental performance, subject to its registration to EMAS under certain conditions.

### **1.2.6 Integrated pollution prevention and control**

The directive on integrated pollution prevention and control (96/61/EC), which entered into force in October 1996, requires the Member States to establish by the end of the implementation period at the end of 1998 a procedure for the issue of permits to installations that covers all environmental media and is therefore integrated. This Directive is a further step away from an approach aimed at a specific medium (air, water, soil, noise, waste, etc.) to one that takes account of all the effects an installation has on the environment. As with EIA, a holistic analysis of the environmental impact of an installation thus becomes possible, transfers of pollution from one medium to another can be more effectively prevented, and interactions can be more readily identified. The Directive applies only to particularly pollutant installations (e.g. power stations); a separate set of rules for less pollutant installations is currently under discussion.

The Directive does not, however, include any material environmental standards. It will therefore be complemented by existing or future specific standards at Community or Member State level.

### **1.2.7 Commission Green Paper on remedying environmental damage**

To improve public information about planned measures to remedy environmental damage and initiate discussion, the Commission adopted on 14 May 1993 a Green Paper which sets out ideas on liability for environmental damage (COM(93)0047). In its resolution of 20 April 1994 on preventing and remedying environmental damage (OJ C 128/165, 9.5.1994), the EP calls on the Commission to draw up a proposal for a directive in line with the Green Paper.



### 1.2.8 Tax on carbon dioxide emissions and energy

With this proposal for a directive the Commission honours a commitment entered into at the European Council's meeting in Essen to submit guidelines that enable the Member States to levy a tax of this kind on the basis of common parameters if they so desire (COM(95)0172). The aim of this tax is to ensure the rational use of energy and a reduction in greenhouse emissions.

By Decision 98/352/EC of 18 May 1998, the Council has created a multiannual programme for the promotion of renewable energy sources in the Community (Altener II) (OJ L 159/53, 3.6.1998; opinion of the EP delivered on 6 November 1997, and decision on the Council's Common Position given on 19 January 1998; see OJ C 62/31, 26.2.1998). In the motives, the Council noted that CO<sub>2</sub> emissions from energy consumption in the Community are likely to increase by about 3% between 1995 and 2000. With the Green Paper of 11 January 1995 and the White Paper of 13 December 1995 the Commission communicated to the Parliament and the Council its views on the future of energy policy in the Community and on the role that renewable energy sources should play; in the Green Paper of 20 November 1996 entitled 'Energy for the Future: Renewable Sources of Energy' the Commission started a process for the development and further implementation of a Community Strategy and an Action Plan on renewable Energy Sources (RES). Hence, the operating part of the Decision underlines that the objectives of Altener II shall be to help create the necessary conditions for the implementation of a Community action plan for renewable energy sources and, in particular the legal, socio-economic and administrative conditions, and to encourage private and public investments in the production and use of energy from renewable sources. These objectives shall contribute to the limitation of CO<sub>2</sub> emissions and the increase of the share of renewable energy sources in the energy balance. The financial reference amount for the implementation of the programme shall be ECU 22 million, and it is the Commission which shall be responsible for the financial execution of the programme.

### 1.2.9 LIFE II

The Council has set aside ECU 450 m for the second phase (1996-1999) of LIFE, the Community's only financial instrument specifically intended for environmental purposes (Regulation No 1973/92, amended by Regulation No 1404/96). LIFE is intended to contribute to the formulation and implementation of the common environment policy. It enables the Community to provide financial support for pilot projects and demonstration programmes and to grant third countries in the Mediterranean and Baltic regions technical assistance.

A budget of ECU 43 m was established for 1996. This was to be used to assist measures of an innovative or demonstration nature to promote the sustainable development of industrial activity and measures for the technical support of territorial authorities, the protection of coastal areas, the reduction of waste and the protection of water reserves. Nature conservation measures are also to be assisted. The Commission has, for example, approved the proposal that 63 new nature conservation projects should be financed by LIFE. They concern the preservation of heathland in Belgium, 'grey' dunes in Denmark, the steppe landscape in Sardinia, marshy areas of Finland and estuaries in Britain. Rare species of animal, such as the brown bear and the Bonelli eagle, are also to be protected.

In its Report under Article 14 of Regulation No 1404/96 (COM(98)0721) the Commission indicates that the main change introduced in 1996 by the second LIFE Regulation was the definition of evaluation criteria for selecting actions to be financed. During the first phase (1992-95) LIFE-Nature (one of the projects funded by LIFE) co-financed many projects in Special Protection Areas for birds as well as

national natural heritage inventories. During the second phase (1996-98), LIFE-Nature gave priority to site protection projects, especially those proposed and in progress under the Habitats Directive. The breakdown by topic of the projects financed under LIFE-Environment between 1992 and 1997 reveals that the most common topic is 'clean technologies' modifying industrial production processes. In overall, the Commission reaffirms the importance of LIFE for Community environmental policy and its positive contribution to the goals of this policy. Thanks to LIFE-Nature, thousands of hectares of natural habitats of European interest are now protected; species only recently endangered are now safe; the European Natura 2000 network is gradually taking shape. Under LIFE-Environment, dozens of clean technologies have proved their effectiveness in the most polluting industries; new techniques and methods have emerged to improve water quality or recycle waste. Thanks to LIFE-Third countries, the principles of Community environmental policy are now known to our Baltic and Mediterranean neighbours and inspire the drafting of their own environmental policies or protection activities. It is the aim in the service of the environment that the Commission proposes to pursue from 2000 to 2004.

On 9 December 1998, the Commission issued a proposal for a Council Regulation concerning the financial instrument for the environment (LIFE) (COM(98)0720). There, it is proposed that the projects financed by LIFE should meet the following general criteria:

- be of Community interest by making a significant contribution to the development and, where appropriate, implementation of Community environment policy and legislation;
- be carried out by technically and financially sound participants;
- be feasible in terms of technical proposals, management (timetable, budget) and value for money;
- priority may be given to projects based on a multinational approach.

LIFE is to be implemented in phases. The third phase should start on 1 January 2000 and end on 31 December 2004. The budgetary resources allocated to the actions shall be entered in the annual appropriations of the general budget of the European Communities. The available annual appropriations shall be authorised by the budgetary authority within the limits of financial perspective. The amount of resources to be allocated to LIFE-Nature shall be 47%, 47% also for LIFE-Environment, and 6% for LIFE-Third Countries.

#### **1.2.10 Environmental agreements between industry and national authorities**

In a communication of November 1996 the Commission proposed the conclusion of environmental agreements between industry and national authorities. The aim of these agreements is to advance the implementation of the Community's environment policy and to ensure that certain legislative environmental measures are used effectively (COM(96)0561).

The communication considers the advantages and risks inherent in such agreements and establishes general criteria for their success, which are based on market-oriented mechanisms and the principle of responsibility 'shared' between the authorities and industry. The advantage of environmental agreements is that they encourage enterprises to adopt an active, environmentally friendly attitude and give them with an opportunity to find, on their own responsibility, appropriate and cost-effective solutions for achieving environmental objectives.

This has given rise to Commission Recommendation 96/733/EC of 9 December 1996 (OJ L 133/59, 21.12.1996) which gives guidelines for the use of agreements between public authorities and the economic sectors concerned ('Environmental Agreements') as a means of implementing Community

Directives in, the field of the environment. When provisions in Directives in the field of the environment explicitly allow for implementation by way of environmental agreements, Member States should observe the guidelines proposed by the Commission, and notably: establish effective arrangements for the collection, evaluation and verification of the results achieved, require participating companies to make available the information regarding the implementation of the agreement, establish dissuasive sanctions such as fines, penalties or the withdrawal of a permit.

### **1.3 Role of the European Parliament**

A large amount of legislation, particularly regarding general environment policy, was adopted in response to initiatives taken by the EP; examples are environmental impact assessment, free access to information and the eco-label for environmentally friendly products.

**1.3.1 Important own-initiative resolutions** on the following general subjects have recently been adopted by the EP:

- pan-European parliamentary cooperation on the environment (OJ C 326/43, 16.12.1991) and the Ministerial Environment Conference in Sofia in October 1995 (OJ C 249/227, 25.9.1995),
- the environment and trade (GATT and WTO; OJ C 42, 15.2.1993, OJ C 114, 25.4.1994, OJ C 18, 23.1.1995, OJ C 166/260, 10.6.1996),
- hazardous waste exports (OJ C 329, 6.12.1994),
- Global Environmental Facility (OJ C 44, 14.2.1994),
- the need to determine the real costs of 'non-environment' for the Community (OJ C 91/130, 28.3.1994),
- prevention and reparation of environmental damage (OJ C 128, 9.5.1994),
- environmental technologies - opportunities for growth and employment (OJ C 205/465, 25.7.1994),
- the shipment of hazardous waste for recycling purposes to non-OECD countries (OJ C 109/38, 1.5.1995),
- the integration of population and environmental policies and programmes (OJ C 249/142, 25.9.1995),
- environmental indicators and green national accounting (OJ C 287/115, 30.10.1995).
- In addition, the Committee on the Environment, Public Health and Consumer Protection has recently held public hearings on the following subjects: climate change (21.2.1996), the application of EU environment law (30.5.1996), the Auto/Oil Programme (20.11.1996) and viable cities for the future (19.3.1997).

### **1.3.2 Fifth action programme**

In a resolution on the fifth action programme (adopted on 17 November 1992 - OJ C 337/34, 21.12.1992) the Parliament set out its own views on the future of European environment policy. While generally welcoming the proposed guidelines, it called for, *inter alia*, the consistent application of the polluter-pays principle so as to prevent environmental dumping and the creation of procedures and mechanisms designed to ensure that environmental policy is incorporated into the remaining Community policies. This action programme was adopted by a resolution of the Council and the Representatives of the Governments of the Member States, meeting within the Council of 1 February 1993 (OJ C 138/1, 17.5.1993). The Council notably acknowledged that many current forms of activity

and development were not environmentally sustainable, and endorsed the general objective of progressively orientating human activity and development towards sustainable forms.

In a further resolution on the fifth action programme (adopted on 22 April 1993; see OJ C 150/289 of 31.5.1993), the EP called on the Commission to present at regular intervals a white paper on the incorporation of environmental policy in other policy areas. In the meantime the Commission has drawn up a report (COM(95)0624) on the implementation of the European Community programme of policy and action in relation to the environment and sustainable development. It has also submitted a new proposal for a review of the fifth action programme (COM(95)0647, amended by COM(96)0648). Following this proposal, the European Parliament and the Council have adopted Decision No 2179/98/EC of 24 September 1998 (OJ L 275/1, 10.10.1998) on the review of the European Community programme of policy and action in relation to the environment and sustainable development 'Towards sustainability' (opinion of the European Parliament delivered on 13 November 1996; see OJ C 362/112, 2.12.1996; decision of the EP on the Council's Common Position given on 15 July 1998; see OJ C 292, 21.9.1998). In this Decision, both institutions confirm their commitment to the fifth action programme. However, in order to speed up the achievement of the programme's objectives and to ensure the more efficient implementation of its approach, the Community will, while aiming at a high level of protection and taking into account the diversity of situations in the various regions of the Community, step up its efforts on five key priorities:

- the integration of environmental requirements into other policies (*e.g.*, the agricultural policy: see the Commission's Communication on Directions Towards Sustainable Agriculture, COM(99)022);
- the broadening of the range of instruments (*e.g.*, the use of environmental charges);
- the implementation and enforcement of legislation (see also Council Resolution of 7 October 1997, C 321/1, 22.10.1997);
- awareness-raising (*e.g.*, to collect and disseminate widely information and knowledge);
- international co-operation (see notably Council Resolution of 7 October 1997, C 321/6, 22.10.1997).

As for international co-operation, one can take note of Council Regulation No 722/97 of 22 April 1997 on environmental measures in developing countries in the context of sustainable development (OJ L 108/1, 25.4.1997), where it is stated that the Community shall provide financial assistance and technical expertise for activities conducted in developing countries which enable the people in these countries to integrate environmental protection and sustainable development concepts more easily into their daily life (opinion of the EP of 9 May 1996; see OJ C 152/56, 27.5.1996). On 28 January 1999, the Commission submitted a proposal for a Council Regulation on measures to promote the full integration of the environmental dimension in the development process of developing countries (COM(99)036).

While discussing the Community programme of policy and action in relation to the environment and sustainable development, the Commission also envisaged that the Community's activity would be stepped up in the field of civil protection and environmental emergencies. Hence, basing itself on the formal proposal of the Commission (COM(98)0768) and the opinion of the EP (OJ C 141/258, 13.5.1996), the Council issued Decision 98/22/EC (OJ L 8/20, 14.1.1998) whereby it established a Community action programme in the field of civil protection in order to contribute to the protection of persons, environment and property in the event of a natural or technological disaster, without prejudice to the internal division of competences in Member States. The programme started on 1 January 1998 and is to end on 31 December 1999.

It should also be remarked that on 24 February 1997 the Commission issued Decision 97/150/EC whereby a European consultative forum on the environment and sustainable development was set up (OJ L 58/48, 27.2.1997). This Forum consists of figures from the sectors of products, the business world, regional and local authorities, professional associations, unions and environmental protection and consumer organisations. The Forum consists of 32 members with particular competence in the field of the environment and sustainable development; they are to be appointed by the Commission, which shall take into account the recommendations made to it by the above-mentioned sectors. The term of office of a member shall be four years (see Commission Decision 97/307/EC, OJ L 131/28, 23.5.1997, for the appointment of the members). The Forum may be consulted by the Commission on any problem relating to the environment and sustainable development in the Community or in Europe as a whole.

### **1.3.3 Application of Community law**

A basic resolution adopted by the EP on the implementation of environmental legislation (OJ C 125/15, 18.5.1992) points out that there have been serious infringements of Community environmental law in the past. Six reasons are given:

- reasons due to Community legislation (e.g. its volume and imprecise nature),
- reasons linked to the functioning of Community institutions (e.g. cumbersome decision-making, lack of flexibility, lack of effective sanctions and inadequate staffing levels),
- economic reasons (e.g. the desire to favour national producers, the priority given to the economy over the environment and the absence of economic and tax incentives),
- sociological reasons (e.g. insufficient environmental awareness),
- administrative and political reasons in the Member States (e.g. special features of federal structures and the inconsistencies in national legislative systems),
- legal reasons (e.g. the diverse nature of penalties).

This subject was also considered at a hearing held by the Committee on the Environment, Public Health and Consumer Protection together with the Commission's Directorate-General XI on 30 May 1996, the findings of which were published in a communication from the Commission to the EP and the Council.

As there are still weaknesses in the enforcement of the more than 200 environmental standards, the Commission has drawn up a communication on 'Implementing Community environmental law'. It contains proposals for improving the implementation and enforcement of EC environmental law at all levels and provides for responsibility for the application of environmental legislation to be shared more fairly among those concerned, e.g. the Commission, the Member States, the regional and local authorities, industry, the general public and private environmental organizations (COM(96)0500).

In its resolution of 4 July 1996 (OJ C 211/20, 22.7.1996) the European Parliament recalled that the European Union had undertaken to bring its environmental standards into line with those of Austria, Finland and Sweden and called for these Member States to be authorised to have recourse to Article 100a(4) of the EC Treaty if the approximation did not occur. See notably the Communication of the Commission concerning the review clause on environmental and health standards four years after the accession of Austria, Finland and Sweden to the EU (COM(98)0745). For the state of the environment in the six Länder of the former East Germany, see COM(98)033.

On 16 December 1998, the Commission submitted a proposal for a Council Recommendation providing for minimum criteria for environmental inspections in the Member States (COM(98)0772). In the general considerations, the Commission emphasises that concern about the state of implementation and enforcement of Community environmental legislation has grown in recent years as the *acquis communautaire* in this sector has developed. The EP adopted a resolution in 1992 on the subject (OJ C 125/122, 18.5.1992), and the Commission and the EP held a joint public hearing in May 1996 entitled 'Challenges to Environmental Protection: Making the Legislation Work'. This activity culminated in the adoption of the Commission's Communication on the implementation of EC environmental law (COM(97)0500). The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) has already examined the question of minimum criteria for environmental inspections and adopted a paper on the subject in 1997 which has formed the basis of this proposal. More precisely, environmental inspections tasks would be carried out in the Member States, according to minimum criteria to be applied in the organising, carrying out, following up and publicising of the results of such tasks, thereby strengthening the compliance with, and contributing to, an even implementation and enforcement of Community environmental law in all Member States. Environmental inspections apply to all industrial installations and other enterprises whose emissions to the environment are subject to authorisation, permit or licence requirements under EC law. An environmental inspection is an activity defined as the checking and promoting of the compliance of controlled installations with environmental requirements set out in EC legislation and in the Member States's laws, and the monitoring of the impact of controlled installations on the environment to determine whether further inspection or enforcement action is required to secure compliance with EC requirements. The carrying out of activities for the above purposes include: site visits, environmental quality monitoring, consideration of environmental audit reports and statements, checking of the relevant infrastructure, maintenance of equipment and adequacy of site management, etc. These environmental inspections may be carried out by any State authority either at national, regional or local level, which is established or designated by the Member State and responsible for the matters covered by the Recommendation. Member States are also advised to ensure that the inspecting authorities draw up a report after every site visit containing their findings as to compliance with EC requirements, an evaluation thereof and a conclusion on whether any further action should follow.

By letter of 15 February 1999, the Council consulted the EP in conformity with Article 130s. The EP transmitted the proposal to the committee on environment, public health and consumer protection, which adopted on 19 April 1999 the project of Ms. Jackson, advocating a Directive rather than a mere Recommendation. The procedure is still pending.

#### **1.3.4 Intergovernmental Conference**

In a resolution on the Intergovernmental Conference in 1996 (OJ C 96/77, 1.4.1996) the EP set its political priorities for the amendment of the Treaties:

- insertion into the preamble of a separate clause on sustainability and the environment,
- environment policy to form an integral part of other policies,
- inclusion in the Treaty of the principle of environmental compatibility and animal welfare.

These concerns were taken into account by the conference, and the Treaty of Amsterdam of 2 October 1997 notably includes the following amendments:

- in the preamble, the existing seventh recital is replaced by the following:  
‘DETERMINED to promote economic and social progress for their peoples, taking into account the principle of sustainable development and within the context of the accomplishment of the internal market and of reinforced cohesion and environmental protection ...’
- a new Article 3c (now Article 6 in the new numbering) was added:  
‘Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development’.  
See the Communication from the Commission to the European Council: ‘Partnership for Integration: A Strategy for Integrating Environment into EU Policies’ (COM(98)0333)
- a Protocol was inserted on the protection and welfare of animals:  
‘In formulating and implementing the Community’s agriculture, transport, internal market and research policies, the Community and the Member States shall pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the Member States relating to religious rites, cultural traditions and regional heritage’.

**MAIN EC LEGISLATION ON GENERAL ENVIRONMENT POLICY**

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1985	Dir. 85/337/EEC OJ L 175/40 5.7.1985	Environmental impact assessment for certain public and private projects	OJ C 66/89 15.3.1982	1.7.1988
(last amended 1997)	Dir. 97/11/EC OJ L 73/5 14.3.1997		OJ C 287/83 30.10.1995	14.3.1999
1990	Reg. (EEC) No 1210/90 OJ L 120/1 11.5.1990	Establishment of a European Environment Agency and European Environment Information and Observation Network	OJ C 96 17.4.1990	30.10.1993
(last amended 1999)	Reg. (EC) No 933/1999 OJ L 117/1 5.5.1999		OJ C 80/134 16.3.1998 Decision of 9 February 1999 (not yet published)	5.5.1999
1990	Dir. 90/313 L 158/56 23.6.1990	Freedom of access to information on the environment	OJ C 120/231 16.5.1989	31.12.1992
1991	Dir. 91/692/EEC OJ L 377/48 31.12.1991	Standardization and rationalization of reports on the implementation of certain environmental directives	OJ C 19/587 28.1.1991	23.12.1991
1992	Reg.(EEC) No 880/92 OJ L 99/1 11.4.1992	Community eco-label award scheme	OJ C 13/37 20.1.1992	11.4.1992
1993	Resolution 93/C 138/1 OJ C 138/1 17.5.1993	Community programme of environ- mental policy and measures with a view to achieving sustainable and environmentally sound development (5th action pro- gramme)	OJ C 337/34 21.12.1992	
1993	Reg. (EC) No 1836/93 OJ L 168/1 10.7.1993	Voluntary participation by indu- strial companies in a Community eco-audit scheme	OJ C 42/60 15.2.1993	13.7.1993



Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1996	Reg. (EC) No 1404/96 OJ L 181/1 15.7.1996	LIFE II	OJ C 181/18 24.6.1996	
1996	Dir. 96/61/EC OJ L 257/26 10.10.1996	Integrated pollution prevention and control	OJ C 166/69 10.6.1996	1.11.1999
1997	Decision 97/150/EC OJ L 58/48 27.2.1997	Setting-up of a European consultative forum on the environment and sustainable development		1.3.1997
1997	Decision of 21 March 1997 of the European Environment Agency OJ C 282/5 18.9.1997	Public Access to the European Environment Agency Documents		1.6.1997
1997	Reg. (EC) No 722/97 OJ L 108/1 25.4.1997	Environmental measures in developing countries in the context of sustainable development	OJ C 152/56 27.5.1996 OJ C 362/33 2.12.1996	28.4.1997
1998	Decision 98/22/EC OJ L 8/20 14.1.1998	Community action programme in the field of civil protection	OJ C 141/258 13.5.1996	1.1.1998
1998	Decision 98/352/EC OJ L 159/53 3.6.1998	Multiannual programme for the promotion of renewable energy sources in the Community (Altener II)	OJ C 388/30 24.11.1997 OJ C 152 18.5.1998	1.1.1998
1998	Decision 2179/98/EC OJ L 275/1 10.10.1998	Review of the European Community programme of policy and action in relation to the environment and sustainable development	OJ C 362/112 2.12.1996 OJ C 292 21.9.1998	

<sup>1</sup> In the case of directives 'Entry into force' means the deadline for transposition into national law. In the case of other EC acts, the 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## **2. AIR POLLUTION**

### **2.1 General information**

Protection of the atmosphere is an environmental issue that will dominate Community policies in the coming century, affecting policies as diverse as energy, transport and land development.

Community activities to protect the air concern a wide range of problems: limiting depletion of stratospheric ozone, controlling acidification, ground-level ozone and other pollutants and climate change.

The EU has taken important steps over the past decade but although there is a progress in policy making, there is no substantial improvement yet in the environment although there is a decrease in the emissions to air and water of a number of pollutants, such as sulphur dioxide (a 50% reduction since 1980), lead (a 60% reduction since 1980), phosphorous in many water catchment areas (a 30 to 60% reduction since 1980s) and to a lesser extent nitrogen oxides and volatile organic compounds (a 14% reduction since 1990).

Atmospheric pollutants, which enter the air from a wide variety of sources, can be subdivided into three broad categories:

- emissions from mobile sources (transport industry). Apart from CO<sub>2</sub>, the main ones are: nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and hydrocarbons (HC), i.e. volatile or non-volatile organic compounds, soot particles and ozone (O<sub>3</sub>)
- emissions from immobile sources (businesses, homes, farms and rubbish dumps). Apart from CO<sub>2</sub>, the main ones are: sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), hydrocarbons (HC), soot particles, chlorofluorocarbons (CFCs) and methane
- emissions caused by power generation. Apart from CO<sub>2</sub>, the main ones are sulphur dioxide (SO<sub>2</sub>) and soot particles.

High concentrations of these gases and pollutants arising from them through chemical reactions in the atmosphere or in the soil are harmful to human health, corrode various materials and damage vegetation, have a detrimental effect on agricultural and forestry production and cause unpleasant smells. Many of these pollutants, such as carbon dioxide (CO<sub>2</sub>), methane, nitrogen oxides (NO<sub>x</sub>) and chlorofluorocarbons (CFCs), are responsible for the greenhouse effect.

### **2.2 Emissions from the transport sector**

The emissions from the transport sector has a particular importance because of its rapid rate of growth: goods transport by road in Europe have increased by 54% since 1980, passenger transport by road by 46% in the past ten years in the EU and passenger transport by air has increased by 67% in the past ten years.

The main emissions caused by motor traffic are nitrogen oxides (NO<sub>x</sub>), hydrocarbons (HC) and carbon monoxide (CO), accounting for 58%, 50% and 75% respectively of all such emissions. Whilst emission

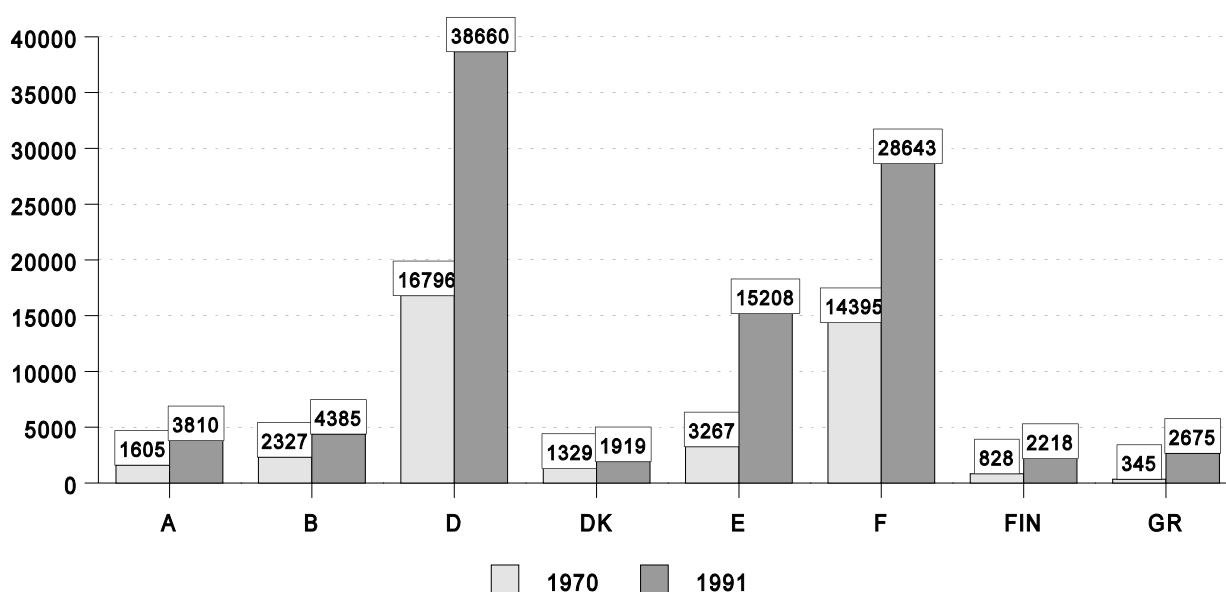
levels in the economically more developed countries have increasingly stabilised, they are continuing to rise in the less developed countries. Community directives establishing stricter standards for the emission of pollutants by motor vehicles have had positive results, but the progress achieved to date is threatened by the rising number of vehicles on the road and vehicle use. In the past years, the fuel consumption in the Community increased by 1.5% a year. In the Netherlands, which has the highest concentration of motor vehicles per square kilometre, private motor vehicle usage is set to increase by 70% in the next twenty years. An even greater increase can be expected in the industrializing countries.

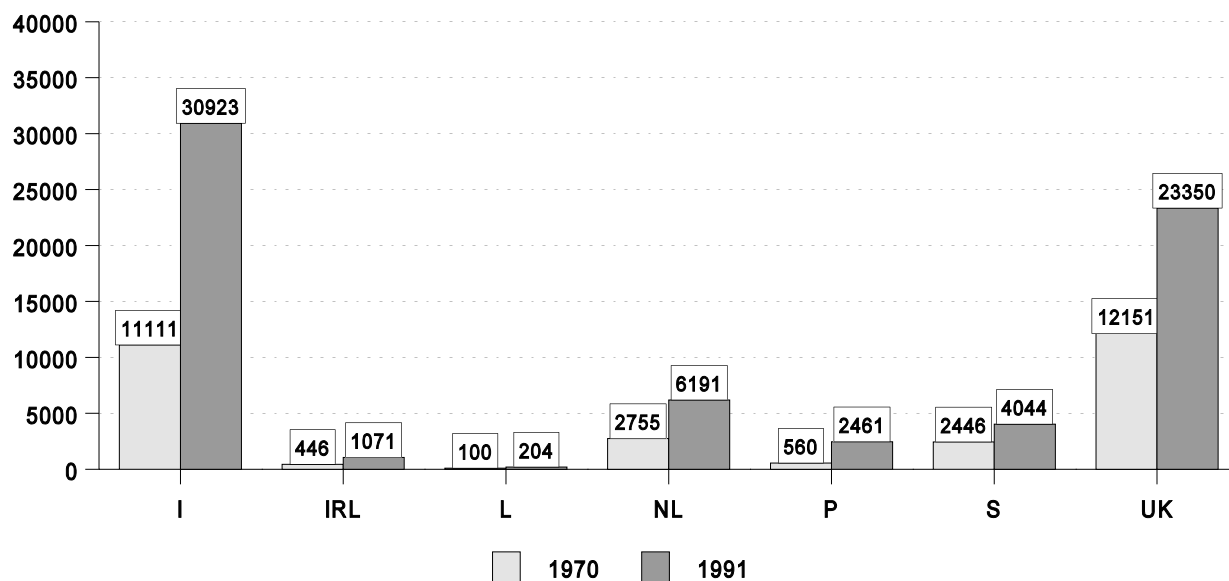
Several directives have been adopted at Community level in order to limit pollution due to transport, setting maximum emission limits for vehicles and other sources of pollution and introducing tax measures in the transport sector aimed at encouraging the consumer to act in a more environmentally friendly manner.

Basic Directive 70/220/EEC on motor vehicle emissions has been continually adjusted to the latest technological developments. It has recently amended in October 1998 by the directive 98/77 (OJ L 286, 23.10.1998).

EU transport emissions of CO<sub>2</sub> currently account for about 3.5% of global CO<sub>2</sub> emissions. The Kyoto agreement confirmed the need to reduced emissions of greenhouse gases and fixed at Kyoto an 8% reduction of emissions in all sectors of the economy compared to 1990 levels by 2008-2012.

**Table 2: Number of motor vehicles (1970-1991) in the EU Member States, in millions**





Source: OECD, quoted from Umwelt, Bonn

Current legislation may be summarized as follows:

### 2.2.1 Light commercial vehicles

On 26 June 1991 the EC Council of Ministers adopted the consolidated Emissions Directive 91/441/EEC (OJ L 242, 30.08.1991). This directive particularly concerns passenger vehicles with a maximum capacity of six passengers and a maximum mass of 2500 kg, independently of their engine capacity, including requirements relating to evaporative emissions and to the durability of emissions related to vehicle components as well as more stringent particulate pollutant standards for motor vehicles equipped with diesel engines. It was amended by Directive 94/12/EC, which introduced more stringent limit values for all pollutants and a modification of the control of conformity of the production.

**Table 3: Limit values for petrol and diesel engines since 1996**

	CO	HC + No <sub>x</sub>	Particles
Petrol engines	2.2 g/km	0.5 g/km	
Diesel engines:			
Indirect injection (IDI)	1.0 g/km	0.70 g/km	0.08 g/km
Direct injection (DI)	1.0 g/km	0.90 g/km	0.10 g/km

The new limit values have been in force since 1 January 1996 for new vehicle-type approvals and since 1 January 1997 for the initial entry into service of vehicles. The limit values for diesel engines with direct injection will fall to those for indirect-injection engines from 1 October 1999. At Parliament's suggestion, the distinction between type approval and conformity of production checks has been dropped.

In January 1996, the Directive 96/1/EC amending Directive 88/77/EEC on measures to be taken by the Member States against the emission of gaseous and particulate pollutants from diesel engines for use in vehicles was adopted. It requires the lower limit value for particulate emissions from small engines (0.15 g/kWh), known as the EURO 2 standard which entered into force in 1997 rather than in 1999. In late 1997 the Commission submitted a new proposal for the amendment of this directive with the aim of strengthening Community requirements aimed at limiting polluting emissions from new heavy-duty diesel engines for use in vehicles. It also introduces new provisions on polluting emissions from new heavy-duty engines fuelled by natural gas and liquefied petroleum gas.

The European Parliament proposed amendments in the final draft of the proposal concerning measures relating to the introduction of a new concept of "Enhanced Environmentally Friendly Vehicles" and actions likely to facilitate the type-approval of engines and vehicles using ethanol as a substitute fuel. This proposal is currently before the Council for a common position.

### **2.2.2 Heavy goods vehicles**

On October 1991, the Council of Ministers adopted the Directive 91/542/EEC, which required limit values for gaseous emissions and particulate pollutants from diesel engines and other heavy goods vehicles over 3.5 tonnes to be reduced in two stages, the second stage began in 1995 or 1996.

In addition, the Commission has proposed an environment-oriented tax on heavy goods vehicles with a view to eliminating distortions of competition in the transport of goods by road. In the Commission's view, the taxes and user charges payable in respect of these vehicles should be further harmonized and appropriately related to the actual infrastructure and external costs that occur in the Community's road transport sector (COM(96)0331).

**Table 4: Limit values for heavy goods vehicles (Stage 2)**

The following Stage 2 values have been applicable since 1 October 1995 for new type approvals and since 1 October 1996 for the initial entry into service of vehicles:

	Values for vehicle-type approval (g/kWh)	Values for conformity of production checks (g/kWh)
CO	4.0	4.0
HC	1.1	1.1
NO <sub>x</sub>	7.0	7.0
Particles	0.15	0.15*

\* Limit values for particulate pollutants for engines with a maximum power output of 85 kW are multiplied by a coefficient of 1.7.

On July 1998, the Commission published the working paper "Towards a framework for the solution of the environmental problems caused by traffic of heavy goods vehicles"(COM 98/444 final) where it identifies several environmental problems caused by road freight and proposes a coherent package of complementary measures to solve these problems. These measures are: charges for road use, the promotion of railway transport as an alternative or complement to road transport, combined transport facilities and new technical standards for vehicles (a significant reduction of exhaust emissions and an improvement in fuel quality).

### 2.2.3 Light commercial vehicles (maximum weight 3 500 kg) and heavy vehicles designed to carry more than six occupants

These vehicles (engine categories M and N; M1 and N1) are covered by Directive 93/59/EEC, which categorizes vehicles according to differences in power and design:

- Class I : reference weight equal to or less than 1250 kg
- Class II: reference weight 1250 kg to 1700 kg
- Class III: reference weight more than 1700 kg.

**Table 5: Limit values for light commercial vehicles**

Class Emissions g/km	Vehicle-type approval			Conformity of production		
	CO	HC+NO <sub>x</sub>	Particle	CO	HC+NO <sub>x</sub>	Particle*
<b>Class I</b>	2.72	0.97	0.14	3.16	1.13	0.18
<b>Class II</b>	5.17	1.4	0.19	6	1.6	0.22
<b>Class III</b>	6.9	1.7	0.25	8	2	0.29

\* Diesel engines only

The rules apply to new models since 1 October 1993 and to all models since 1 October 1994. The European Parliament proposed stricter values for some emissions, particularly for hydrocarbons and nitrogen oxides.

#### **2.2.4 Mobile machinery and devices equipped with internal combustion engines**

In 1997, the directive 97/68/EC (OJ L 059, 27.02.1998) on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in mobile equipment other than road vehicles ( bulldozers, excavators, rollers, harvesting machines, etc.) was approved imposing for the first time limit values on exhaust emissions of particles, nitrogen oxides, hydrocarbons and carbon monoxide from diesel engines (18 to 550 kW).

The aim of the directive is to approximate the laws of the Member States regarding the emission standards and the type-approval procedures for engines intended to be fitted to mobile equipment other than road vehicles.

The European Parliament and the Council shall decide, by the end of the year 2000 on a proposal that the Commission will submit before the end of 1999, on a further reduction in emission limit values, taking into account the global availability of techniques for controlling air-polluting emissions from compression ignition engines and the air quality situation.

There is also a Commission proposal (COM(1998) 472, OJ No C 303, 02.10.1998) on "action to be taken against emissions of pollutant gases and pollutant particles by engines intended to power agricultural or forestry tractor".

#### **2.2.5 Motorcycles and mopeds**

There are currently no EC limit values for motorcycle and moped exhausts. However, the Commission is currently drawing up limit values taking UN-ECE regulations as a guide.

### **2.2.6 Lead in petrol**

In March 1985 the Environment Ministers agreed on the compulsory introduction of unleaded petrol from October 1989 (Directive 85/210/EEC). At the same time provision was made for the lead content of petrol to be reduced from 0.40 g/l to 0.15 g/l. In July 1987 the Ministers went a step further by authorizing Member States to prohibit the sale of regular leaded petrol (Directive 87/416/EEC).

The new directive 98/70/EC related to the quality of petrol and diesel fuels (OJ No L 350, 28.12.1998) repeals directives 85/210/EEC, 85/536/EEC and 87/441/EEC as from 1 January 2000. It sets the environmental specifications to apply successively (with effect from 1 January 2000 and 1 January 2005) to fuels for vehicles equipped with positive ignition engines (petrol) and with compression ignition engines (diesel).

This Directive also provides for progressive improvements in the environmental quality of unleaded petrol and diesel fuel and finally from the year 2000, the leaded petrol will be banned from the market.

### **2.2.7 Sulphur in liquid fuels**

The sulphur content of liquid fuels is regulated by Directive 93/12/EEC which has recently been amended by the directive 98/70/EC introducing more stringent quality standards for liquid fuels. The directive 93/12/EEC lays down two stages for reducing the sulphur content: since 1 October 1994 the maximum limit value for all liquid fuels including diesel has been 0.2%, and for diesel it has dropped to 0.05% since 1 October 1996.

In April 1999, the new directive 98/70/EC (OJ No L 350, 28.12.1998) related to the reduction of the sulphur content of certain liquid fuels was approved, reducing sulphur dioxide emissions resulting from the combustion of heavy fuel oils and gas oil. Except for derogations, it sets limit values for the sulphur content of these fuels - 0.2% by weight for gas oils and no more than 1% for heavy fuel oils. The use of these fuels on Community territory is subject to compliance with these values.

### **2.2.8 Volatile organic compounds (VOCs)**

In late 1994, the Council and Parliament adopted a directive controlling VOC emissions from the storage and distribution of petrol from terminals to service stations (Directive 94/63/EC). The directive is important, because annual VOC emissions in the Community from petrol and solvents amount to some 10 million tonnes and are considered very harmful to humans and the environment.

On March 1999, a new directive (COM(98) 681 final) on "limiting emissions of organic compounds due to the use of organic solvents in certain industrial activities and installations" was approved. It provides for a two-third reduction in the VOCs which are released into the atmosphere through the use of solvents in industry and together with nitrogen oxide and sunlight, cause the notorious summer smog.

The existing installations must comply with the same requirements as for new installations no later than 30 October 2007.

The European Parliament emphasized the importance of taking preventive action to help workers in regular contact with organic solvents and invited the Commission to put forward a proposal on the



marketing of products containing solvents intended for commercial and private use, in order to tackle emissions of VOCs not related to installations to supplement this directive.

### **2.2.9 Auto/Oil Programme**

Together with the oil and automobile industries, the Commission has established a programme (Auto/Oil Programme) aimed at reducing emissions from the road transport sector. This programme centres mainly on two directives, one relating to the 'quality of petrol and diesel fuels' (OJ No L 350, 28.12.1998), the other to 'measures to be taken against air pollution by emissions from motor vehicles and amending Council Directives 70/156/EEC and 70/220/EEC' was last amended in October 1998.

The Commission has introduced a proposal to establish a scheme to monitor the average specific emissions of carbon dioxide from new passenger cars. This proposal corresponds to the Community strategy to reduce emissions of CO<sub>2</sub> from new passenger cars, setting a target of 120g/km to be attained by 2005 (2010 at the latest) [COM(95) 689 final; Council Conclusions of 25.06.1996] according to the United Nations Framework Convention on Climate Change adopted in New York in 1992 and the Kyoto Protocol of 10 December 1997. The Council has already adopted its common position, which is currently before Parliament for a second reading.

The new directive 98/70/EC reduces pollution emanating from car emissions by introducing new environmental specifications applicable to petrol and diesel fuels and it bans leaded petrol from the market from the year 2000. Finally, it also provides for progressive improvements in the environmental quality of unleaded petrol and diesel fuel.

The directive 98/69/EC (OJ No L 350, 28.12.1998) lays down differing limit values for emissions, by petrol and diesel cars which shall apply from 2000 and 2005, according to the type of vehicle. Tax incentives granted by Member States to encourage advance compliance with new limit values are permitted and after 28 September 1999, the new European test cycle provided by this directive shall apply.

The Directive 98/77/EC (OJ No L 286, 23.10.1998) inserts new technical requirements into Directive 70/220/EEC such as the EC approval of replacement catalytic converters as separate technical units, the EC approval of vehicles which may operate on liquefied petroleum gas or natural gas and the measurement of rolling resistance.

## **2.3 Emissions from immobile sources (greenhouse effect)**

The term 'greenhouse effect' is used to describe the gradual warming of the earth's atmosphere as a result of carbon dioxide (CO<sub>2</sub>), chlorofluorocarbons (CFCs) and methane acting in one of two ways. Some gases such as CO<sub>2</sub> concentrate in the atmosphere and reduce the outward long-wave radiation from the earth; others such as CFCs destroy the ozone layer in the stratosphere, which shields the earth from excessive incident ultraviolet radiation. The consequences of a worldwide increase in temperatures include the raising of the sea level, climatic changes and an increased incidence of skin cancer due to the growing hole in the ozone layer.

The main cause of the greenhouse effect is unbridled combustion of fossil fuels. Extensive climatic changes are feared as a result of the rise in temperature.

According to estimates, carbon dioxide (CO<sub>2</sub>) accounts for 50%, methane (CH<sub>4</sub>) for 19% and chlorofluorocarbons (CFCs) for 17% of the greenhouse gases now present in the atmosphere. Whilst methane emissions are mainly due to agriculture (cattle and certain crops), the energy sector (natural gas leaks) and refuse dumps, the level of CFCs is exclusively attributable to industrial production since CFCs are not produced in nature.

At a conference of the signatory states of the Montreal Convention in Copenhagen on 25 November 1992 the decision adopted was to ban chlorofluorocarbons as from 1 January 1996 and to gradually reduce the use of chlorofluorohydrocarbons until the year 2020 and to ban them completely by 2030. At the same time, an agreement was reached on the financing of the 'Montreal Fund', according to which US\$ 113 million would be made available for developing countries in 1993 and US\$ 113.4 million in 1994 to enable them to switch to alternative substances.

The UN New York Convention on climate change adopted in 1992 and which entered into force on 21 March 1994 (OJ No L 33, 07.02.1994) was considered a success, having made the world more aware of the problems linked to climate change.

The Parties to the Convention therefore decided, at the Conference of the Parties in Berlin in March 1995, to negotiate a Protocol containing measures to reduce emissions for the period beyond 2000 in the industrialized countries. This work resulted in the adoption of the Protocol on 10 December 1997 in Kyoto. This Protocol was signed on behalf of the European Community on 29 April 1998, (COM(98) 96 final).

Although the Protocol is less ambitious than the EU's proposed objective of a 15% cut by the year 2010 (with an intermediate goal of 7.5% by 2005) in emissions of carbon dioxide, methane and nitrous oxide, it is still an important step forward in the fight against global warming as it contains binding and quantified objectives to limit and reduce greenhouse gases.

The Parties undertake to reduce greenhouse gas emissions by at least 5% below 1990 levels during the period 2008 to 2012 and the EU Member States collectively must reduce their greenhouse gas emissions by 8% between 2008 and 2012. For the period up to 2008, the Parties undertake to make demonstrable progress in achieving their commitments by 2005.

The Kyoto Protocol allows for the use of various flexible mechanisms: international emissions trading, Joint Implementation and the Clean Development Mechanism.

In the Communication "Climate change - Towards an EU post-Kyoto strategy" (COM (98) 353 final), the Commission develops a Community strategy for achieving the targets laid down in the Kyoto Protocol. In order to be effective, the Community strategy must cover all sectors of activity which produce polluting gases, being the energy and transport sectors the most important sources but taking also appropriate measures regarding the industry, tertiary sector and agriculture.

The EC post-Kyoto strategy is based in environmental effectiveness, cost-effectiveness (economic and political), equity and political acceptability, adaptability to new and unforeseen developments, inclusiveness, consistency in the integration into all Community policies and domestic action in the adoption of policies.

The Commission has published a Communication on "transport and CO<sub>2</sub>: developing a Community approach" (COM(98) 204 final) in order to protect the environment by reducing emissions of CO<sub>2</sub> from transport in the framework of the undertakings made at the Kyoto Conference.

In the EU, the transport emissions proportion of total CO<sub>2</sub> emissions rose from 19% in 1985 to 26% in 1995 and the EU transport emissions of CO<sub>2</sub> currently account for about 3.5% of global CO<sub>2</sub> emissions. In this Communication, the Commission maintains that the transport policy measures proposed or already adopted at Community or local level should make it possible to cut the rate of increase of CO<sub>2</sub> emissions by half. A package of measures is defined to contribute to the reduction of CO<sub>2</sub> transport emissions and proposing a process under which actions can be developed at different levels: Road freight, Passenger cars, Rail freight, Public passenger transport, Shipping, Air transport, the creation of an integrated EU transportation system, a fair and efficient pricing and an efficient infrastructure.

The UN Framework Convention on Climate Change Conference that took place in Buenos Aires in November 1998 made concrete progress on issues, such as, transfer of technology, compliance (there is a common understanding that a strong and comprehensive regime is needed to ensure an effective implementation of the Kyoto Protocol) and adaptation (vulnerable countries will receive further support from the Global Environment Facility to plan concrete measures).

The Conference adopted a Buenos Aires Plan of Action, including deadlines on a number of important issues, such as financial mechanisms, further work on policies and measures, development and transfer of technologies, rules governing the Kyoto mechanisms on emission trading, Joint implementation and with a priority to the Clean Development Mechanisms, a solid promise to discuss number of particular concerns to the EU.

During these years, the EC in order to achieve a high level of environmental protection, has adopted several regulations as in December 1994, the Regulation (EC) No 3093/94 on substances that deplete the ozone layer to comply at Community level with commitments deriving from the second amendment to the Montreal Protocol. The Regulation has generally prohibited the production, or putting into circulation, or use of (halogenated) fluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloromethane and hydrobromofluorocarbons since 1 January 1996. Exceptions may be permitted only by the Member States' appropriate authorities in agreement with the Commission.

To protect the ozone layer, the Commission has also adopted a proposal setting new quotas for the production and import of HCFCs (hydrochlorofluorocarbons) and seeking their complete exclusion from the EU by the year 2015, i.e. five years earlier than required by the Montreal Protocol. The EU quotas for HCFCs currently total 8 079 ODP tonnes (ODP = 'ozone-depleting potential').

In order to control the level of CO<sub>2</sub> emissions, the introduction of a combined carbon dioxide/energy tax currently under discussion in the various political bodies could be a suitable means of achieving this target, its aim being to improve energy efficiency and to encourage the use of fuels that release little or no CO<sub>2</sub> (Commission proposal: COM(95)0172).

The Commission has put forward a strategy paper on the reduction of methane gas in the atmosphere. Methane is the leading greenhouse gas after carbon dioxide, 45% being generated in agriculture, 32% by waste and 23% in energy production. The aim of this proposal is to promote new technologies for the conversion of manure into energy in agriculture, for example, and, with the help of new Community legislation, to reduce the quantity of organic waste produced in the EU (COM(96)0557).

In September 1996 the Council adopted the Directive 96/62/EC on ambient air quality assessment and management where the quality of ambient air is to be improved under a framework directive based on a comprehensive concept. It also adopted the Directive 96/61/EC (OJ No L 257, 10.10.1996) concerning integrated pollution prevention and control where the aim is to prevent or minimize air, water and soil pollution by emissions from industrial installations in the Community, with a view to achieving a high level of environmental protection.

## **2.4 Emissions from power generation (sulphur dioxide)**

Sulphur dioxide is damaging to the respiratory tract and the cardiovascular system, and, as the principal cause of acid rain, corrodes metals and stone, damages forests and other vegetation and kills life in surface waters. Thermal power stations and industrial and domestic heating plants account for 88% of sulphur dioxide (SO<sub>2</sub>) emissions in the Community. In order to reduce these emissions, the Community has adopted a number of measures, the most important of which is probably the directive on large combustion plants (88/609, as last amended by Directive 94/66). Taking 1980 as the reference year, the following reductions in annual emissions from large combustion plants are to be achieved:

- SO<sub>2</sub>: 73% by the year 2000,
- NO<sub>x</sub>: 40% by 1998.

The EC directive on limit values for SO<sub>2</sub> emissions requires a reduction of 57% from 14.4 to 6.2 million tonnes by the year 2005, taking 1980 as the reference year.

## **2.5 Projected trend in emissions**

According to a study by the European Environment Agency (EEA), SO<sub>2</sub> emissions in the Member States are steadily decreasing and will probably fall by 27% by the year 2000, compared to 1990 levels.

According to a study by Eurostat, on the other hand, the EU is unlikely to achieve its goal of stabilizing CO<sub>2</sub> emissions at their 1990 level by the year 2000 (3188 m tonnes of CO<sub>2</sub> emitted in the 15 Member States). CO<sub>2</sub> emissions are more likely to rise again by the end of the decade because of the increase in road and air traffic.

Nor is it certain, according to the EEA study, that the 30% reduction in NO<sub>x</sub> (nitrogen oxide) emissions envisaged by the EU can actually be achieved by the year 2000. Emissions are more likely to be stabilized at their 1985 level or NO<sub>x</sub> emissions to be reduced by about 10%. According to the EEA, however, it can be assumed that other pollutant emissions (NMVOC, CH<sub>4</sub>, CO, N<sub>20</sub>, NH<sub>3</sub>) will be reduced by between 3 and 17%.

## **2.6 Emission from large combustion plan**

The reduction of air pollution from industrial combustion plants is a highly diversified area of Community legislation. Some of the key measures focus primarily on the reduction of sulphur dioxide, nitrogen oxides, particulates and volatile organic compounds in restoring air quality deficits and the reduction of trans-boundary air pollution.

The Council Directive 88/609/EEC from November 1988 and amended by Council Directive 94/66/EEC of December 1994, limits the emissions of certain pollutants into the air from large combustion plants. Both Directives apply to combustion plants with a rated thermal input equal to or greater than 50 MW.

In April 1999, the Directive to limit sulphur content in non-automotive gas oil and inland heavy fuel oil proposal was adopted (COM(97) 88 final - OJ No C 190, 21.06.1997). It amends the Directive 93/12/EEC and it aims to reduce sulphur dioxide emissions resulting from the combustion of heavy fuel oils and gas oil. Except for derogations, it sets limit values for the sulphur content of these fuels - 0.2% by weight for gas oils and no more than 1% for heavy fuel oils; use of these fuels on Community territory is subject to compliance with these values.

On July 1998 the Commission put forward a new proposal for a Directive amending Council Directive 88/609/EEC on the limitation of emissions of certain pollutants into the air from large combustion plants (COM(98) 415 final SYN0225, OJ No C 300, 29.09.1998). This proposal incorporates into the original Directive the technical progress achieved in the large combustion plant sector since it was adopted, what should help, with the right economic approach, to achieve the acidification targets the Commission set in its 1997 strategy, and to further reduce health risks, particularly those related to small suspended particles as well as those related to the formation of tropospheric ozone, for which nitrogen dioxide (NO<sub>2</sub>) is an important precursor.

## **2.7 Role of the European Parliament**

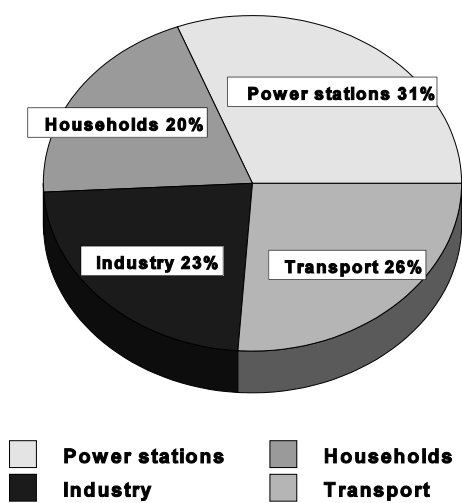
As far as measures to combat air pollution are concerned, the European Parliament has played a decisive role in the formulation of a progressive environmental policy. After successfully forcing through stricter limit values for motor vehicle exhaust fumes despite the opposition of the Commission and Council, it called in another resolution for a further reduction in the limit values for pollutant and noise emissions from cars and aircraft and for stricter fuel quality standards. It also demanded that the 3 litre/100 km petrol-driven car and the 2 litre/100 km diesel-powered car be prescribed from the year 2005.

**Table 6: Carbon dioxide emissions from fossil fuels in the EU**

<b>Carbon dioxide emissions from fossil fuels in the EU</b>			
	Total CO <sub>2</sub> emissions (in m tonnes)		Change 1990-94 (%)
	1990	1994	
EU 15	3 188	3 103	-2.7%
EU12	3 025	2 929	-3.2%
Belgium	111	117	+5.9%
Denmark	53	63	+18.9%
Germany	992	897	-9.5%
Greece	73	78	+6.7%
Spain	209	229	+9.5%
France	368	349	-5.0%
Ireland	31	32	+3.3%
Italy	402	393	-2.2%
Luxembourg	12	12	-2.8%
Netherlands	157	164	+4.9%
Austria	58	57	-1.6%
Portugal	40	45	+13.8%
Finland	53	61	+13.9%
Sweden	52	56	+7.5%
United Kingdom	579	550	-5.0%

Source: Eurostat, 1996

**Table 7: Carbon dioxide emissions by sector**



Emissions by sector	Change 1990-1994, %
EU total	-2.7
Thermal power stations	-4.4
Industry and energy sector	-7.7
Transport	+7.6
Households, etc.	-8.3

Source: OUR-OP

**MAIN EC LEGISLATION ON AIR POLLUTION**

Year	Measure	Title (abbreviated)	EP position	Date of entry into <sup>force</sup>
1970	Dir. 70/220/EEC OJ No L 76/1 06.04.1970	Measures against air pollution by gases from positive ignition engines of motor vehicles	OJ No C 160/7 18.12.1969	01.10.1971
(last amended 1998)	Dir. 98/69/EEC OJ No L 350/1 28.12.1998			28.12.1999
1972	Dir. 72/306/EEC OJ No L 190/1 20.08.1972	Emission of pollutants from diesel engines for use in vehicles	not published in OJ	10.02.1974
(last amended 1997)	Dir 97/20/EEC OJ No L 125/21 16.05.1997			06.06.1997
1975	Dir. 75/716/EEC OJ No L 307/22 27.11.1975	Sulphur content of certain liquid fuels	OJ No C 74/46 03.07.1974	26.08.1976
(last amended 1998)	Dir. 98/70/EEC OJ No L 350 28.12.1998		OJ No C 167 01.06.1998	
1977	Dir. 77/537/EEC OJ No L 220/38 29.08.1977	Measures against the emission of pollutants from diesel engines for use in wheeled agricultural or forestry tractors	OJ No C 125/51 08.06.1976	30.12.1978
(last amended 1997)	Dir. 97/54/EEC OJ No L 1277/25 10.10.1997		OJ No C 182/112 19.07.1982	
1980	Dir. 80/779/EEC OJ No L 229/30 30.08.1980	Air quality limit values and guide values for sulphur dioxide and suspended particulates	OJ No C 83/44 04.04.1977	18.07.1982
(last amended 1991)	Dir. 91/692/EEC OJ No L 377/48 31.12.1991		OJ No C 19/587 28.01.1991	
1980	Dir. 80/1268/EEC OJ No L 375/36 31.12.1980	Fuel consumption of motor vehicles	OJ No C 265 13.10.1980	
(last amended 1997)	Dec. 97/465/EEC OJ No L 199/53 26.07.1997			
1981	Dir. 81/462/EEC OJ No L 171/11 27.06.1981	Convention of Geneva	OJ No C 59/71 10.03.1980	06.03.1983
1982	Dir. 82/459/EEC OJ No L 210/1 19.07.1982	Reciprocal exchange of information and data from stations measuring air pollution	OJ No C 125/168 17.05.1982	



Year	Measure	Title (abbreviated)	EP position	Date of entry into <sup>force</sup>
1982	Dir. 82/884/EEC OJ No L 378/15 31.12.1982	Limit value for lead in the air	OJ No C 28/31 09.02.1976	10.12.1984
(last amended 1991)	Dir. 91/692/EEC OJ No L 377/48 31.12.1991		OJ No C 19/587 28.01.1991	
1984	Dir. 84/360/EEC OJ No L 188/20 16.07.1984	Combatting air pollution from industrial plants	OJ No C 342/160 19.12.1983 OJ No C 19/587 28.01.1991	30.6.1987
(last amended 1991)	Dir. 91/692/EEC OJ No L 377/48 31.12.1991			
1985	Dir. 85/203/EEC OJ No L 87/1 27.03.1985	Air quality standards for nitrogen dioxide	OJ No C 337/434 17.12.1984 OJ No C 19/587 28.01.1991	01.01.1987
(last amended 1991)	Dir. 91/692/EEC OJ No L 377/48 31.12.1991			
1985	Dir. 85/210/EEC OJ No L 96/25 03.04.1985	Lead content of petrol	OJ No C 12/56 1985	01.01.1986
(last amended 1987)	Dir. 87/416/EEC OJ No L 225/33 13.08.1987		OJ No C 19/587 28.01.1991	
1987	Dir. 87/217/EEC OJ No L 85/40 28.03.1987	Prevention and reduction of environ-mental pollution by asbestos	OJ No C 99/5 13.04.1987	31.12.1988
(last amended 1991)	Dir. 91/692 OJ No L 377/48 31.12.1991		OJ No C 19/587 28.01.1991	
1988	Dir. 88/77/EEC OJ No L 36/33 09.02.1988	Emission of gaseous pollutants from diesel engines for use in vehicles	OJ No C 345/61 21.12.1987	01.07.1988
(last amended 1996)	Dir. 96/1/EEC OJ No L 40/1 17.02.1996		OJ No C 17/96 22.01.1996	08.03.1996
1988	Reg. 3322/88/EEC OJ No L 297/1 31.10.1988	Cholorofluorocarbons and halons which deplete the ozone layer	OJ No C 187/46 18.07.1988	01.01.1989
1988	Dir. 88/609/EEC OJ No L 336/1 07.12.1988	Limitation of emissions of cer- tain pollutants into the air from large combustion plants	OJ No C 175/297 15.07.1985 OJ No C 268/34 04.10.1993 OJ No C 341 05.12.1994	30.06.1990
(last amended 1994)	Dir. 94/66/EC OJ No L 337/83 24.12.1994			
1989	Dir. 89/369/EEC OJ No L 163/32 14.06.1989	Prevention of air pollution from new municipal waste incinera- tion plants	OJ No C 69/219 20.03.1989	01.12.1990

Year	Measure	Title (abbreviated)	EP position	Date of entry into <sup>force</sup>
1989	Dir. 89/429/EEC OJ No L 203/50 15.07.1989	Reduction of air pollution from existing municipal waste-incineration plants	OJ No C 69/223 20.03.1989	01.12.1990
1991	Reg. 594/91/EEC OJ No L 67/1 14.03.1991	Substances that deplete the ozone layer	OJ No C 19 28.01.1991 OJ No C 61/114 28.02.1994	15.03.1991
(last amended 1994)	Reg. 3093/94/EEC OJ No L 333/1 22.12.1994		OJ No C 341 05.12.1994	
1991	Dec. 91/690/EEC OJ No L 377/28 31.12.1991	Montreal Protocol on substances that deplete the ozone layer	OJ No C 280/29 28.10.1994	
1992	Dir. 92/72/EEC OJ No L 297/1 13.10.1992	Air pollution by ozone	OJ No C 150/234 15.06.1992	06.04.1994
1993	Dir. 93/12/EEC OJ No L 74/81 27.03.1993	Sulphur content of certain liquid fuels	OJ No C 94/78 13.04.1992	01.04.1994
(last amended 1998)	Dir. 99/32/EEC OJ No L 121 11.05.1999		OJ No C 167/98	
1993	Dir. 93/76/EEC OJ No L 237/28 22.09.1993	Limiting CO <sub>2</sub> emissions by efficient use of energy (SAVE)	OJ No C 176/212 28.06.1993	31.12.1994
1993	Decision 93/389/EEC OJ No L 167 09.07.1993	Community monitoring system for CO <sub>2</sub> and other greenhouse gas emissions		
(last amended 1999)	Decision 99/296/EEC OJ No L 117 05.05.1999			01.05.1999
1994	Dir. 94/63/EEC OJ No L 365/24 20.12.1994	Controlling VOC emissions from storage and distribution of petrol, stage 1	OJ No C 194/325 19.03.1993 OJ No C 91/82 28.03.1994	31.12.1995
1996	Dir. 96/91/EEC OJ No L 257 10.10.1996	Integrated pollution prevention and control		30.10.1996
1996	Dir. 96/62/EEC OJ No L 296/55 21.11.1996	Ambient air quality assessment and management	OJ No C 166/173 03.07.1995	

Year	Measure	Title (abbreviated)	EP position	Date of entry into <sup>force</sup>
1997	Dec. 97/101/EEC OJ No L 35 05.02.1997	Reciprocal exchange of information and data collected from networks and individual stations measuring ambient air pollution within the Member States		01.01.1997
1997	Dir.97/68/EEC OJ No L 59/1 27.02.1998	Measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery	OJ No C 328 07.12.1995	19.03.1998
1998	Decision 23.03.1998 Kyoto Protocol COM(98) 96 final	Signature by the EC of a Protocol to the United Nations Framework Convention on Climate Change		
1998	Res. of 18.12.1997 OJ No C 004/98 08.01.1988	Strategy to promote combined heat and power		
1998	Dec. 98/686/EEC OJ No L 326 03.12.1998	Conclusion by the EC of the Protocol to the 1979 Convention on long-range transboundary air pollution on further reductions of sulphur emissions.	OJ No C 14 19.01.1998	
1998	Dir.98/352/EEC OJ No L 159 03.06.1998	Promotion of renewable energy sources	OJ No C 358 24.11.1997	
1988	Res. of 18.12.1997 OJ No C 394/98 17.12.1998	Energy efficiency in the European Community		
1998	Dir. 98/70/EEC OJ No L 350 28.12.1998	Quality of petrol and diesel fuels	OJ No C 313 12.10.1998	
1998	Dec. 99/24/EEC OJ No L 007 13.01.1999	Multi annual programme of technological actions promoting the clean and efficient use of solid fuels (1998-2002)	OJ No C 328 26.10.1998	
1999	Dir. 99/13/EEC OJ No L 085 29.03.1999	Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations	OJ No C 341 09.11.1998	

Year	Measure	Title (abbreviated)	EP position	Date of entry into <sup>force</sup>
1999	Dec. 99/59/EEC OJ No L 019 26.01.1999	Allocation of quantities of controlled substances allowed for essential uses in the Community in 1999 under Reg. 3093/94 on substances that deplete the ozone layer		

<sup>1</sup> In the case of directives 'entry into force' indicates the deadline for transposition of incorporation into national law. In the case of other EC acts, the "date of entry into force" means the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

### 3. WATER POLLUTION

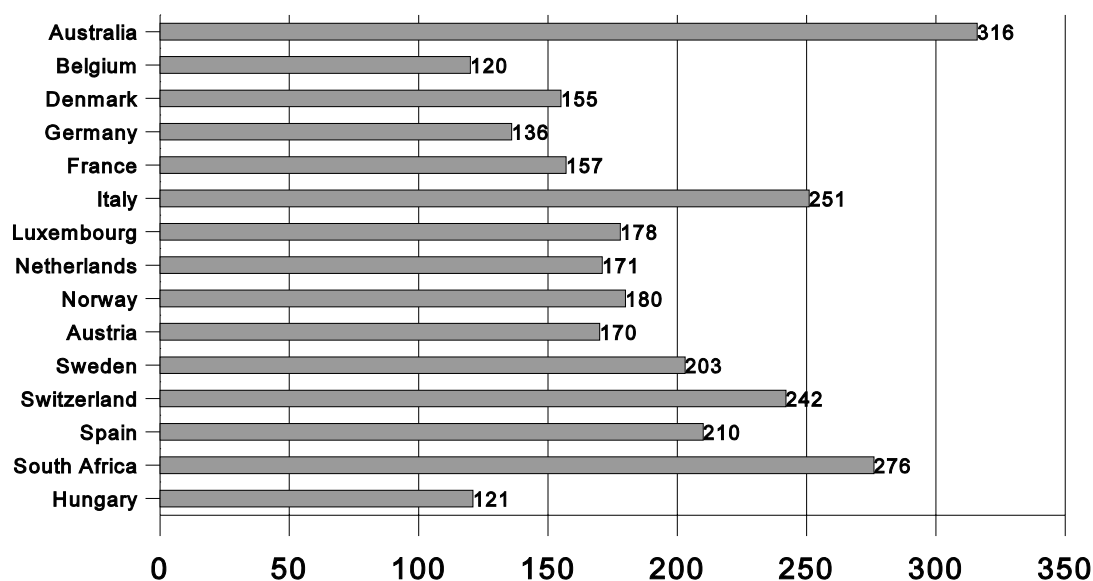
#### 3.1 General

The environmental medium water, essential for physiological processes and the staff of human, animal and plant life, is ever-present in the global cycles of precipitation, condensation, evaporation and runoff. Water is put to many and varied uses (drinking water supplies, as a means of production, for irrigation, for cooling, as a medium to carry waste matter, as a traffic carrier, for recreation and sport, embellishment of the landscape, etc.). The earth's entire water resources are estimated at 1.5 bn km<sup>3</sup>; the seas cover 71% of the earth's surface. However, 97% of the earth's water is sea water, i.e. salt water that humans cannot drink. Usable fresh water accounts for 0.3% of total water resources. Most fresh water is trapped in the vast icy expanses of the poles and the Alpine glaciers.

#### 3.2 Water use and consumption

Water consumption in the Community has stagnated in recent years, increasing in the southern Member States and falling slightly in the north. Annual per capita water consumption in selected countries can be seen in the following table.

**Table 8: Water consumption in various countries**  
Households and small businesses (litres per inhabitant and day, 1993)



Source: IWSA, quoted from Umwelt Nr 4 (1997)

The considerable variations are primarily due to the widely differing quantities of water used for irrigation in agriculture, often because of the climate.

### **3.3 Water quality**

#### **3.3.1 Inland bodies of water**

##### **3.3.1.1 Groundwater**

Groundwater supplies 75% of drinking water in the Community as a whole, rising to 88% in Italy and 98% in Denmark.

The most serious threat to groundwater today no longer emanates from emissions from point sources, since they have been very successfully combatted with the instruments of the groundwater directive (Directive 80/68/EEC), among other things.

A more serious problem today, especially in the more developed countries, is groundwater pollution from diffuse sources, i.e. harmful substances originating from the pollution of the soil by industry and waste dumps, often abandoned waste disposal sites, and high nitrate concentrations in the soil due to intensive agriculture (and especially the use of inorganic fertilizers and the disposal of farmyard manure). The Commission is particularly aware of such pollution from various sources, and its impact on water quality and the environment in general. For instance, it has adopted Decision 98/483/EC of 20 July 1998 establishing ecological criteria for the award of the Community eco-label to dishwashers, and Recommendation 98/480/EC of 22 July 1998 concerning good environmental practice for household laundry detergents. It has also adopted Directive 98/15/EC of 27 February 1998 amending Council Directive 91/271/EEC with respect to certain requirements established in Annex I thereof (concentrations in phosphorus and nitrogen).

High concentrations of nitrates can be found in many areas of the Community. In Denmark the average nitrate level of groundwater has tripled over the last 30 years and is increasing at a rate of about 3.3 mg/l per year, with the result that 8% of the water produced in Danish waterworks now has a nitrate concentration above the admissible Community limit of 50 mg/l (according to Directive 80/778/EEC relating to the quality of water intended for human consumption). It is estimated that 800 000 people in France, 850 000 in the United Kingdom and 2.5 million in Germany are drinking water with nitrate concentrations above the permitted Community limit.

As many of the pollutants washed out of the soil over the past decade have not yet reached the water table, it will take between 25 and 50 years for nitrate levels in groundwater in the shallow wells of the Netherlands, Belgium, Denmark and Germany to fall to an acceptable figure, in accordance with the Community Directive on drinking water, despite recent cuts in the use of fertilizers in some Member States.

Following the proposals of the Commission for the extensive modification of the legislation on the quality of water intended for human consumption (COM(94)0612; COM(97)0228), the Council adopted Directive 98/83/EC of 3 November 1998 (OJ L 330/32, 5.12.98) so as to adapt Directive 80/778/EEC to scientific and technological progress. Parliament was consulted under the cooperation procedure of Article 189 c of the Maastricht Treaty, and amended the Commission's original proposal (OJ C 20/133, 20.1.97). The Directive was also re-examined in the light of the principle of subsidiarity to focus on compliance with essential quality and health parameters, leaving Member States free to add other parameters if they see fit. Of importance is probably the provision on lead, the limit value for which has

been reduced from 50 to 10 micrograms/litre, for it was claimed that this would have particularly serious financial implications because of the pipes that would need to be replaced.

In its communication to the Council and European Parliament on the European Community water policy (COM(96)0059 of 21 February 1996) the Commission proposes that the groundwater directive should be replaced with a new framework water directive. A proposal for a framework water directive was announced for the spring of 1997.

On 10 July 1996 the Commission also put forward a proposal for a comprehensive action programme for integrated groundwater protection and management (COM(96)0315). It proposes, firstly, that there should be integrated planning and management of fresh water resources, secondly, that the abstraction of fresh water should be regulated, thirdly, that concerted action should be taken against the diffuse sources of pollution referred to above, especially agriculture and sewage disposal and, fourthly, that the dangers emanating from point sources of pollution should be addressed. The Commission believes the action programme should be implemented both under the framework water directive mentioned above and by means of appropriate action programmes at Member State level.

### **3.3.1.2 Rivers and lakes**

The situation regarding pollution in the Community's surface waters is as follows:

- untreated or insufficiently treated sewage poses a problem in many areas: 50% of the Community's population live in areas where sewage is untreated, the situation being worse in less-developed regions (94% of Portugal's population live in areas without treatment plants against 2% of the population in Denmark); disadvantaged areas must be supported in their efforts to implement the EC directive concerning urban waste water treatment (Directive 91/271/EEC), which requires that waste water treatment plants be provided for all towns with more than 15 000 inhabitants by the year 2000 and all other localities by 2005;
- the constant increase in nitrate and phosphate levels in the Community's rivers and lakes is leading, among other things, to the growth of algae, which is adding to the cost of water treatment;
- pollution by heavy metals is decreasing in many major rivers following Community measures to regulate the discharge of conventional water pollutants from industrial sites (especially the general directive on the aquatic environment, Directive 76/464/EEC, and the provisions adopted to complement it). For example, levels of lead in the Rhine were halved between 1975 and 1985. International cooperation in this field has also played a part. Further examples are conventions to protect the Danube, the Elbe and the Oder.

On the river Oder specifically, the Council has adopted Decision 1999/257/EC of 29 March 1999 by which the Convention on the International Commission for the Protection of the Oder is approved on behalf of the Community. The Convention, signed on April 1996 by Germany, the Czech Republic, Poland and the European Community (OJ L 100/21, 15.4.99) aims, *inter alia*, to prevent the pollution of the Oder and the Baltic Sea by contaminants and to achieve a sustained reduction in the pollution thereof. The Contracting Parties draw up joint action programmes within the Commission for the Protection of the Oder.

Turning to the river Danube, the Council adopted Decision 97/825/EC of 24 November 1997 (OJ L 342/18, 12.12.97) concerning the conclusion of the Convention on cooperation for the protection and sustainable use of the river Danube. By this Decision the Convention, which was signed on behalf of the Community in Sofia on 29 June 1994, is approved on behalf of the Community. Its objective is notably to "achieve the goals of a sustainable and equitable water management, including the conservation, improvement and the rational use of surface waters and ground waters in the catchment area as far as possible" (Article 2(1)). An International Commission for the Protection of the river Danube is also established.

Regarding dangerous substances discharged into the aquatic environment by industrial plants, Community legislation has introduced a system of binding limit values, whilst at the same time leaving member countries free to choose the system of quality objectives, with the corresponding obligation to show that these objectives are being complied with. The 'parent Directive', 76/464/EEC, adopted in 1976 contains a blacklist of 129 substances declared dangerous by virtue of their toxicity and bio-accumulation. To make this list more specific, special directives have been adopted over the years prescribing limit values and quality objectives for the discharge of cadmium, hexachlorocyclohexane (HCH) and mercury. For most of the substances on the list, however, there are still no EC limit values. The specification of EC limit values came to a standstill in 1991. Referring to the subsidiarity principle, the Commission now prefers to see limit values set at Member State level.

Many directives also set mere environmental quality targets applicable to water intended for certain purposes, e.g. water for drinking water abstraction and water for human consumption (see the drinking water directive, Directive 75/440/EEC, and the directive on the quality of water for human consumption, Directive 80/68/EEC) and bathing water. Directive 76/160/EEC on the quality of bathing water was introduced to prevent the spread of infectious disease. In the light of scientific and technical progress the Commission submitted a proposal (COM(94)0036) to amend the directive in 1994. The EP considered this proposal on 12 December 1996 and called for numerous amendments.

As with groundwater, however, major changes are likely where surface water is concerned if the Commission has its way. The planned framework water directive is to replace all directives, and especially the directive on the aquatic environment, with the exception of the directives concerning water for specific purposes (drinking water, bathing water). What has yet to be clarified is the relationship between emission limit values and environmental quality objectives and between the EC's and the Member States' limit values.

### **3.3.2 Coastal waters and seas**

In many cases, it is not until far from the actual source that the effects of marine pollution become visible. It is estimated that almost half of all marine pollutants are discharged into the sea from the land, either directly through pipes or via rivers, while around one third stems from atmospheric fallout and only about one fourth stems from sea-based sources. Future action to curb the pollution of the marine environment is therefore largely dependent on measures to restrict land-based sources of pollutants, most of which arise in coastal areas.



The main problems are caused by:

- nutrients deriving from the increased use of fertilizers (nitrates and phosphates), which lead to a sharp rise in the growth of algae, oxygen depletion, the death of marine organisms in large numbers and a decline in tourism;
- the lack of sewage treatment plants, particularly in the Mediterranean region;
- heavy metals and organic compounds from industrial plants.

For the measures taken to combat these problems reference should be made to the section on inland bodies of water.

A number of international agreements were signed in the 1970s aimed at curbing direct sea-based sources of pollution (the dumping, burning and discharge of waste, oil spillages, etc.). A directive concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods has also been adopted (Directive 93/75/EEC). In the autumn of 1996 the Commission submitted a proposal for the amendment of this directive (COM(96)0455), which in fact led to the adoption of three successive directives (Directive 97/34/EC of 6 June 1997, Directive 98/55/EC of 17 July 1998, and Directive 98/74/EC of 1 October 1998). These take account of the amendments to the Marpol Convention and to codes issued by the IMO, as was originally stated in Article 11 of Directive 93/75/EC. Furthermore, the Commission submitted on 17 July 1998 a proposal for a Council Directive on port reception facilities for ship-generated waste and cargo residues (COM(98)0452, COM(99)0149 (amendment)). Its purpose is to reduce the discharges of such waste and residues into the sea, especially illegal discharges, from ships using ports in the European Community, by improving the availability and use of port reception facilities. Member States are to lay down a system of enforcement and penalties relating to these aims.

It should also be noted that Directive 98/55 (OJ L 215/65, 1.8.98) adds the carriage by sea of radioactive materials (INF code) in the list of matters to be submitted to special requirements.

On 18 February 1998, the Commission transmitted a communication (COM(98)0049) to the Council and the Parliament on removal and disposal of disused off-shore oil and gas installations.

Preoccupied by the pollution caused by the spillage of hydrocarbons and other harmful substances at sea in large quantities, the Commission submitted on 16 December 1998 a proposal for a Council Decision setting up a Community framework for cooperation in the field of accidental marine pollution (COM(98)0769). The proposal aims at establishing such framework for the period 1 January 2000 to 31 December 2004, and is intended to support and supplement Member States' efforts for the protection of the marine environment, human health and coastlines against the risks for accidental pollution at sea and operational skills. Cooperation will operate in the framework of a data processing system, the 'Community Information System'.

The protection of the **North Sea** has given rise to the Bonn Convention regarding cooperation on measures to combat pollution caused by hydrocarbons and other dangerous substances, a convention to which the Community as an entity is a party (OJ L 188, 16.7.1984). At the third North Sea Conference, held in The Hague on 7 and 8 March 1990, it was agreed to impose a total ban by 1993 on the dumping of industrial waste in the North Sea; dumping of polychlorinated biphenyls (PCBs) will be permitted until 1999. However, the agreements do not alter the fact that numerous decisions of the second (1987) conference have to this day not been implemented (e.g. the 50% cut in nitrate discharges,

the ban on dumping dangerous substances, etc). Furthermore the United Kingdom was unable to give a date for ending the dumping of industrial waste before 1993 and was not willing to phase out the dumping of sewage sludge before 1998, even though all the other coastal states would have preferred earlier dates. The outcome of the North Sea conferences was accordingly criticized by the EP in its resolutions of 6 April 1990 and 9 July 1991.

The conservation of the **Baltic Sea** is an obligation under the Convention on fishing and conservation of the living resources in the Baltic Sea and the Belts - also known as the Warsaw Convention (OJ L 237/9, 26.8.1983). In a resolution of 19 October 1993 (OJ C 315/627, 22.11.1993) the EP set out a list of demands on measures to regenerate and prevent the pollution of the Baltic. On 17 March 1999, the Commission issued a proposal (COM(99)0128) for a Council Decision concerning the approval, on behalf of the Community, of the amendments to the Annexes to the Convention on the protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention).

The **Mediterranean** is the subject of a number of agreements to which the Community is Party, dealing for example with the prevention of pollution caused by dumping from ships and aircraft (Barcelona Convention of 16 February 1976) and the Mediterranean specially protected areas (OJ L 68/36, 10.3.1984). In 1999, the Commission submitted three proposals regarding amendments to the Barcelona Convention. COM(99)0028 of 28 January 1999 contains a proposal for a Council Decision on accepting the amendments to the Protocol for the protection of the Mediterranean sea against pollution from land-based sources. COM(99)0029 of 28 January 1999 deals with a proposal for a Council Decision on the acceptance of amendments to the 'Convention for the Protection of the Mediterranean Sea against Pollution' and the Protocol for the prevention of pollution by dumping from ships and aircraft (Barcelona Convention). COM(99)0030 of 29 March 1999 has been adopted in respect of a proposal for a Council Decision on concluding the Protocol (Barcelona Convention) concerning 'Specially Protected Areas and in the Mediterranean', and on accepting the Annexes to that Protocol.

By Council Decision 98/249/EC of 7 October 1997 (OJ L 104/1, 3.4.98), the Convention for the protection of the marine environment of the **North-East Atlantic** (OSPAR Convention), signed in Paris on 22 September 1992, was approved on behalf of the Community. The EP was consulted according to Article 228 of the Maastricht Treaty (OJ C 89/199, 10.4.95), and approved the proposal of the Commission (COM(94)0660) without amendments. The Convention aims to prevent and eliminate pollution and to protect the maritime area against adverse effects of human activities. Since the Community had already adopted measures in the area covered by the Convention, its participation in the Convention appeared to be a necessary complement to that of the Member States.

In a document of 23 April 1999 (COM(99)0190), the Commission submitted a proposal for a Council Decision concerning the approval, on behalf of the Community, of OSPAR Decisions 98/2, 98/3, 98/4 and 98/5 on the dumping of radioactive waste at sea, on the disposal of off-shore installations, on emission and discharge limit values for the manufacture of vinyl chloride monomer, and on emission and discharge limits in the vinyl chloride sector. In the same document, the Commission included a proposal for a Council Decision concerning the approval, on behalf of the Community, of the new Annex to the OSPAR Convention on the protection and conservation of the ecosystems and biological diversity of the maritime area, the corresponding Appendix 3, and the Agreement on the meaning of certain concepts in the new Annex.

In 1996, 1558 beaches (compared to 567 in 1989) in 16 countries (including Bulgaria, Slovenia, Turkey and Cyprus) and 475 ports (126 in 1989) in the Community were awarded the 'Blue Flag', an operation

coordinated by the Foundation for Environmental Education in Europe, sponsored by the Commission, and first launched in 1987 as part of the European Environment Year. This seal of approval is awarded to beaches and ports meeting certain criteria such as cleanliness, rescue and sanitary facilities and public information. It is hoped that this will influence tourists in their choice of destination and thus provide an incentive for those responsible to achieve the quality objectives. Significant progress has already been made in this respect through the 'Blue Flag' campaign.

In view of the deteriorating state of Europe's coastal areas the Commission has published a communication (COM(95)0511), which has been criticized by the EP for being too vague and for presenting too minimalist a programme (OJ C 78/16, 18.3.1996). Taking account of this point of view, the Commission submitted on 17 November 1997 a proposal for a Council Directive concerning the quality of bathing water (COM(97)0585). The Commission noted that Directive 76/160/EEC, which had been amended on a number of occasions should, 'for reasons of clarity', be recast. In this new proposal, the Commission included a certain number of amendments proposed by the Parliament during its plenary session in December 1996.

On a more general level, the Commission has submitted a proposal for a Council Directive establishing a framework for Community action in the field of water policy (COM(97)0049, COM(97)0614 (amendment), COM(98)0076 (amendment)). The overall purpose of the proposal is to establish, for the protection of surface fresh waters, estuaries, coastal waters and groundwater in the Community, a framework which prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to waters needs, terrestrial ecosystems, and also to promote sustainable water consumption bases on long-term protection of available water resources.

### **3.4 Role of the European Parliament**

The hearing on 'water policy in the European Union' held by the Committee on the Environment, Public Health and Consumer Protection on 20 June 1995, the committee's subsequent criticism of the lack of coordination of the Commission's current proposals relating to water and the requests the Council was prompted to make, led to the Commission communication of 21 January 1996 referred to above (COM(96)0059), in which the Commission presented a global strategy designed to make the Union's water policy more coherent, transparent and efficient. Hence, the Commission issued Special Report No 3/98 concerning the implementation by the Commission of EU policy and action as regards water pollution (OJ C 191/2, 18.6.98). In this report, the Commission considers that considerable progress has been made in introducing a water policy. Substantial efforts still need to be made, of course, particularly to devise a strategy for the integrated planning and management of water resources which take account of qualitative as well as quantitative factors.

**MAIN EC LEGISLATION ON WATER POLLUTION**

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1975  (last amended 1991)	Dir. 75/440/EEC OJ L 194/34 25.7.1975 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Quality of surface waters intended for the abstraction of drinking water	OJ C 62/7 30.5.1974	18.6.1977
1975  (last amended 1991)	Dir. 76/160/EEC OJ L 31/1 5.2.1976 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Quality of bathing waters	OJ C 128/13 9.6.1975	10.12.1977
1976  (last amended 1991)	Dir. 76/464/EEC OJ L 129/23 18.5.1976 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Pollution caused by dangerous sub- stances discharged into the aquatic environment	OJ C 5/62 8.1.1975	4.5.1978
1977  (last amended 1986)	Decision 77/795/EEC OJ L 334/29 24.12.1977 86/574/EEC OJ L 335/44 28.11.1986	Introduction of a common procedure for exchanging information on the quality of surface freshwater	OJ C 285/10 2.12.1976	12.12.1977
1979  (last amended 1991)	Dir. 79/869/EEC OJ L 271/44 29.10.1979 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Frequency of sampling and analysis of surface waters intended for the abstraction of drinking water	OJ C 67/48 12.3.1979	11.10.1981
1979  (last amended 1991)	Dir. 79/923/EEC OJ L 281/47 10.11.1979 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Quality of shellfish waters	OJ C 133/48 6.6.1977	5.11.1981
1979  (last amended 1991)	Dir. 80/68/EEC OJ L 20/43 26.1.1980 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Protection of groundwater against pollution caused by certain dangerous substances	OJ C 296/35 11.12.1978	19.12.1981

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1980  (last amended 1991)	Dir. 80/778/EEC OJ L 229/11 30.8.1980 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Quality of water for human consumption	OJ C 28/27 9.2.1976	17.7.1982
1982  (last amended 1991)	Dir. 82/176/EEC OJ L 81/29 27.3.1982 Dir.91/692/EEC OJ L 377/48 31.12.1991	Limit values and quality objectives for mercury discharges by the chloralkali industry	OJ C 175/24 14.7.1980	1.7.1983
1983  (last amended 1991)	Dir. 83/513/EEC OJ L 291/1 24.10.1983 Dir.91/692/EEC OJ L 377/48 31.12.1991	Limit values and quality objectives for cadmium discharges	OJ C 334/138 20.12.1982	28.9.1985
1984  (last amended 1991)	Dir. 84/491/EEC OJ L 274/11 17.10.1984 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Limit values and quality objectives for hexachlorocyclohexane	OJ C 127/138 14.5.1984	1.4.1986
1986  (last amended 1988)	Decision 86/85/EEC OJ L 77/33 22.3.1986 88/346/EEC OJ L 158/32 25.6.1988	Establishment of a Community information system to control and reduce marine pollution by oil and other dangerous substances	OJ C 229/15 9.9.1985  OJ C 49/155 22.2.1988	22.3.1986  25.6.1988
1986  (last amended 1991)	Dir. 86/280/EEC OJ L 181/16 4.7.1986 Dir. 91/692/EEC OJ L 377/48 31.12.1991	Limit values and quality objectives for the discharge of certain dangerous substances within the meaning of List I in the Annex to Directive 76/464/EEC	OJ C 120/172 20.5.1986  OJ C 19/587 28.1.1991	1.1.1988
1989	Dir. 89/428/EEC OJ L 201/56 14.7.1989	Harmonisation of programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry	OJ C 158 26.6.1989	31.12.1989

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1991	Dir. 91/271/EEC OJ L 135/40 30.5.1991	Urban waste-water treatment	OJ C 260/185 15.10.1990	30.6.1993
(last amended 1998)	Dir. 98/15/EC OJ L 67/29 07.03.1998			30.9.1998
1991	Dir. 91/676/EEC OJ L 375/1 31.12.1991	Protection of water against pollution by nitrates from agriculture	OJ C 158 26.6.1989	19.12.1993
1993	Dir. 93/75/EEC OJ L 247/19 5.10.1993	Minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods	OJ C 175/41 OJ C 255/47 20.9.1993	13.9.1994
(last amended 1998)	Dir. 98/74/EC OJ L 276/7 13.10.98			2.11.1999
1995	Council Resolution 95/228/EC OJ C 49/1 28.02.1995	Groundwater protection		
1997	Decision 97/825/EC OJ L 342/18 12.12.1997	Approval of the Convention on cooperation for the protection and sustainable use of the river Danube	OJ C 347/425 18.11.1996	
1998	Decision 98/249/EC OJ L 104/1 03.04.1998	Approval of the Convention for the protection of the marine environment of the North-East Atlantic	OJ C 89/199 10.04.95	
1998	Decision 98/483/EC OJ L 216/12 04.08.1998	Ecological criteria for the award of the Community eco-label to dishwashers		
1998	Dir. 98/83/EC OJ L 330/32 05.12.1998	Quality of water of human consumption	OJ C 20/133 20.01.97	36884
1999	Decision 1999/257/EC OJ L 100/20 15.04.1999	Approval of the Convention on the International Commission for the Protection of the Oder	Opinion delivered on 16.12.1998 (not yet published)	

<sup>1</sup> In the case of directives 'Entry into force' means the deadline for transposition into national law. In the case of other EC acts, the 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## 4. WASTE DISPOSAL AND PROCESSING

### 4.1 General

Each year, over two billion tonnes of waste are produced in the Community, of which approximately 30 m tonnes are classed as dangerous. The volume of waste rose in the first half of the 1980s in all Member States apart from the new German Länder and the Netherlands. The quantity of domestic waste per capita and year rose by 18% from 1965 to 1982 and is in danger of increasing by 30% by the year 2000. The economically stronger countries produce most waste: Germany, France, the United Kingdom and Italy generated 85% of the Community total and 78% of all its hazardous waste in the late 1980s, while Ireland, Denmark, Portugal, Greece and Spain produced only around 5% of total waste and 4% of hazardous waste. It is estimated that around 68% of household waste is disposed of by dumping, 17.7% by incineration, 5% by composting and 8.6% by other means, e.g. recycling.

**Table 9: General statistics on waste disposal**

Countries	EUR 15	A	B	D	DK	E	F	FIN	GR	I	IRL	L	NL	P	S	UK
1992: municipal waste (kg/inhabitant) <sup>1</sup>	407	430	400	360	460	360	470	624	310	350	312	490	500	330	370	350
1993: recycling of glass (%)	:	68	55	70	62	29	46	46	20	52	29	:	76	29	59	29
1993: proportion of population connected to sewerage system (%)	:	72	>23	86	98	50	68	77	>10	>61	44	90	93	60	95	97

<sup>1</sup> The definition of this term is not the same in all Member States. The figures should be seen only as a guide.  
Source: Eurostat

Disposal by dumping is reaching its limits in the more densely populated areas of the Community. Even though it remains a possible solution in other areas where sufficient sites are still available, opportunities are limited in the long term by the threat of water and soil pollution and the protests of the local population. Recourse to dumping will depend on the availability of conveniently situated and well-planned sites and the pre-treatment of certain waste before final dumping takes place.

Waste incineration is an option in many cases, having the advantage of energy recovery. However, investment is required to prevent toxic emissions, as well as careful planning and management of the plant and sensitive selection of sites.

The best approach is to cut the volume of waste by reducing the use of packaging and by recycling. Reprocessing has great potential for reducing pollution. Energy consumption is cut by between one fourth and three fifths for every tonne of paper produced from waste paper rather than wood, while atmospheric pollution is cut by 75%. The recycling of paper, cardboard and glass is therefore of prime

importance. Levels of recycling in the Community range between around 28% and 53% for paper and cardboard (EC average: 49.6%) and between 21% and 70% for glass.

The Community is pursuing five guiding aims in the area of waste management:

- avoiding waste by promoting environmentally-friendly and less waste-intensive technologies and processes and the production of environmentally sound and recyclable products,
- promoting reprocessing, in particular the recovery and re-use of waste as raw materials,
- improving waste disposal by introducing stringent European environmental standards, particularly in the form of legislation,
- tightening up the provisions governing the transport of dangerous substances,
- reclaiming contaminated land.

As part of this overall strategy, the plan for waste disposal in a Community area without internal frontiers is for waste to be disposed of at the plant nearest to the place where it was produced. Implementation of the system is to be based on waste management plans drawn up by each individual Member State.

A number of joint research projects have been launched with a view to reducing the quantities of waste which cannot be recycled and to put into practice processes for the recycling of industrial and domestic waste and the use of waste for agricultural purposes or for the generation of energy.

## **4.2 Relevant legislation**

Directive 75/442/EEC lays down the basic principles concerning waste, with regard to its collection, disposal, recycling and processing.

This text was supplemented by Directive 78/319/EEC (last amended by Directive 91/692/EEC) on toxic and dangerous waste. It contains a list of toxic and dangerous substances divided into 27 groups. The Member States must ensure that such waste may be stored and treated only in authorized plants. Costs of waste disposal not covered by recycling must be met according to the polluter-pays principle.

The area of toxic and dangerous waste is also covered by the following directives on specific substances not listed in Directive 78/319/EEC:

- waste oils (Directive 75/439/EEC; 91/692/EEC). On 22 May 1997, the Commission adopted Decision 97/622/EC concerning questionnaires for Member States reports on the implementation of Directive 91/692/EEC (OJ L 256/13, 19.9.1997);
- polychlorinated biphenyls and terphenyls (Directive 76/403/EEC; 91/192/EEC);
- waste from the titanium dioxide industry (Directive 78/176/EEC; 92/112/EEC).
- use of sewage sludge in agriculture (Directive 86/278/EEC). This Directive defines Community measures to protect the soil and curb the uncontrolled use of sewage sludge;



- prevention of atmospheric pollution by new incineration plants for municipal waste (Directive 89/369/EEC); reduction of atmospheric pollution by existing incineration plants for municipal waste (Directive 89/429/EEC). The two directives concern the disposal of 25% of the municipal waste produced in the Community. Emission standards are laid down for heavy metals, hydrochloric acid, hydrofluoric acid, sulphur dioxide and dust, classified according to the capacity of incineration plants. More stringent standards apply to larger plants. Existing plants are to be brought into line with the standards for new plants in two stages;
- batteries and accumulators containing dangerous substances (Directive 91/157/EEC). This directive was adopted in response to an initiative by the EP. It bans the marketing of certain batteries and accumulators containing dangerous substances. The Member States are required to take measures to ensure that used batteries and accumulators are suitably labelled and collected separately with a view to their recycling and proper disposal. Directive 91/157/EEC was amended by Commission Directive 98/101/EC of 22 December 1998 (OJ L 1/1, 05.01.1999), whereby Member States shall prohibit, as from 1 January 2000 at the latest, the marketing of batteries and accumulators containing more than 0,0005 % of mercury by weight.

Mention should also be made of the 'Post-Seveso' Directive - Directive 84/631/EEC on the supervision and control within the Community of the trans-frontier shipment of hazardous waste, which came into being largely as a result of pressure from the EP. This Directive was the Community's response to the dioxin tragedy at Seveso, when drums containing waste were being transported within the Community without even the most elementary safety precautions. The directive introduced supervision and control procedures aimed at preventing similar negligence in the future.

Directive 94/62/EC on packaging and packaging waste has been adopted. It gives top priority to waste prevention; among the various methods of waste management, it attributes equal importance to re-use and the various forms of reprocessing (by pulping or burning). Member States are set a target of reprocessing at least 50% and at most 65% of waste in five years' time (i.e. including thermal processing by burning waste) and pulping a minimum of 25% and a maximum of 45% of all waste, and at least 15% of every package by means of recycling. Exemptions from these targets are, however, allowed in the case of Greece, Ireland and Portugal.

By Decision 97/129/EC of 28 January 1998 (OJ L 50/28, 20.2.1997), the Commission established the identification system for packaging materials pursuant to Directive 94/62/EC. The Decision aims to set up the numbering and abbreviations on which the identification system is based, indicating the nature of the packaging material(s) used and specifying which materials shall be subject to the identification system. And on 3 February 1997, the Commission issued Decision 97/138/EC (OJ L 52/22, 22.2.1997), establishing the formats relating to the database system pursuant to Directive 94/62/EC. This aims to contribute to enabling Member States and the Commission to monitor the implementation of the objectives set out in the Directive.

The Commission also adopted 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 (OJ L 56/47, 04.03.1999). The Directive aims to establish the conditions under which the concentration levels of Article 11 of Directive 94/62 may not apply to plastic crates and pallets used in products loops which are in closed and controlled chain.

It is also worth noting that on 23 December 1994 Austria had notified to the Commission a draft of national measures pursuant to Directive 83/189/EEC laying down a procedure for the provision of

information in the field of technical standards and regulations. In this draft, the Austrian Government communicated its intention to exceed the recycling target laid down in Article 6(1)(b) of Directive 94/62/EC. In Decision 1999/42/EC of 22 December 1998 (OJ L 14/24, 19.1.1999), the Commission confirmed the measures notified by Austria.

On 9 July 1997 the Commission submitted a proposal for a Council Directive on end of life vehicles (COM(97)0358), which aims to ensure that end of life vehicles are discarded without endangering the environment. Collection and treatment operators should be allowed to operate only when they have received a permit. The Commission then submitted an amended proposal (COM(99)0176) which takes account of a number of amendments from the European Parliament which were adopted at its Plenary Session on 8-12 February 1999, notably an amendment on the quantity of waste generated by end of life vehicles.

On the burning of dangerous waste, the Council adopted Directive 94/67/EC containing measures and provisions to prevent or at least reduce the adverse effects on the environment and public health of incinerating dangerous waste. The directive accordingly includes conditions for the operation of waste incineration plants and emission limit values. The Commission submitted a proposal for a Council Directive amending the above-mentioned Directive (COM(97)0604). This amendment focuses on Article 8 of the Directive, and is revised so that the conditions under which the waste water from the cleaning of exhaust gases may be discharged after separate treatment, are more stringent. Then, on 29 October 1998, the Commission presented a proposal for a Council Directive on the incineration of waste (COM(98)0558) more generally. In the motives the Commission mentions, inter alia, the fifth Environment Action Programme and the Action in relation to the environment and sustainable development which sets up objectives in terms of air quality, as well as EC legislation relating to environment protection. The aim of the proposed Directive is to prevent or, where this is not practicable, to reduce as far as possible negative effects on the environment, in particular the pollution of air, soil, surfacewater and groundwater, and the resulting risks to human health, from the incineration and co-incineration of waste and, to that end, to set up and maintain appropriate operating conditions and emissions limit values for waste incineration and co-incineration plants within the Community. In particular, no incineration or co-incineration plant shall operate without a permit.

In Decision 98/184/EC of 25 February 1998 (OJ L 67/48, 7.3.1998), the Commission undertook to survey the transposition and implementation of Directive 94/67/EC and issued a questionnaire to be used by Member States as a basis for the drawing up of the report they are required to submit to the Commission pursuant to Article 5 of the Directive. By Decision 97/283/EC of 21 April 1997, the Commission laid down provisions on harmonised measurement methods to determine the mass concentration of dioxins and furans in atmospheric emissions in accordance with Article 7(2) of Directive 94/67/EC.

On the dumping of waste, the Commission put forward a proposal for a directive on waste dumps (COM(91)0102, as amended by COM(93)0275), which provides for the classification of dumps and creation of harmonized approval, checking and supervision procedures, so as to bring the Member States' provisions on dumping into line. However, as this proposal was rejected by the EP, the Council called on the Council in June 1996 to draw up a new proposal for an EC dumping directive as soon as possible.

On 10 March 1997, the Commission submitted a proposal for a Council Directive on the landfill of waste (COM(97)0105), following a Council resolution of 9 December 1996 on waste policy, where it

was stressed that, in the future, only safe and controlled landfill activities should be carried out throughout the Community. The overall objective of the Directive would be, in accordance with Directive 75/442/EEC, to provide for measures, procedures and guidance to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, as well as the resulting risks to human health, from landfilling of waste. The Commission proposed an amended proposal (COM(98)0189) which takes account of a number of amendments from the European Parliament which were adopted in its opinion at first reading at its plenary session on 16-20 February 1998 (OJ C 80/204, 16.3.1998). The Commission notably agreed to an amendment introducing a reference to the waste hierarchy in a recital, an amendment on the need for legislation on the processing of dredging sludges, and an amendment introducing an exemption for non-hazardous sludges to be deposited in surface water. However, the Commission could not agree on an amendment which addresses the need for improved monitoring and reporting systems, because that would oblige the Commission to transmit the reports drafted by Member States. The Commission also refused an amendment on the introduction of a landfill tax. On 4 June 1998, the Council formally adopted its Common Position No 49/98 (OJ C 333/15, 30.10.1998), which the Parliament examined at second reading on 9 February 1999 and approved subject to amendments. Then, the Commission submitted a re-examined proposal (COM(99)0116), incorporating the Parliament amendments on, inter alia, the definition of liquid waste, the changing to 5 years of the time frame for existing landfills to comply with the Directive.

At international level, the Community signed the Basle Convention on transboundary movements of hazardous waste in 1989, and became a full Party to it on 7 May 1994. On 22 September 1997, by Council Decision 97/640/EC, the amendment to the Convention on the control of transboundary movements of hazardous wastes and their disposal was approved on behalf of the Community (OJ L 272/45, 4.10.1997). Pursuant to Decision II/2 of the Conference of the Parties held in June 1995, exports of hazardous wastes destined for final disposal from OECD to non-OECD countries were to be prohibited immediately and exports of hazardous wastes destined for recovery operations were to be phased out until 31 December 1997 and prohibited as of that date. As a result of these negotiations, on 22 September 1995, the Conference of the Parties adopted Decision III/1, which is the object of Decision 97/640/EC, which aims to immediately prohibit exports of hazardous wastes destined for final disposal from Parties listed in a new Annex VII to the Convention, and to phase out until 31 December 1997 and prohibited as of that date exports of hazardous wastes destined for recovery operations from Parties listed in Annex VII to States not so listed. The EP delivered its opinion on 16 September 1997, and approved the decision. Then, on 6 November 1998, the Commission submitted a proposal for a Council Decision on the approval, on behalf of the Community, of the amendment of Annex I and the adoption of new Annexes VIII and IX to the Basle Convention, as laid down in Decision IV/9 of the Conference of the Parties (COM(98)0634). The overall purpose of Decision IV/9 is to clarify the notion of wastes that are characterised as hazardous.

The Council adopted Regulation (EEC) No 259/93/EEC on the supervision and control of shipments within, into and out of the Community of waste to which the Basle Convention relates. On the Community's initiative the Third Conference of the Parties to the Basle Convention agreed to its amendment to provide for the immediate prohibition of exports of hazardous waste for final disposal and the prohibition of exports of hazardous waste from OECD countries for recycling from 1 January 1998. This led the Commission to submit a proposal (COM(96)0515) to the Council for the amendment of Regulation No 259/93, which led to Council Regulation (EC) No 120/97 of 20 January 1997. The amendment also advocates the adjustment of the EU definitions and lists with respect to the term

'hazardous waste' in the regulation, since 'they did not entirely concur with those of the Basle Convention'.

The Commission has also adopted Decision 98/368/EC of 18 May 1998 adapting, pursuant to Article 42(3), Annexes II and III to Regulation No 259/93 (green list of wastes and amber list of wastes). The Commission has communicated to States the state of the implementation of Regulation No 259/93 (COM(98)0475). The Commission stresses that most Member States have failed to take the necessary steps to inform it of the measures they have taken. In addition, Commission Regulation (EC) No 2408/98 of 6 November 1998 amends Annex V to Regulation No 259/93. This Annex enumerates wastes which are classified as hazardous for the purposes of the Basle Convention, and the conditions under which they are covered by an export ban.

On that basis also, the Commission adopted on 8 February 1995 a proposal for a Council Regulation establishing common rules and procedures to apply to shipments to certain non-OECD countries of certain types of wastes (COM(94)0678). On 17 July 1997, the EP delivered its opinion (OJ C 286/229, 22.9.1997). There, the EP proposed that in the case of countries which have replied that they do not wish to receive certain types of waste, these cannot be exported to them, and in the case of countries which have not replied, the types of waste under consideration cannot be exported (the Commission had adopted a different view and sought to take account of the interest of the industrial sector). On 26 January 1998, the Commission adopted its amended proposal in view of the EP's opinion (COM(97)0685), which prompted Council's Common Position No 48/98 of 4 June 1998 (OJ C 333/1, 30.10.1998). The proposed Regulation mentions notably that the export of waste to countries and territories which have indicated to the Commission that they do not wish to receive shipments for recovery of certain types of wastes shall be prohibited, and that a control procedure shall apply to such countries and territories as have not responded to the Commission's communication on shipments for recovery of certain types of wastes. Finally, on 9 February 1999, the EP examined the Council Common Position, and approved it, subject to 7 amendments. Pursuant to Article 189c(d) of the EC Treaty, the Commission submitted on 13 April 1999 a new proposal for a Council Regulation, incorporating a number of the above-mentioned amendments (COM(99)0150).

With the same end in mind, the Community has agreed to include a provision in the new Convention of Lomé prohibiting all exports of waste from the Community to the African, Caribbean and Pacific States; they, for their part, are to prohibit all imports of waste, regardless of their origin. In accordance with the Fourth ACP-EC Convention, shipments of certain types of waste are to be prohibited by the proposed Council Regulation on shipments to certain non-OECD countries of certain types of wastes.

A special mention should also be made of the problem of radioactive waste management. The Commission forwarded a communication and fourth report on the present situation and prospects for radioactive waste management in the European Union (COM(98)0799). This followed from a Council Resolution of 1980, in which the Council approved a Community Action Plan in the field of radioactive waste, which was extended to the end of 1999. A radioactive waste is generally understood as materials for which no further use is foreseen, and which has been managed in a system of reporting, authorisation and control. All countries have radioactive waste arising from medicine, research and industry. By far the highest quantities of such waste are produced in the nuclear fuel cycle. The Commission indicates that, generally, the expected production of radioactive waste, compared with the volumes predicted for specific countries in earlier reports, has diminished considerably, notably because the construction of new power plants has been halted in most Member States. Treatment and conditioning techniques are applied on an industrial scale, and progress has been made in reducing

waste volumes through incineration, supercompaction and reduction in the added amounts of typical conditioning materials such as cement or concrete.

On 22 December 1998, the Commission also issued its second report on the application in the Member States of Directive 92/3/EURATOM of 3 February 1992 on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community. This Directive had introduced a system for the administrative supervision and control of such shipments. Article 18 thereof requires the Member States to forward to the Commission reports on the implementation of the Directive and to supplement these reports with information on the situation regarding shipments within their respective territories. On the basis of these reports, the Commission is required to prepare a summary report for the European Parliament, the Council and Social Committee. According to the Commission, it appears that the Directive is applied in all Member States, and that the number of transfrontier shipments of radioactive waste is relatively small. In the period covered by the report, Member States reported the delivery of sixty authorisations.

Finally, the Commission made a proposal for a Council Decision concerning the approval, on behalf of the Community, of OSPAR Decision 98/2 on the dumping of radioactive waste at sea (COM(99)0190 of 23 April 1999). At the 1997 OSPAR Commission meeting, France and the United Kingdom stated that they no longer wished to preserve the possibility allowed to them by Article 3(3)(b) of Annex II to the OSPAR Convention of an exemption from the permanent and complete prohibition of the dumping at sea of radioactive substances, including waste. The Commission very warmly welcomed the declaration by the French and the UK Governments and OSPAR Decision 98/2 adopted by the Contacting Parties, which revoked the exemption provided for. The Commission strongly supports this progress and expressed its support for Decision OSPAR 98/2, proposing that the Council should approve the Decision in question. The strategy provides for the identification of radioactive substances and/or human activities which give rise to concern about the impact of discharges, emissions or losses of radioactive substances, the prioritisation of such substances and activities and the development of programmes and measures suitable to ensure the application of best available techniques and best environmental practice.

### **4.3 Role of the European Parliament**

In a resolution on the need for further development of the Community strategy on waste management (OJ C 128, 9.5.1994) Parliament was in favour of forging ahead and urged the Commission to develop appropriate proposals placing stronger emphasis on waste prevention, more extensive recycling, market development and fiscal incentives. Following this incentive, the Commission issued on 8 November 1995 a report to the Parliament and the Council on waste management and policy (see also the Communication concerning the application of Directives 75/439/EEC, 75/442/EEC, 78/319/EEC and 86/278/EEC on waste management (COM(97)023) and the draft Council Regulation on waste management statistics (COM(99)0031)). On that basis, the Council adopted on 24 February 1997 a Resolution on a Community strategy for waste management (OJ C 76/1, 11.3.1997), where it calls on the Commission and Member States to ensure the implementation and enforcement of Community legislation on waste management and to intensify their cooperation in this regard.

In a further resolution adopted in November 1996 the EP criticizes the Commission's proposal for a policy of Community-wide waste management for not containing any really new proposals. Parliament therefore calls on the Commission to develop a genuine waste strategy that conforms to the principle

of sustainable development, i.e. the consumption of resources of today's generation must not compromise the consumption of resources by future generations. The targets set in the Fourth Environmental Action Programme for the year 2000 of 50% of all paper, glass and plastics re-used and the volume of waste stabilized at its 1985 level should continue to be pursued.

Parliament would also like to prevent 'waste tourism' and therefore advocates the enforcement of the polluter-pays principle and the principle of avoiding waste at source. In the EP's view, the market for the re-use of waste should be promoted.

**MAIN EC LEGISLATION ON WASTE DISPOSAL AND PROCESSING**

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1975	Dir. 75/439/EEC OJ L 194/31 25.7.1975	Waste oils	OJ C 85/6 18.7.1974	18.6.1977
(last amended 1991)	Dir. 91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.1.1991	
1975	Dir. 75/442/EEC OJ L 194/47 25.7.1975	Waste	OJ C 32/36 11.2.1975	18.7.1977
(last amended 1991)	Dir. 91/156/EEC OJ L 78/32 26.3.1991		OJ C 158/232 26.6.1989	1.4.1993
1976	Dir. 76/403/EEC OJ L 108/41 26.4.1976	Disposal of polychlorinated biphenyls and terphenyls	OJ C 157/87 14.7.1975	9.4.1978
(last amended 1996)	Dir. 96/59/EC OJ L 243/31 24.9.1996		OJ C 166 10.6.1996	
1978	Dir. 78/176/EEC OJ L 54/19 25.2.1978	Titanium dioxide production waste	OJ C 28/16 9.2.1976	22.2.1979
(last amended 1992)	Dir. 92/112/EEC OJ L 409/11 31.12.1992		OJ C 94/158 13.4.1992 OJ C 305 23.11.1992	15.6.1993
1978	Dir. 78/319/EEC OJ L 84/43 31.3.1978	Toxic and dangerous waste	OJ C 30/27 17.2.1977	22.3.1980
(last amended 1991)	Dir. 91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.1.1991	
1984	Dir. 84/631/EEC OJ L 326/31 13.12.1984	Supervision and control within the Community of the trans- frontier shipment of hazardous waste	OJ C 184/50 11.7.1983	1.10.1985
(last amended 1991)	Dir. 91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.1.1991	
1986	Dir. 86/278/EEC OJ L 181/6 4.7.1986	Sewage sludge in agriculture	OJ C 77/136 19.3.1984	4.7.1989
(last amended 1991)	Dir. 91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.1.1991	
1989	Dir. 89/369/EEC OJ L 163/32 14.6.1989	New incineration plants for municipal waste	OJ C 69/219 20.3.1989	1.12.1990

Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1989	Dir. 89/429/EEC OJ L 203/50 15.7.1989	Existing incineration plants for municipal waste	OJ C 69/223 20.3.1989	1.12.1990
1991	Dir. 91/157/EEC OJ L 78/38 26.3.1991	Batteries and accumulators	OJ C 158/209 26.6.1989	18.9.1992
1991	Dir. 91/271/EEC OJ L 135/40 30.5.1991	Urban wastewater treatment	OJ C 260/185 15.10.1990	30.6.1993
1991  (last amended 1994)	Dir. 91/689/EEC OJ L 377/20 31.12.1991  Dir. 94/31/EC OJ L 168 2.7.1994	Hazardous waste	OJ C 158/238 26.6.1989	12.12.1993
1993  (last amended 1997)	Reg. (EC) No 259/93 OJ L 30/1 6.2.1993  Reg. (EC) No 120/97 OJ L 22/14 24.1.1997	Shipments of waste within, into and out of the Community	OJ C 94/276 13.4.1992 OJ C 42/82 15.2.1993 OJ C 32/32 5.2.1996 OJ C 320/75 28.10.1996	9.2.1993  27.1.1997
1994	Dir. 94/62/EC OJ L 365/10 31.12.1994	Packaging and packaging waste	OJ C 194/154 19.7.1993 OJ C 205/163 25.7.1994	
1994	Dir. 94/67/EC OJ L 365/34 31.12.1994	Incineration of hazardous waste	OJ C 115/90 26.4.1993 OJ C 341 5.12.1994	
1997	Decision 97/138/EC OJ L 52/22 22.2.1997	Formats relating to the database system pursuant to Directive 94/62/EC on packaging and packaging waste		
1997	Decision 97/283/EC OJ L 113/11 30.4.1997	Harmonized measurement methods to determine the mass concentration of dioxins and furans in atmospheric emissions in accordance with Directive 94/67/EC		
1997	Decision 97/640/EC OJ L 272/45 4.10.1997	Approval, on behalf of the Community, of the amendments to the Basle Convention	Opinion delivered on 16 September 1997 (not yet published)	



Year	Measure	Title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1998	Dir.98/101/EC OJ L 1/1 5.1.1999	Directive adapting to technical progress Directive 91/157/EEC on batteries and accumulators containing certain dangerous substances		36525
1998	Decision 98/368/EC OJ L 165/20 10.6.1998	Decision adapting Annexes II and III to Resolution No 259/93		
1999	Decision 99/177/EC OJ L 56/47 4.3.1999	Conditions for a derogation for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directive 94/62/EC		

<sup>1</sup> In the case of directives 'Entry into force' means the deadline for transposition into national law. In the case of other EC acts, the 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## **5. CHEMICAL SUBSTANCES, INDUSTRIAL RISKS AND BIOTECHNOLOGY**

### **5.1 General**

Human activity can place both the environment and public health at serious risk. A series of legislative measures concerned with prevention are set out here under the heading of major risks and are designed to provide users and consumers with a high level of protection.

### **5.2 Relevant legislation**

#### **5.2.1 Dangerous substances**

Before an environmental policy had even been defined, in June 1967 the Council adopted Directive 67/548 to harmonize legislation and regulations on the classification, packaging and labelling of dangerous substances, last amended by Directive 96/56. These measures aim to achieve the following objectives:

- to guarantee adequate protection for man and the environment against the potential risks of chemical substances;
- to introduce a uniform notification procedure for new chemical substances and provisions on packaging and temporary labelling for dangerous substances;
- to introduce an environmental hazard mark;
- to reduce as far as possible the number of laboratory animals.

The directive as such creates a single 'gateway' through which all new chemical substances must pass before entering the Community market, so that they can be analysed for their potential effect on man and environment. This is achieved by requiring manufacturers and importers to submit a notification indicating the quantities manufactured, uses, safety precautions, the results of toxicological and environmental pollution tests and the possibilities of 'neutralizing' the substance. More stringent tests are necessary for substances for which production figures exceed 100 tonnes per year or a total of 500 tonnes and for substances for which marketing figures exceed 1000 tonnes per year or a total of 5000 tonnes.

These rules apply to all chemical substances marketed in the European Community for the first time after 18 September 1981.

This, however, is only one approach, since the directive also provides for the classification and labelling of existing chemical substances. All substances which were on the market between 1 January 1971 and 18 September 1981 are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS). This inventory, which contains more than 100 000 chemical substances, is unique of its kind. To date 2 500 of these substances have been shown to be dangerous and classified and labelled accordingly. Of the remaining substances, a further 20 000 are probably dangerous also. However, analysis and assessment of all substances will probably take a few more years.

The above mentioned Directive has been amended many times, the last one (the 25th) having been at the end of 1998 (Commission Directive 98/98/EC of 15 December 1998 - OJ L 355, 30.12.1998, p.1).

The aim of Regulation No 793/93 on the evaluation and control of the risks of existing chemicals is to enable a systematic evaluation at Community level of the risks posed by the substances listed in the EINECS (Regulation No 1488/94 established the appropriate principles for such an evaluation).

The Community has prohibited or restricted the marketing and use of certain dangerous substances and preparations by Directive 76/769, last amended by Directive 97/56 (for the 16<sup>th</sup> time and a new one is coming, having the Council adopted (on 14 December 1998) a common position (No2/1999) with a view to the adoption of a new Directive (OJ C 018, 22. 01.1999, p.43)). These substances include:

- **PCBs and PCTs:** Polychlorinated biphenyls (PCBs) and terphenyls (PCTs), used as components in electricity transformers, can turn into dioxin if a fire breaks out (as at Seveso). According to its Article 1, the purpose of Directive 96/59 on the disposal of PCBs and PCTs, which replaces the old Directive 76/403, is to approximate the laws of the Member States on the controlled disposal of PCBs, the decontamination or disposal of equipment containing PCBs and/or the disposal of used PCBs. Its aim is the complete elimination of PCBs and equipment containing PCBs.
- **PCPs:** Directive 91/173 amending Directive 76/769 for the ninth time restricted the marketing and use of pentachlorophenol (PCP) and its salts and esters in concentrations of  $\geq 0.1\%$  (by mass) in substances and preparations, since this substance, which is used in wood preservatives among other things, is considered to be a carcinogen. In a judgment of the European Court of Justice of 17 May 1994 (Case C-41/93), the Federal Republic of Germany, which had set a limit value for PCP of 0.01% before this Directive was adopted, was forbidden - at the request of France - to set a more stringent national limit value than that established in the Directive, after the Commission had earlier approved an exemption pursuant to Article 100a(4) of the EEC Treaty.
- **Asbestos:** the fifth amendment of Directive 76/769 (Directive 83/478) defined asbestos as a dangerous substance within the meaning of the original directive. Directive 91/382 was intended to protect workers against the dangers of asbestos, and the directive of 3 December 1991 (91/659) adapting Annex I to Directive 76/769 aims to restrict still further its marketing and use. A Council Conclusion on the protection of workers against the risks from exposure to asbestos was issued in April 1998 (OJ C 142, 07.05.1998, p.1) and many written questions have been forwarded to the Commission by MEPs on issues related to this dangerous substance (OJ C 158, 25.05.1998, p.180; OJ C 174, 08.06.1998, p.104; OJ C 386, 11.12.1998; OJ C 013, 18.01.1999, p.75; OJ C 096, 08.04.1999, p.150).
- **Pesticides:** plant protection products have been the subject of twin measures. The first (Directive 76/895) is based on Article 43 of the EEC Treaty relating to the CAP and lays down maximum levels for pesticide residues in and on fruit and vegetables. The second measure, based on Article 100 of the EEC Treaty relating to the harmonization of legislation, is intended to prohibit the sale and use of plant protection products containing certain active substances (OJ L 33, 8.2.1979). The list issued with the directive deals with the categories of prohibited products, that is to say compounds of mercury and persistent organochlorine compounds (aldrin, dieldrin, chlordane, endrin, DDT, etc.). The annex to this directive is constantly updated on the basis of the latest scientific and technological findings.

In 1995 the Commission submitted to the Council a proposal for a directive amending the annexes to Directives 76/895, 90/642, 86/362 and 86/363 with a view to limiting residues of such common pesticides as glysofate, fenarimol and benomyl (COM(95)0448).

On 15 July 1991 a new Council directive was adopted, No 91/414 on the placing of plant protection products on the market (last amended by Directive 99/1/EC of 21.01.1999 - OJ L 021, 28.01.1999, p.21). The aim of this directive is to create uniform conditions for the authorization of plant protection products and to establish an authorization procedure. The directive aims to complement provisions on the categorization, packaging and labelling of pesticides.

Annex VI to the Directive was established in Directive 94/43 in a legislative procedure in which the EP was not involved. The EP's appeal to the Court of Justice to have the decision declared void was successful, the Court ruling that the contents of the basic directive had been inadmissibly modified by the annex (Case C-303/94).

A project on sustainable use of plant protection products was launched by the EU executive after the Fifth Environmental Action Programme was adopted in 1992. The aim was to investigate the current use patterns of plant health products (agricultural pesticides), the problems associated with their use, and to prepare possible future initiatives. This project came to an end in May 1998 when a workshop, including all concerned, discussed the outcome of the project reports and adopted a set of conclusions (more information can be obtained directly on the Commission's website:

<http://europa.eu.int/comm/dg11/ppps/home.htm>).

As a follow-up, the Commission is currently drafting a Communication on the sustainable use of plant protection products.

Ninety active substances are currently under examination under Commission Regulation 3600/92/EEC (OJ L 366, 15.12.1992, p.10), which set out detailed rules for a review of all the active substances of plant health preparations that were already on the market before Directive 91/414/EC came into force, with a view to their inclusion on the positive list of authorised substances.

Industrial chemicals are divided into "existing" and "new" chemicals. "Existing" chemicals are those which were on the Community market before September 18, 1981. Data provided by European industry shows that there are approximately 2,500 "existing" chemicals on the Community market. All "new" chemicals are assessed for their risks to human health and the environment before they are placed on the Community market. Since 1993, some 600 new chemicals have been assessed.

- **Placing of biocidal products on the market:** on 26 June 1996 the EU Environment Ministers adopted a common position on the biocide directive (Commission proposal COM(93)0351, amended by COM(95)0387). The Directive concerns the use of all biocidal products outside agriculture. It covers the whole range of wood preservatives and disinfectants, rat poison and anti-fouling agents. An authorization for these products is to be issued only if they appear on a positive list. To comply with the internal market principle, once a substance has been authorized in one Member State, it may be used throughout the Union.

Part of the above mentioned project focused on the agricultural use of pesticides also covered biocidal uses and will be used in the future for assessing the need to take further steps for reduction of the use of biocides as a complement to the implementation of Directive 98/8/EC of 16 February 1998 (OJ L 123, 24.04.1998, p.1), concerning the placing of biocidal products on the market. Preparations are under way to start the evaluations of biocidal products as soon as the "Biocides Directive" is implemented by Member States, which is foreseen by May 13, 2000.

### **5.2.2. Detergents**

In 1973, two directives were adopted, one prescribing the average rate of biodegradability for surfactants (Directive 73/404 - OJ L 347, 17.12.1973, p.51), the other relating to methods of testing biodegradability of anionic surfactants (Directive 73/405 - OJ L 347, 17.12.1973, p.53). These measures aim to prevent the large-scale formation of foam which limits air-water contact and so jeopardizes the photosynthesis vital to aquatic flora. A further risk is that of the eutrophication of the water by the addition of fertilizers in the form of phosphates used in the manufacture of detergents.

The two above mentioned Directives were last amended respectively by Dir.86/94/EEC (OJ L 80, 25.03.1986, p.51) and by Dir.82/243/EEC (OJ L 109, 22.04.1982, p.18).

Such a topic has been considered several times throughout the years by MEPs (OJ C 161, 20.06.1991, p.12; OJ C 242, 21.09.1992, p.27; OJ C 234, 22.08.1994, p.47).

In 1995, a Commission Decision (95/365/EC - OJ L 217, 13.09.1995, p.14) established the ecological criteria for the award of the Community eco-label to laundry detergents, whereas good environmental practice for household laundry detergents were concerned by a Recommendation of 22 July 1998 (98/480/EC - OJ L 215, 01.08.1998, p.73).

Early this year, a proposal for a Council Decision concerning the setting of ecological criteria for the award of the Community eco-label to detergents for dishwashers was issued (COM(99)0023).

### **5.2.3 The risk of major accidents associated with certain industrial processes**

After the dioxin accident at Seveso, the Community took steps to prevent major accidents and to limit their consequences. Directive 82/501/EEC of 24 June 1982 (OJ L 230, 05.08.1982, p.1), amended for the first time in 1987 (Dir. 87/216/EEC - OJ L 85, 28.03.1987, p.36), imposes the same obligation on manufacturers in all Member States to inform the authorities about substances, plants and possible locations of major accidents. It imposes on Member States the obligation to inform persons likely to be affected by a major accident. It authorizes the Commission to maintain files containing an account of major accidents which occur, including an analysis of their causes and the measures taken in response. As a directive under the EEC Treaty, it applies neither to the activities of the ECSC nor to nuclear installations.

Directive 88/610/EEC (OJ L 336, 07.12.1988, p.14), amending this directive, has extended its scope to the storage of dangerous chemical products, whether packaged or not, at any site. The provisions on informing the public have also been made more stringent; details are given of the minimum information which must be made available (e.g. the nature of the risk to the public and the environment, measures to be taken in the event of an accident, existing emergency plans and provisions on access to further information).

Directive 96/82/EC (OJ L 10, 14.01.1997, p.13) amends and supplements Seveso Directive 82/501. It is intended to prevent serious accidents involving dangerous substances and to limit the consequences of accidents for man and the environment and applies to plants and the working environment in which dangerous substances are present.

In 1998 the Commission adopted a Decision (98/433/EC - OJ L 192, 08.07.1998, p.19) on harmonised criteria for dispensations according to Article 9 of Dir.96/82.

The Council also issued a Decision (98/685/EC - OJ L 326, 03.12.1998, p.1) concerning the conclusion of the Convention on the Transboundary Effects of Industrial Accidents. The Parliament had already given an opinion about this in 1997 (OJ C 339, 10.11.1997, p.26).

#### **5.2.4 Biotechnology**

On 23 April 1990 the Council adopted Directives 90/219 and 90/220 (both amended for the first time in 1994 respectively by Dir. 94/51/EC - OJ L 297, 18.11.1994, p.29 and by Dir. 94/15/EC - OJ L 103, 22.04.1994, p.20) on the contained use of genetically modified micro-organisms and the deliberate release into the environment of genetically modified organisms.

Measures to control the contained use of genetically modified micro-organisms (e.g. in research and development) have been drawn up on the basis of the first directive. These include a notification system, the implementation of specific containment measures (depending on the type of micro-organism and the nature of the activity) and measures relating to accidents and waste management.

The second directive is concerned with the safe use of genetically modified organisms deliberately released into the natural environment. It lays down a case-by-case notification and approval system, the procedure for which varies according to whether the organisms have been released in the framework of research and development or whether the products in question are for commercial use.

In 1996 the Commission adopted, on the basis of Directive 90/220, four decisions authorizing the marketing of certain herbicide-resistant varieties of rapeseed, soya, chicory and maize. The EP was highly critical of the Commission for permitting the marketing of genetically modified maize despite the reservations expressed by scientists and the opposition of 13 of the 15 Member States (Resolution B4-0147, adopted on 8 April 1997, and others).

The Commission adopted Decisions in this respect also in 1997 (97/392 and 97/393 - OJ L 164, 21.06.1997, p.40 and p.38) and in 1998 (98/291, 98/292, 98/293 and 98/294 - OJ L 131, 05.05.1998, p.26, 28, 30 and 33).

Austria and Luxembourg have meanwhile taken steps to prohibit the marketing of genetically modified maize through the application of Article 16 of Directive 90/220 and proposals for a Council Decision concerning this provisional prohibition have been made (COM(98)0339 - Austria and COM(98)0340 - Luxembourg) .

Directive 90/219 was last amended in 1998 by Dir.98/81/EC of 26.10.1998 (OJ L 330, 05.12.1998, p.13) whereas Dir.90/220 was last amended in 1997 by Dir.97/35/EC of 18.06.1997 (OJ L 169, 27.06.1997, p.72) even though proposals for a European Parliament and Council Directive amending it again were made, the last one having been forwarded by the Commission to the Council early this year (COM(99)0139).

In January 1997 Regulation No 258/97 on novel foods and novel food ingredients was adopted after the Council and EP agreed following a lengthy conciliation procedure and under pressure from Parliament that the Europe-wide labelling of genetically modified food, its ingredients and additives

was now needed. They may be placed on the market only if they have been explicitly confirmed as being harmless to the consumer's health after an assessment procedure.

Following the research and technological development programme in the field of biotechnology (BRIDGE) (1990-1994), the Council adopted a programme in the field of biotechnology (Decision 94/912/EC - OJ L 361, 31.12.1994, p.25). This programme run until the end of 1998 and had been allocated ECU 552 m. The specific programme was based on Decision 1110/94/EC (OJ L 126, 18.05.1994, p.1) on the fourth framework programme in the field of research, technological development and demonstration and implemented its biotechnology section.

The European Parliament is particularly active as far as GMOs and biotechnologies are concerned. In fact, a Resolution on the mandate of the Group of Advisers on the Ethical Implications of Biotechnology to the European Commission dates back to 1997 (OJ C 200, 30.06.1997, p.258) and a Resolution on the impact of biotechnology on agriculture was issued in 1998 (OJ C 080, 16.03.1998, p.242).

Several questions have been forwarded to both the Council and the Commission by MEPs in relation to genetically modified organisms but the relevant EP debates are not yet published.

To conclude with, a Commission Directive 1999/12/EC (OJ L 077, 23.03.1999, p.22) adapting to technical progress the Annex to Council Directive 88/320/EEC on the inspection and verification of good laboratory practice (GLP) need to be mentioned.

### **5.2.5 Export and import of dangerous substances**

Council Regulation No 2455/92 of 23 July 1992 amends Regulation 1734/88 on the export out of and import into the Community of certain dangerous chemicals. The new regulation provides for a joint notification procedure and information system on the import and export of such chemicals. The Regulation has since been amended by Regulations Nos. 3135/94 and 41/94 (this last one was repealed by Commission Regulation No 1492/96/EC of 26 July 1996 - OJ L 189, 30.07.1996, p.19) to extend the list of dangerous chemicals the import and export of which must be reported.

The transport of dangerous goods by road (Directive 94/55/EC - OJ L 319, 12.12.1994, p.7) and by rail (Dir.96/49/EC - OJ L 235, 17.09.1996, p.25) was also considered. Both Directives were amended in 1996 (respectively Dir.96/86/EC - OJ L 335/43, 24.12.1996 and Dir.96/87/EC - OJ L 335/45, 24.12.1996) and adaptations have been recently approved by the Commission. They entered into force in January 1997, including a number of transitional provisions expiring on January 1, 1999, intended to permit the finalisation of standardisation of provisions on certain tankers and recipients for the transport of gas. Delays at the European Committee for Standardisation (CEN) mean the deadlines outlined in the two texts are no longer consistent with the prevailing situation and June 2001 is therefore proposed as a new deadline.

**MAIN EC LEGISLATION ON CHEMICAL SUBSTANCES**

Year	Measure	Short title (abbreviated)	EP opinion	Entry into force <sup>1</sup>
1967	Dir. 67/548/EEC OJ L 196/1 16.08.1967	Approximation of legislation on classification, packaging and labelling of dangerous substances	OJ 209/3133 11.12.1965	01.01.1970
(last amended 1998)	Dir. 98/98/EC OJ L 355/1 30.12.1998			01.07.2000
1973	Dir. 73/404/EEC OJ L 347/51 17.12.1973	Approximation of legislation on detergents	OJ C 10/29 05.02.1972	27574
(last amended 1986)	Dir. 86/94/EEC OJ L 80/51 25.03.1986		OJ C 68/191 24.03.1986	
1973	Dir. 73/405/EEC OJ L 347/53 17.12.1973	Approximation of legislation on methods of testing the biodegradability of anionic surfactants	OJ C 10/29 05.02.1972	26.05.1975
(last amended 1982)	Dir. 82/243/EEC OJ L 109/18 22.04.1982		OJ C 172/111 13.07.1981	14.10.1983
1976	Dir. 76/769/EEC OJ L 262/201 27.9.1976	Approximation of legislation on restricting the marketing and use of certain dangerous substances and preparations	OJ C 60/49 13.03.1975	03.02.1978
(last amended 1997)	Dir. 97/56/EC OJ L 333/1 04.12.1997		OJ C 33/75 03.02.1997	01.03.1999
1978	Res.30.05.1978 OJ C 133/1 07.06.1978	Fluorocarbons in the environment		
1978	Dir. 78/631/EEC OJ L 206/13 29.07.1978	Approximation of the laws of the Member States relating to the classification, packaging and labelling of dangerous substances (pesticides)	OJ C 30/35 07.02.1977	01.01.1981
(last amended 1992)	Dir. 92/32/EEC OJ L 154/1 05.06.1992		OJ C 284/85 12.11.1990 OJ C 13/82 20.01.1992	31.10.1993
1979	Dir. 79/117/EEC OJ L 33/36 08.02.1979	Prohibition of the placing on the market and the use of plant protection products containing certain active substances	OJ C 30/38 07.02.1977	01.01.1981
(last amended 1991)	Dir.91/188/EEC OJ L 92/42 13.04.1991			31.03.1992



Year	Measure	Short title (abbreviated)	EP opinion	Entry into force <sup>1</sup>
1980	Decision 80/372/EEC OJ L 90/45 03.04.1980	Chlorofluorocarbons in the environment	OJ C 4/68 07.01.1980	29766
1982	Decision 82/795/EEC OJ L 329/29 25.11.1982	Consolidation of precautionary measures concerning CFCs in the environment	OJ C 125/167 17.05.1982	30273
1982	Dir. 82/883/EEC OJ L 378/1 31.12.1982	Surveillance and monitoring of environments concerned by waste from the titanium dioxide industry	OJ C 149/101 14.06.1982	31025
1983	Dir. 83/513/EEC OJ L 291/1 24.10.1983	Limit values and quality objectives for cadmium discharges	OJ C 334/138 20.12.1982	28.09.1985
(last amended 1991)	Dir.91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.01.1991	01.01.1993 01.01.1994 01.01.1995 (see Art.7)
1984	Dir. 84/156/EEC OJ L 74/49 17.03.1984	Limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electro- lysis industry	OJ C 10/300 16.01.1984	12.03.1986
(last amended 1991)	Dir. 91/692/EEC OJ L 377/48 31.12.1991		OJ C 19/587 28.01.1991	01.01.1993 01.01.1994 01.01.1995 (see Art.7)
1988	Resolution 88/204/EEC 25.01.1988	Community action programme to combat environmental pollution by cadmium		
1988	Reg. (EEC) No 1734/88 OJ L 155/2 22.06.1988	Export and import of certain dangerous chemicals	OJ C 281/199 19.10.1987	22.06.1989
(last amended 1996)	Reg. (EC) No 1492/96 OJ L 189/19 30.07.1996			30.08.1996
1989	Dir. 89/428/EEC OJ L 201/56 14.07.1989	Harmonizing the programmes for the reduction and eventual elimina- tion of pollution caused by waste dioxide industry	OJ C 158/248 26.06.1989	31.12.1989

Year	Measure	Short title (abbreviated)	EP opinion	Entry into force <sup>1</sup>
1989	Reg. (EEC) No 428/89 OJ L 50/1 22.02.1989	Export of certain chemical products		22.02.1989
(last amended 1994)	eg. (EC) No 3381/94 OJ L 367/1 31.12.1994		OJ C 268/26 04.10.1993	01.07.1995
1991	Dir. 91/157/EEC OJ L 78/38 26.03.1991	Batteries and accumulators containing certain dangerous substances	OJ C 158/209 26.06.1989 OJ C 19/87 28.07.1991	18.09.1991
(last amended 1998)	Dir. 98/101/EC OJ L 001/1 05.01.1999			31.12.1999
1991	Dir. 91/414/EEC OJ L 230/1 19.08.1991	Marketing of plant protection products	OJ C 72/33 18.03.1991	26.07.1993
(last amended 1999)	Dir. 99/01/EC OJ L 21/21 28.01.1999			31.07.1999
1993	Reg. (EEC) No 793/93 OJ L 84/1 05.04.1993	Evaluation and control of the risks of existing substances	OJ C 280/65 28.10.1991 OJ C 337 21.12.1992	05.06.1993
(last amended 1994)	Reg. (EC) No 1488/94 OJ L 161/3 29.06.1994	Laying down of principles for the assessment of risks of existing substances		28.08.1994
1996	Dir. 96/59/EC OJ L 243/31 24.09.1996	Disposal of PCBs and PCTs	OJ C 149/150 18.06.1990 OJ C 19/38 18.01.1991 OJ C 166/76 10.06.1996	35323
1998	Dir.98/8/EC OJ L 123/1 24.04.1998	Placing of biocidal products on the market	OJ C 144/191 13.05.1996	36658

<sup>1</sup> In the case of directives, 'Date of entry into force' means the deadline for transposition into national law. In the case of other EC acts, 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

**MAIN EC LEGISLATION ON INDUSTRIAL RISKS**

Year	Measure	Short title (abbreviated)	EP opinion	Entry into force
1982	Dir. 82/501/EEC OJ L 230/1 05.08.1982	Major-accident hazards of certain industrial activities	OJ C 175/49 14.07.1980	08.01.1984
(last amended 1997)	Dir. 96/82/EC OJ L 10/13 14.01.1997		OJ C 56/80 06.03.1996 OJ C 261/24 09.09.1996	03.02.1997
1993	Dir. 93/75/EEC OJ L 247/19 05.10.1993	Minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods	OJ C 175/41 16.07.1990 OJ C 255 20.08.1993	13.09.1994
(last amended 1998)	Dir.98/74/EC OJ L 276/7 13.10.1998			02.11.1999
1994	Dir. 94/55/EC OJ L 319/7 12.12.1994	Approximation of the laws of the Member States with regard to the transport of dangerous goods by road	OJ C 205/54 25.07.1994 OJ C 301/25 27.10.1994	31.12.1996
(last amended 1996)	Dir.96/86/EC OJ L 335/43 24.12.1996			31.12.1996
1996	Dir. 96/49/EC OJ L 235/25 17.09.1996	Approximation of the laws of the Member States with regard to the transport of dangerous good by rail	OJ C 249/138 25.09.1995	35429
(last amended 1998)	OJ L 294/1 31.10.1998			
1998	Decision 98/685/EC OJ L 326/1 03.12.1998	Conclusion of the Convention on Transboundary Effects of Industrial Accidents	OJ C 339/26 10.11.1997	

<sup>1</sup> In the case of directives, "Date of entry into force" means the deadline for transposition into national law. In the case of other EC acts, 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

**MAIN EC LEGISLATION ON BIOTECHNOLOGY**

Year	Measure	Short title (abbreviated)	EP opinion	Entry into force
1990	Dir. 90/219/EEC OJ L 117/1 08.05.1990	Contained use of genetically modified organisms	OJ C 158/122 26.06.1989 OJ C 96 17.04.1990	23.10.1991
(last amended 1998)	Dir. 98/81/EC OJ L 330/13 05.12.1998		OJ C 115/59 14.04.1997	05.06.2000
1990	Dir. 90/220/EEC OJ L 117/15 08.05.1990	Deliberate release into the environment of genetically modified organisms	OJ C 158/225 26.06.1989 OJ C 96 17.04.1990	23.10.1991
(last amended 1997)	Dir. 97/35/EC OJ L 169/722 27.06.1997			31.07.1997
1997	Reg. (EC) 258/97 OJ L 43/1 14.02.1997	Novel foods and food ingredients	OJ C 315/139 22.11.1993 OJ C 96/26 01.04.1996	14.05.1997

- 1 In the case of directives, 'Date of entry into force' means the deadline for transposition into national law. In the case of other EC acts, 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## 6. NOISE

### 6.1 General

It is mainly in highly industrialized countries with high traffic densities that noise is regarded as a serious threat to the quality of life. The extent of the nuisance largely depends on psychological and sociological factors. However, the effect of persistently high noise levels on health should not be underestimated. For example, it has been shown that residents of busy streets have higher blood pressure; thus the existing problem of hypertension is further aggravated by noise pollution, especially for persons who are subjected to high noise levels both at work and in the home environment. Similarly, account should be taken of the effects on animals since certain species are highly sensitive to noise.

An OECD study shows that around 50% of the 826 million people in the OECD Member States are exposed to traffic noise of more than 55 dB(A) and around 16% are exposed to traffic noise of more than 65 dB(A). The WHO claims that ambient noise levels in Europe are increasing, in spite of technological improvements, due to the increasing number of vehicles on the roads. Between 1980 and 1990, the proportion of the European population exposed to unacceptable noise levels (65 dB over 24 hours) increased from 15% to 26%. In France, 25% of people living in cities are exposed to a noise level of more than 65 dB(A); in Germany the figure is 15 - 20%. In Germany, half the population considers traffic noise a nuisance while one in five citizens suffer greatly as a result of traffic noise.

It has so far proved impossible to achieve a lasting reduction in noise levels. Even though noise emissions from road traffic and aircraft have been cut through the introduction or gradual reduction of limit values, the simultaneous expansion in road and air traffic has meant that the effects have been limited to slowing down the rate at which noise increases. A further increase in sources of noise is to be expected, given that the growing number of newly registered cars and aircraft will add to the volume of traffic.

Noise can have a detrimental effect on the quality of life. It has been shown not only to cause annoyance but also to interfere with speech comprehension and with sleep. Children in noisy environments such as airports are more likely to perform poorly at school and to have impaired reading acquisition and problem-solving abilities and attention span. Studies increasingly show a link between high noise levels and ischemic heart disease and hypertension.

Measures to reduce noise have therefore been based on three main approaches:

- combatting noise at source, e.g. by reducing noise emissions from vehicles, construction equipment, domestic appliances, etc., and by standardizing methods of measuring noise;
- reducing noise pollution by means of a more definite geographical separation between residential and industrial areas;
- taking 'passive' noise abatement measures such as noise protection zones along motorways.

Noise abatement has been addressed in five programmes on environmental protection. The fifth action programme contained plans to establish a noise register (by 1994) and noise abatement programmes in addition to further reductions in noise emission from road vehicles, aircraft and machines.

Manufacturers must be informed in good time of reductions in limit values for noise emissions so that they can adapt to such developments.

Given that there is always a delay before noise from new products can be combatted effectively, limit values should be introduced for products already in use. Monitoring similar to that which already applies to motor vehicles should also be possible.

Economic incentives aimed at the market are an essential part of Community noise abatement policy. Possible measures are:

- subsidies for the purchase of quieter products,
- a legal requirement to provide information on products,
- noise levies in accordance with the polluter-pays principle,
- the introduction of noise licences,
- subsidies for the development of quieter products.

## **6.2 Relevant legislation**

A series of directives have been adopted on noise abatement. Noise emission levels have been established for motor vehicles, motor cycles, agricultural and forestry tractors, domestic appliances, earth-moving equipment, construction equipment, lawn mowers and civilian subsonic aircraft.

Particular attention has been paid to road and air traffic, which poses a major noise nuisance.

### **6.2.1 Motor vehicles**

The basic Council Directive on the permissible sound level and the exhaust system of motor vehicles (70/157/EEC) covers all motor vehicles with a maximum speed of more than 25 km/h. In 1995/1996 the noise limit on passenger cars was reduced to 74 dB(A) or half the previous level, which means that two of the next generation of cars will together emit as much noise as one today. The significant reduction in the noise emitted by car engines will, however, be partly offset by the increase in the number and performance of cars and in the number of more powerful and heavier vehicles.

The limit value adopted by the EC for heavy goods vehicles in November 1992 is 80 dB(A). This 'quiet' HGV is thus becoming the standard vehicle for the transport of goods on Europe's roads. This means that since 1995/1996 25 new HGVs have together been as noisy in urban traffic as a single HGV in the early 1980s, measured at the noise limit values and with account taken of methods of measurement. HGVs that comply with the noise limits defined in the new EC Directive may be marked as such since 1994. This has made it far easier to monitor schemes of advantage to users of quiet HGVs, which is particularly relevant to the ban on the use of all transit motorways and adjoining federal highways in Austria from 10 p.m. to 5 a.m., from which quiet HGVs (limit values: 78 dB(A) for HGVs <150 kW and 80 dB(A) for HGVs >150 kW) are exempted.

## 6.2.2 Motorized two-wheelers

Surveys show motorcycles and HGVs to be placed at the top of the list of worst offenders where road traffic noise is concerned. As they are ridden for leisure purposes, motorcycles are often used at times when and places where noise is disturbing. In comparable traffic conditions the noise emissions of motorcycles are far higher than those of cars, by about 6 dB(A) on average. An added factor is that motorcycle of the same type emit different levels of noise depending on how they are ridden.

**Table 10: EC noise limit values applicable to HGVs**

	before 1.10.1989 or 1990	since 1.10.1989 or 1990	since 1.10.1995 or 1996	for comparison <sup>1</sup>	
				Switzerland	Japan
Cars	80	77	74	75	78
Buses <150 kW	82	80	78	80	83
Buses >150 kW	85	83	80	82	83
Small buses < 2 tonnes Vans	81	78	76		
Small buses 2-3.5 tonnes Vans	81	79	77	77	78
HGVs >3.5 tonnes < 75 kW	86	81	77	80	83
HGVs 75-150 kW	86	83	78	82	
HGVs >150 kW	88	84	80	84	83

<sup>1</sup> 'Lutter contre le bruit dans les années 1990', OECD, Paris 1991, p. 73

The noise levels of motorized two-wheelers too have long been limited by EC directives. Directive 78/1015/EEC on the permissible sound level and the exhaust system of motorcycles has been amended on several occasions, one of the latest reduction entering into force in 1993/1994. The noise limit values have since been 75 dB(A) for motorcycles up to 80 cc, 77 dB(A) for motorcycles between 80 and 175 cc and 80 dB(A) for motorcycles over 175 cc.

Currently under discussion in the EC is a new directive on two- and three-wheeled vehicles that will, among other things, specify maximum permissible noise levels for all categories of motorcycles and require all the Member States to enforce them.

## 6.2.3 Aircraft

Under the Council Directive on the limitation of noise emissions from subsonic aircraft (80/51/EEC) certification is restricted to aircraft which comply with the requirements of Annex 16, Part II of the Convention on International Civil Aviation, third edition, July 1978 or equivalent standards. The Directive is based on the standards of the International Civil Aviation Organization and aims to reduce

aircraft noise while taking account of environmental protection, technical feasibility and the economic consequences.

Under Council Directive 92/14 only subsonic jet aircraft which have a by-pass ratio of less than two or satisfy the requirements of Chapter 3 of the Convention referred to above or have been in use for not more than 25 years may operate at airports situated in the Member States. Exemptions are possible for the aircraft of certain particularly poor developing countries.

This Directive has been amended by Dir. 98/20/EC. According to it Member States may limit deletion from their registers of all mention of aeroplanes which do not comply with the standards of Chapter 3 of Annex 16 to an equivalent annual rate of up to 10% of the total civil subsonic jet fleet of a Community air carrier. From 1 April 2002 all subsonic jet aircraft are to meet the requirements of Chapter 3. The Member States may grant exemptions in individual cases and for flights needed for the maintenance of aircraft. Exemptions can also be granted for replacement aircraft in certain circumstances and for aircraft of historical interest.

The latest amendment to Dir. 92/14/EC is the Commission Directive 1999/28/EC of 21 April 1999 which amends its Annex (OJ L 118, 06.05.1999, p.53).

A Council Regulation (EC) No 925/1999 on the registration and operation within the Community of certain types of civil subsonic jet aeroplanes which have been modified and recertificated as meeting the standards of volume I, Part II, Chapter 3 of Annex 16 to the Convention on International Civil Aviation, third edition (July 1993) was adopted lately this year (OJ L 115, 04.05.1999, p.1)(the so-called "anti-hushkits" Regulation). It was adopted on 29 April 1999 but its introduction has been postponed for a year.

The Parliament delivered its opinion on this on 16 September 1998 (OJ C 313, 12.10.1998, p.94).

This topic is a very controversial one which is currently a matter of dispute between EU and US.

The Directive on environmental impact assessment (Directive 85/337/EEC) applies to public and private projects, i.e. construction works and other measures having effects on nature and the landscape. Provision is made for airports with a runway length of 2100 metres or more to undergo a procedure arranged by the Member States in which the main effects of the project on the environment are identified and assessed. The procedure provides in particular for the public to be given the opportunity to express an opinion.

#### **6.2.4 Railways**

The noise caused by the transport of goods, especially by road, can be significantly reduced only if it is transferred to the railways. However, the resulting increase in the number of trains, particularly at night, would contrast with the demand from increasingly sensitive people living near railways for a reduction in both the number of trains and the speed at which they travel. This conflict of interests can be overcome only with a noise reduction programme that entails both the use of a new, quiet generation of rolling stock and measures to improve the track itself.

The aim of the programme to develop a 'low noise train' launched jointly by Deutsche Bahn AG, the Austrian Federal railway and the Italian railway company was a substantial reduction of the noise



immissions of the whole system by as much as 23 dB(A) by introducing rolling stock of an acoustically optimal new design. Another goal was to make the transport of goods by rail more attractive and so more competitive by reducing current 'life cycle costs' by 40% and achieving speeds of up to 160 km/h. To this end, attempts were made to develop one or two locomotives and three to five types of waggon suited to the various types of product to be transported. A prototype waggon was to be available for testing and measurement purposes at the end of 1997.

Studies of the 'low noise train' found that various measures can be taken to achieve major noise reductions. Encasing bogies, for example, already reduces noise immissions considerably. It has also been shown that much of the noise emanating from trains is due to the roughening of the wheel treads by the break shoes or to corrugation of the rail surface. These and other findings of the studies so far conducted, together with the use of low-noise motors and the prevention of vibration and loose connections within rolling stock, will have to be taken into consideration in the future development of the new generation of rolling stock.

At EU level a proposal for the approximation of legislation on sound emitted by rolling stock that was originally put forward in 1984 (COM(83)0706) was withdrawn by the Commission on 28 July 1993 (OJ C 228/12, 24.08.1993).

### **6.2.5 Trade and industry**

The sources of tiresome industrial noise include building sites, since they are outdoors and often close to residential areas. Since 1984 the EC has imposed noise limits on a number of frequently used types of construction machinery (e.g. concrete-breakers, power generators, compressors and earth-moving machines). The limit values are determined in a type examination test and inscribed on the machines before they are marketed in the EU. The limit values have been gradually lowered: in July 1995, the EU adopted a Directive reducing the noise limit values for earth-moving machines (95/27/EC), which since December 1996 has imposed values calculated by a practical measuring procedure and in all some 3 dB(A) lower than the values previously applicable. Provision has been made for a further 3 dB(A) reduction from December 2001.

A draft Directive to regulate noise emissions from 55 types of outdoor equipment has been published by the European Commission earlier this year (COM(98)0046). According to this proposal all products would have to be marked with their guaranteed maximum sound power level, while noise limits would be set for a third. Equipment for which noise limits will be set for the first time includes loader-type landfill compactors, builders' hoists, motor hoes and lawn trimmers. Equipment not subject to noise limits includes portable chain saws, compaction machines, concrete mixers, hedge trimmers, leaf blowers, piste caterpillars, refuse collection vehicles and shredders/chippers. Manufacturers would be obliged to follow a harmonised conformity assessment procedure before placing any of these products on the market. The limits would take effect in two stages-the first being two years and the second six years after the Directive's entry into force. Aspects of the noise testing procedure are being resisted by industry, suggesting that negotiations may take some time.

## **6.3 Proposals for future Community noise abatement measures**

To ensure adequate noise abatement in the future, especially in road traffic, it is important to begin by tackling noise at its source. Various proposals have been made in this respect. A Dutch proposal, for example, calls for the introduction in the Community of emission values of 74 dB(A) for cars and 74-76

dB(A) for HGVs by the year 2000 and of 70 dB(A) for cars and 75 dB(A) for HGVs by the year 2015. As the rolling noise of car tyres on the road surface at high speeds is one of the main sources of noise, the use of a quieter tyre, especially on motorways and suburban roads, would reduce noise emissions by as much as 6 dB(A). Non-skid road surfaces also reduce noise. The use of 'whispering' asphalt would lead to an eightfold reduction in noise emissions. The replacement of diesel engines with gas engines in commercial vehicles would also result in a significant reduction in noise in road traffic. Noise abatement zones might also be established around airports. Other proposals call for the erection of noise protection walls and the sound insulation of buildings to exclude all noise and for the establishment of special noise abatement funds to finance noise abatement measures. The scope of the environmental impact assessment directive might also be extended to cover busy roads other than motorways.

Non-technical noise reduction measures that influence traffic include speed limits in urban areas and on motorways, improvements in the flow of traffic, restrictions on the use of roads at given times and in given areas, e.g. road closures at weekends or in inner cities, pedestrian precincts, the exclusion of HGVs and HGV diversions. Further investment in public transport might also persuade travellers to take the bus or train rather than the car.

Another important instrument of noise abatement policy is the development of a market in quiet products through measures that influence the market, such as the creation of supply and demand. The noise emitted by a product is already one of the assessment criteria in the award of eco-labels under Regulation 880/92. A noise levy might also be introduced for cars and HGVs, collected together with the motor vehicle tax. Taxing aviation fuel is another means of reducing noise in the air transport sector. The introduction of eco-licences in the noise abatement sphere might also be considered.

A framework Directive on environmental noise measurement, mapping and control (floated by the Commission almost three years ago in a Green Paper (COM(96)0540) and considered by the Parliament in a Resolution (OJ C 200/28 of 30.06.1997)) is to be proposed before the end of 1999. The goal is to have the legislation in force in 2002 - but a key issue yet to be settled is whether EC noise targets should be set for later in the decade.

The draft Directive is expected to propose a duty on local authorities to assess noise levels using existing methods, but expressed in terms of a common noise index or indices on which work is nearing completion. Noise targets would have to be set at national or local level. Ambient noise levels would have to be mapped in cities of 250,000 people or more, identifying "hot spots" where action would have to be taken to reduce noise exposures. These provisions would enter into force in 2002. In a second stage taking effect in 2006, harmonised noise measurement methods would be introduced. The apparent intention is that data from harmonised measurement would provide the basis for noise targets at EC level.

Proposal on noise from tyres and recreational craft are also in the pipeline.

## **6.4 Role of the European Parliament**

Noise abatement policy in the European Union has so far attracted little interest in the relevant circles and has been regarded as a poor cousin in the context of environmental protection policy.

However, noise is becoming one of the most pressing environmental problems in the EU.

Although progress has been made in recent years in road transport through the lowering of limit values and in air transport through the introduction of new aircraft and the banning of older types of aircraft, the measures so far taken are not enough or are cancelled out by the increase in road and air traffic.

The European Parliament has repeatedly stressed the need for further cuts in limit values and improved measurement procedures. Regarding air traffic, consideration should be given to a ban on night flying over residential areas near to airports, landing fees graded according to noise levels and measures to avoid particularly noise-intensive take-off and landing manoeuvres. Parliament has also called for measures to reduce noise emissions to be extended to cover military subsonic jet aircraft.

**MAIN EC LEGISLATION ON NOISE**

Year	Measure	Short title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1970	Dir. 70/157/EEC OJ L 42/16 23.02.1970	Permissible sound level and the exhaust system of motor vehicles	OJ C 160/7 18.12.1969	10.08.1971
(last amended 1996)	Dir. 96/20/EC OJ L 92/23 13.04.1996			01.10.1996
1978	Dir. 78/1015/EEC OJ L 349/21 13.12.1978	Permissible sound level and the exhaust system of motorcycles	OJ C 125/48 08.06.76	01.10.1980
(last amended 1997)	Dir. 97/24/EC OJ L 226 18.08.1997		OJ C 151/184 19.06.1995	17.12.1998
1979	Dir. 79/113/EEC OJ L 33/15 08.02.1979	Determination of the noise emission of construction plant and equipment	OJ C 76/37 07.04.1975	23.06.1980
(last amended 1985)	Dir. 85/405/EEC OJ L 233/9 30.08.1985			26.03.1986
1979	Dir. 80/51/EEC OJ L 18/26 24.01.1980	Noise emissions from subsonic air- craft	OJ C 178/61 02.08.1976	21.06.1980
(last amended 1983)	Dir. 83/206/EEC OJ L 117/15 04.05.1983		OJ C 334/137 20.12.1982	25.04.1984
1984	Dir. 84/533/EEC OJ L 300/123 19.11.1984	Permissible sound power level of compressors	OJ C 39/72 12.01.1979	26.03.1986
(last amended 1985)	Dir. 85/406/EEC OJ L 233/11 30.08.1985			23.06.1986
1984	Dir. 84/534/EEC OJ L 300/130 19.11.1984	Permissible sound power level of tower cranes	OJ C 125/43 08.06.1976	26.03.1986
(last amended 1987)	Dir. 87/405/EEC OJ L 220/60 08.08.1987		OJ C 76/4 23.03.1987	26.06.1989
1984	Dir. 84/535/EC OJ L 300/142 19.11.1984	Permissible sound power level of welding generators	OJ C 125/43 08.06.1976	26.03.1986
(last amended 1985)	Dir. 85/407/EEC OJ L 233/16 30.08.1985			26.03.1986

Year	Measure	Short title (abbreviated)	Opinion of the EP	Entry into force <sup>1</sup>
1984	Dir. 84/536/EEC OJ L 300/149 19.11.1984	Permissible sound power level of power generators	OJ C 125/43 08.06.1976	26.03.1986
(last amended 1985)	Dir. 85/408/EEC OJ L 233/18 30.08.1985			26.03.1986
1984	Dir. 84/537/EEC OJ L 300/156 19.11.1984	Permissible sound power level of powered hand-held concrete-breakers and picks	OJ C 76/37 07.04.1975	26.03.1986
(last amended 1985)	Dir. 85/409/EEC OJ L 233/20 30.08.1985			26.03.1986
1984	Dir. 84/538/EEC OJ L 300/171 19.11.1984	Permissible sound power level of lawnmowers	OJ C 127/80 21.05.1979	01.07.1987
(last amended 1988)	Dir. 88/181/EEC OJ L 81/71 26.03.1988		OJ C 281/176 19.10.1987	01.07.1991
1986	Dir. 86/594/EEC OJ L 344/24 06.12.1986	Airborne noise emitted by household appliances	OJ C 277/166 17.10.1983	04.12.1989
1986	Dir. 86/662/EEC OJ L 384/1 31.12.1986	Noise emitted by hydraulic excava- tors, rope-operated excavators, dozers, loaders and excavator- loaders	OJ C 66/95 15.03.1982	26.12.1988
(last amended 1995)	Dir. 95/27/EC OJ L 168/14 18.07.1995		OJ C 255/70 10.09.1993 OJ C 341/74 05.12.1994	31.12.1995
1989	Dir. 89/629/EEC OJ L 363/27 13.12.1989	Noise emission from civil subsonic jet aeroplanes	OJ C 158/492 26.06.1989	30.06.1990
1992	Dir. 92/14/EEC OJ L 76/21 23.03.1992	Limitation of the operation of certain aeroplanes	OJ C 13/534 20.01.1992	01.07.1992
(last amended 1999)	Dir. 99/28/EC OJ L 118/53 06.05.1999			01.09.1999
1997	EP Resolution OJ C 200/28 30.06.199	On the Commission Green Paper on future noise policy		

<sup>1</sup> In the case of directives, 'Date of entry into force' means the deadline for transposition into national law. In the case of other EC acts, 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## **7. NATURE CONSERVATION**

### **7.1 Background**

Economic development and population growth through the centuries have led to a decrease in the wealth and diversity of the flora and fauna and of the natural eco-systems in Europe. Although there has been no significant change in the distribution of land amongst the principal uses since 1955, natural habitats continue to shrink or disappear. A significant percentage of the known plant and animal species in the Community is endangered. Over 1000 higher plant species and 153 bird species are either seriously threatened or threatened with extinction. 20% of invertebrates and 45 out of the 65 indigenous species of freshwater fish in the Community are threatened. Over half the known species of mammals in France, the Netherlands and Portugal and over 80 % of reptile species in the Netherlands are endangered.

Community action to protect our natural heritage is based on the following principles:

- the preservation of non-renewable genetic resources and the prevention of their depletion;
- the preservation of global ecological equilibria by safeguarding the habitat of fauna and flora;
- the promotion of underlying ethical considerations.

The Community and the Member States have played an important role in the international arena in the search for solutions to world-wide problems such as global climatic changes and the destruction of the tropical rainforests.

This is also clearly reflected in the fifth action programme for the protection of the environment adopted in 1993. This programme deals, inter alia, with global environmental problems. It focuses on measures to combat climate change, the depletion of the ozone layer, the reduction in the diversity of species and the continuing deforestation the world over.

The United Nations Conference on the Environment and Development (UNCED), held in Rio de Janeiro in June 1992, was also of major importance for environmental policy. The Rio Summit ended with the adoption of the Framework Convention on Climate Change, the Biological Diversity Convention, both of which are new binding treaties in international law, the Rio Declaration, a Statement of Forest Principles and the 'Agenda 21' programme.

### **7.2 International conventions for the protection of fauna and flora**

In this field, the Community has signed the following international conventions:

- the Bonn Convention of 23 June 1979 on the protection of migratory species (OJ L 210, 19.7.1982, p. 11). In February 1998 a Council Decision approved the amendments to Appendices I and II (inclusion of an additional number of threatened migratory species) as decided by the fifth meeting of the Conference of the parties to the Convention, held in Geneva on 10 to 16 April 1997 (OJ L 046, 17.02.1998, p.6);
- the Berne Convention on the protection of European wildlife and natural habitats signed by the Community on 19 September 1979 (OJ L 38, 10.2.1982, p. 2);

- the Washington Convention of 3 March 1973 on international trade in endangered species of wild fauna and flora (CITES Convention). The Community signed this convention on 3 December 1982 (OJ L 384/7, 31.12.1982, last amended by OJ L 66/24, 10.3.1989). With a view to the further implementation of the CITES Convention, Regulation No 338/97 on the protection of species of wild fauna and flora by regulating trade therein was adopted on 9 December 1996. This Regulation contains a number of provisions on intra- and extra-Community trade in wild fauna and flora. A subsequent number of Commission Regulations amended the above mentioned one, the last one having been in 1998 (OJ L 279, 16.10.1998, p.3).  
Also related to this topic, in 1997 a Commission regulation suspended the introduction into the Community of the specimens of certain species of wild fauna and flora (OJ L 349, 19.12.1997, p.97); such a regulation was last amended early this year (OJ L 029, 03.02.1999, p.5);
- the Canberra Convention on the conservation of marine species in the Antarctic (OJ L 252, 5.9.1981, p. 27). Parliament had adopted a resolution on the dangers of the destruction of the Antarctic ecosystem (OJ C 69, 20.3.1989). It calls for a strict ban on any exploitation of the mineral resources of Antarctica and calls on the Community to recognize the entire Antarctic as a world nature reserve;
- the Rio de Janeiro Convention on biological diversity signed by the Community in June 1992 (OJ L 309, 13.12.1993, p. 1).

## **7.3 Main provisions and fields covered**

### **7.3.1 Wild birds**

The Wild Birds Directive is the EU's oldest piece of nature conservation legislation, and one of the most important, creating a comprehensive scheme of protection for the EU's wild bird species.

It was adopted in April 1979 by the Council (Directive 79/409/EEC of 02.04.1979 - OJ L 103, 25.04.1979, p.1) and it provides a number of separate but related components making up a sound protection programme. The main objects are:

- the preservation, maintenance or re-establishment of a diversity and a sufficient area of habitat of all species of birds covered by the directive;
- the establishment of a general system of protection for all these species;
- the prohibition of the sale, the transport for sale or the possession of birds, either live or dead, as well as the hunting, trapping or killing of them, except under clearly determined conditions.

On 8 June 1994 the Council adopted Directive 94/24/EC amending Annex II to Directive 79/409/EEC on the conservation of wild birds (OJ L 164/9, 30.6.1994). This Directive adds to the list of bird species the hunting of which may be permitted by the Member States.

In 1997 Directive 79/409 was amended once more by Commission Directive 97/49/EC: Annex I was replaced by the Annex of the new Directive.

### **7.3.2 Conservation of natural habitats and of wild fauna and flora**

On 21 May 1992 the Council adopted the directive on the conservation of natural habitats and wild fauna and flora (the Habitat Directive, 92/43). The principal objective of this directive is to promote the conservation of biological diversity whilst taking account of economic, social, cultural and regional requirements.

The state of natural habitats in the European territory of the Member States is deteriorating continuously. Growing numbers of species of wild fauna and flora are seriously endangered. Special conservation areas are to be created to maintain or restore natural habitats and species of Community interest at a favourable conservation status. In each of the areas designated, the necessary measures are to be implemented to ensure that the conservation targets are met and arrangements are to be made to enable the conservation status of the natural species and habitats listed in the directive to be monitored. The directive lays down that a general protective system for certain animal and plant species must be established and provides for management measures for certain species where justified by their conservation status; this includes the prohibition of certain methods for the capture or killing of animals.

The European Union has co-financed some 60 projects relating to the areas to be included in the European network of protected habitats, Natura 2000. These projects will receive a total of ECU 45 m.

In 1997 the Commission with a Decision (OJ L 107, 24.04.1997, p.1) adopted a site information format for proposed Natura 2000 sites.

Amendments to the Habitat Directive have been made through the years, the last one having been Council Directive 97/62 of 27 October 1997 adapting the former Directive to technical and scientific progress.

The issues related to the Natura 2000 network are particularly felt by the European Parliament: lately, in fact, information about the implementation of the Habitat Directive has been asked (OJ C 323, 21.10.1998, p.105) and financial support for an information campaign to publicize Natura 2000 has been solicited already twice (OJ C 013, 18.01.1999, p.99 and OJ C 050, 22.02.1999, p.103).

In a resolution on the conservation of wetlands (A4-0238/96) the EP calls on the Community to accede to the Ramsar Convention and to classify all wetlands satisfying the criteria of this convention as wetlands of international interest. Habitats should also be mapped in a database so that a dense network of interlinked wetlands may be established under Natura 2000.

The importance of a European Community biodiversity strategy was highlighted in a Communication from the Commission to the Council and the European Parliament in 1998 (COM(98)0042).

### **7.3.3 Whaling**

Since 1981 the Council has restricted the imports of cetacean products on the basis of Regulation (EEC) No 348/81. In 1982 the International Whaling Commission (IWC) decided to phase out commercial whaling as of 1986. On 17 May 1990 the European Parliament adopted a resolution on the moratorium on commercial whaling agreed on in 1982. It condemned the fact that, since the entry into force of the



moratorium, whaling had continued as a result of purely formal objections and called on the governments of all IWC Member States to extend the moratorium. It called on the governments of Iceland, Japan and Norway in particular fully to comply with the moratorium (OJ C 149/136, 18.6.1990). In addition, the Commission participated in the negotiations which resulted in a Convention on the protection of young whales in the North and Baltic Seas, signed in Geneva in September 1991.

#### **7.3.4 Protection of animals prized for their fur**

The Council adopted Regulation (EEC) No 3254/91 on 4 November 1991. It bans the use of leghold traps in the Community and, from 1 January 1996, the import into the Community of pelts and manufactured goods of certain wild species originating in countries which allow leghold traps or trapping methods that do not meet international humane trapping standards. However, the Commission failed to come to an agreement, as required in the Regulation, on humane trapping methods with the countries where leghold traps are used (Canada and Russia). In its resolution of 21 February 1997 the European Parliament therefore severely criticized the Commission and, in agreement with the Council of Environment Ministers, called for a ban on imports of the skins of animals caught with leghold traps to be introduced not later than 31 March 1997 (B-0154/97).

#### **7.3.5 Import of skins of certain seal pups and products derived therefrom**

Community policy on the trade in sealskins derives from an own-initiative resolution of the European Parliament (OJ C 87, 5.4.1982, p. 87). Council Directive 83/129/EEC banning the commercial importing of skins of harp and hooded seal pups was adopted on 28 March 1983. In particular, it bans the importing of raw, tanned or dressed fur skins and products derived from them. However, it does not apply to products resulting from traditional hunting by the Inuit (Eskimo) people. The directive was originally valid until 1985 but was extended on 27 September 1985 for four years and on 8 June 1989 indefinitely (89/370/EEC), not least because of pressure from the European Parliament.

#### **7.3.6 Animal experiments**

Following the EP's resolution on limiting animal experiments and on the protection of laboratory animals (OJ C 172, 2.7.1984, p. 164) - calling for a limitation on animal experiments if similar results could be obtained by other methods and if the results were stored in a central European data bank - the Council adopted Directive 86/609/EEC (OJ L 358, 18.12.1986) in November 1986. In January 1990 the Commission established an Advisory Committee on the Protection of Animals used for Experimental and other Scientific Purposes (OJ L 44, 20.2.1990, p. 30). On 9 September 1994 the Commission submitted an amended proposal on the conclusion of the European Convention on the protection of vertebrate animals used for experimental and other scientific purposes (COM(94) 366), and on 16 July 1996 it accepted the amendments proposed by the EP (OJ C 266, 13.9.1996).

The above mentioned Directive was implemented by a Commission Regulation at the beginning of 1997 (OJ L 008, 11.01.1997).

#### **7.3.7 Tropical rainforests**

In response to an initiative by the European Parliament the Council has adopted a Regulation on operations to promote tropical forests (Regulation No 3062/95), which seeks to conserve the biological

diversity of tropical rainforests and the eco-systems by providing financial and technical assistance to the developing countries concerned and actively involving the indigenous people.

In its resolution of 24 March 1994 (OJ C 114, 25.4.1994, p. 35), the European Parliament lamented the weakness of the International agreement on Tropical Timber concluded in Geneva in January 1994 (new conclusion of the Convention in 1983, OJ No 313, 22.11.1985, p. 9) and called on the European Union to demand stricter rules on sustainability within the organization established by the agreement and to provide further funding to promote the sustainable exploitation of tropical forests.

A proposal for a Council Regulation (EC) on measures to promote the conservation and sustainable management of tropical forests and other forests in developing countries was put forward early this year (COM(99)0041 - OJ C 087, 29.03.1999, p. 97).

### **7.3.8 Community's forests**

Actions have been undertaken also to protect the Community's forests against both fire and air pollution.

The first Council Regulation on protection of the Community's forests against fire dates back to 1992 (OJ L 217, 31.07.1992, p. 3). It was instituting a scheme aimed to reduce the number of forest fire outbreaks and the extent of areas burnt. This has been amended several times, the last one having been in 1998 (OJ L 193, 09.07.1998).

The Parliament issued a Resolution on forest fires in the European Union some months later (OJ C 313, 12.10.1998, p. 191) in which it called on the implementation of a Community forestry policy that takes account of the specific nature of Mediterranean forests. It also called on the Commission to draw up a strategy for preventing and fighting forest fires with measures designed to secure greater coordination and cooperation between Member States.

In this respect, a Council Regulation establishing a European forestry information and communication system (EFICS) was adopted in May 1998 (OJ L 157, 30.05.1998, p. 10).

Finally, a Council Resolution on a forestry strategy for the European Union, based primarily on the general analysis and guidelines of the Communication of the Commission to the Council and the European Parliament (COM(98)0649), was adopted early this year (OJ C 056, 26.02.1999, p. 1).

The concern of the Community about the protection of its forests against air pollution was formally pointed out by a Council Regulation already in 1986 (OJ L 326, 21.11.1986, p. 2) in order to establish a scheme to help the Member States to establish or extend a periodic inventory of damage caused to forests and a network of observation points. Such a Regulation was amended several times, the last one having been in 1994 (OJ L 125, 18.05.1994, p.1).

### **7.3.9 Zoological gardens**

On 10 July 1991 the Commission submitted a proposal for a Council Directive laying down minimum standards for the keeping of animals in zoos. The aim of the proposal is to harmonize the various national legislations with a view to achieving effective Community rules in the field of the protection of flora and fauna, covering in particular the trade in endangered species.

The Commission proposed that all zoos should require a licence which establishes that the zoo concerned has appropriate facilities for the care and the keeping of animals and that it endeavours to promote environmental awareness, scientific research and the conservation of species. The proposal further provided for zoos to keep regular and comprehensive records on the animals kept in order to enable more effective control of the place of origin of animals. In reply to a question from the European Parliament at Question Time, the Commission announced that it intended to withdraw its proposal for a Council directive and to replace it with a proposal for a Council recommendation (Commission proposal COM(95)0619). However, in its resolution of 17 March 1995, the European Parliament called on the Commission to keep to the original proposal for a directive in order to ensure uniform minimum standards for the keeping of animals in zoos.

Eventually, after the Parliament delivered its opinion on 29 January 1998 (OJ C 56, 23.02. 1998, p. 34) and gave its Decision on 10 February 1999 (decision not yet published in the Official Journal) the Council Directive relating to the keeping of wild animals in zoos was adopted early this year (Dir. 1999/22/EC of 29 March 1999 - OJ L 094, 09.04.1999, p.24).

The objectives of this Directive are to protect wild fauna and to conserve biodiversity by providing for the adoption of measures by Member States for the licensing and inspections of zoos in the Community, thereby strengthening the role of zoos in the conservation of biodiversity.

#### **7.3.10 Desertification**

On 21 June 1989 the Council adopted a resolution on the greenhouse effect, in which it declared that afforestation and measures to improve vegetative cover within the Community should be intensified and that the Community should play its full part in international efforts to arrest the process of desertification (OJ C 183, 20.7.1989, p. 4).

In Paris on 15 October 1994 the Community signed the Convention on combatting desertification, in accordance with article 34(2) and (3) of the United Nations Convention to combat desertification in countries seriously affected by drought and/or desertification, particularly Africa. On 28 July 1997 the Commission submitted to the Council a proposal for a Decision concerning the conclusion, on behalf of the Community, of the above mentioned Convention (OJ C 299, 30.09.1997, p.1). The European Parliament gave its opinion (OJ C 339, 10.11.1997) and such a proposal was adopted some months later (OJ L 083, 19.03.1998, p.1).

#### **7.3.11 The Alps**

On 12 June 1991 the European Parliament adopted a resolution on the danger to the natural and semi-natural habitats in the Alps posed by the steadily increasing summer and winter tourism in these areas. In it Parliament called for measures to protect the environment in the Alpine region from the effects of increasing tourism (OJ C 183, 15.7.1991, p. 112). The Convention on the Protection of the Alps entered into force on 9 March 1996 (Decision 96/191/EC), the contracting parties being Austria, Germany, France, Italy, Switzerland, Liechtenstein, Slovenia and the European Community.

The Principality of Monaco became a contracting party to the Alpine Convention in 1998 (OJ L 033, 07.02.1998, p. 21). In fact, the Council adopted the Protocol of its Accession with a Decision (98/118/EC of 16 December 1997) after having had regard to the proposal from the Commission (COM(97)0237) and the opinion of the European Parliament (OJ C 339, 10.11.1997).

The Commission also called for measures for the establishment within the Joint Research Centre (JRC) of a section to take on the task of Alps Observation and Information System Coordination Unit (COM (96)0713)).

The Parliament pointed out the danger of radioactivity in the Alps (OJ C 096, 08.04.1999, p.18).

### **7.3.12 LIFE**

In 1992 a Council Regulation established a financial instrument for the environment referred to as "LIFE" (Reg.No 1973/92, OJ L 206, 22.07.1992). The general objective of LIFE was to contribute to the development and implementation of Community environmental policy and legislation by financing:

- a) priority environmental actions in the Community;
- b) (i) technical assistance actions with third countries from the Mediterranean region or bordering on the Baltic Sea;
- (ii) in exceptional circumstances, actions concerning regional or global environmental problems provided for in international agreements.

The LIFE scheme was supposed to be implemented in phases, the first one finishing at the end of 1995. The second phase will end on 31 December 1999 and in accordance with Article 14 of Regulation (EEC) No 1973/92, a third phase for a period of five years ending on 31 December 2004 should be set in motion.

Reg. 1973/92 was amended itself later on (OJ L 181, 20.07.1996) and discussed several times by the Parliament (OJ C 158, 25.05.1998, p.90; OJ C 354, 19.11.1998, p.9; OJ C 013, 18.01.1999, p.22; OJ C 050, 22.02.1999, p.68).

On 10 December 1998 the Commission submitted a proposal for a Council regulation concerning the LIFE scheme (OJ C 015, 20.01.1999, p.4). The general objective of such a proposal is to contribute to the development of Community environmental policy, particularly in relation to the integration of the environment into other policies and the implementation and updating of environmental legislation.

According to it, LIFE shall consist of three thematic components: LIFE-Nature, LIFE-Environment and LIFE-Third Countries.

The projects financed by LIFE shall meet the following general criteria:

- (a) be of Community interest by making a significant contribution to the development and, where appropriate, implementation of Community environment policy and legislation,
- (b) be carried out by technically and financially sound participants,
- (c) be feasible in terms of technical proposals, management (timetable, budget) and value for money.

Priority may be given to projects based on a multinational approach.

## 7.4 The Role of the European Parliament

Other aspects of nature conservation considered by the EP and not mentioned above are the following:

- **Monk seals:** in its resolution of 22 November 1990 on the monk seal the European Parliament stressed the fact that the monk seal is threatened with extinction, and called on the Commission immediately to draw up an action programme for the conservation of this species. It called for this action programme to include in particular training measures, the setting up of biological stations and a seal vaccination programme against the phocine distemper virus, which affects seals, and that it be financed through the ACNAT fund (OJ C 324, 24.12.1990, p. 215).

The Action by the Community relating to nature conservation (ACNAT) was considered in a Council Regulation (OJ L 370, 31.12.1991, p.17) after the proposal from the Commission (COM(90)0125) and the opinion of the Parliament (OJ C 19, 28.01.1991, p. 282) in order to grant financial support for projects contributing to the maintenance or re-establishment of biotopes, habitats or endangered species.

The above mentioned fund was repealed by the establishment of a financial instrument for the environment referred to as LIFE (OJ L 206, 22.07.1992, p. 1) (see also 7.3.12 above).

The protection of monk seals in the Mediterranean region and the Eastern Atlantic is continuously highlighted by the Parliament, even early last year (OJ C 223, 17.07.1998, p.76).

- **Protection of wolves and brown bears:** calls for immediate measures, with financial support, for these two extremely endangered species (OJ C 69, 20.3.1989, pp. 201 and 202),

- **Coastal-zone management:** a Council Resolution on a Community strategy for integrated coastal zone management dates back to 1994 (OJ C 135, 18.05.1994, p.2);

- **The environment of the Amazon region:** In an own-initiative resolution on the negative effects of financing from the European Community and various international organizations on the environment of the region (OJ C 158, 26.6.1989, p. 323) the EP calls on the Community to encourage the countries of the region to develop a strategy for the conservation of the region, and calls on Member States and banks to introduce a programme of debt rescheduling, whereby investments are not made in projects which encourage deforestation.

In a further resolution of 25 October 1990 the European Parliament condemned the support of the iron mining project in Carajas (Brazil) (ECSC loans) and called on the Commission to support the use of alternative fuels instead of charcoal in the production of pig iron and to provide ECSC funds for this purpose, to freeze imports of pig iron from Brazil as long as it is produced with charcoal, and to investigate the undesirable ecological and social impact of the production of pig iron imported from other countries (OJ C 295, 26.11.1990, p. 189, 196). It further called on the Community to declare a moratorium on imports of pig iron from Carajas, pending a solution to the local energy problem, and to support an alternative project which does not use charcoal for fuel.

In another couple of resolutions the Parliament called for measures on fires in the Brazilian Amazon region (OJ C 339, 10.11.1997, p. 163) and on forest fires and air pollution in South-East Asia (OJ C 339, 10.11.1997, p. 159).

Lately, in a resolution on the fires devastating northern Brazil and South-East Asia (OJ C 138, 04.05.1998, p.173), the European Parliament called on the Commission and the Council to provide the national authorities concerned with the necessary support to develop sustainable alternatives to present activities which contribute largely to the destruction of the tropical rainforests. It also called on the Commission in its technological research and development programme for developing

countries to pay particular attention to questions associated with the sustainable working of tropical forests.

- **GATT-WTO:** The first WTO Ministerial Conference was held in Singapore in December 1996, one of the subjects considered being the link between world trade and environmental protection. Before this meeting the European Parliament had adopted a resolution in which it advocated that greater account be taken of environmental aspects, and especially of multilateral agreements on environmental protection, in the work of the World Trade Organization (OJ C 166, 10.6.1996).
- **Agricultural Production Methods:** in terms of protection of the environment the Community considered also the compatibility of agricultural production methods with the requirements of the protection of the environment and the maintenance of the countryside. In this respect, a Council regulation was adopted in 1992 (OJ L 215, 30.07.1992, p.85). In 1996 a Commission regulation laid down detailed rules for the application of the above mentioned regulation (OJ L 102, 25.04.1996, p.19) which was amended later on in 1997 (OJ L 067, 07.03.1997, p. 2). At the end of 1997 a report from the Commission to the Council and the European Parliament on the application of Reg. No 2078/92 was forwarded (COM(97)0620).

**MAIN EC LEGISLATION ON NATURE CONSERVATION**

Year	Measure	Short title (abbreviated)	EP Opinion	Date of entry into force <sup>1</sup>
1979	Dir. 79/409/EEC OJ L 103/1 25.04.1979	Conservation of wild birds	OJ C 163/28 11.07.1977	06.04.1981
(last amended 1997)	Dir. 97/49/EC OJ L 223/9 13.08.1997			30.09.1998
1981	Reg. (EEC) No 348/81 OJ L 39/1 12.02.1981	Imports of whales or other cetacean products	OJ C 291/49 10.11.1980	01.01.1982
1981	Decision 81/691/EEC OJ L 252/26 05.09.1981	Convention on the conservation of marine species in the Antarctic (Canberra Convention)	OJ C 101/116 04.05.1981	21.05.1982
1981	Decision 82/72/EEC OJ L 38/1 10.02.1982	Convention on the conservation of European wildlife and natural habitats (Bern Convention)	OJ C 175/17 14.07.1980	01.09.1982
1982	Decision 82/461/EEC OJ L 210/10 19.07.1982	Convention on the conservation of migratory species of wild animals (Bonn Convention)	OJ C 327/95 14.12.1981	24.06.1982
(last amended 1998)	Decision 98/145/EC OJ L 046/6 17.02.1998		OJ C 339 10.11.1997	12.02.1998
1982	Reg. (EEC) No 3626/82 OJ L 84/1 31.12.1982	Implementation in the Commu- nity of the Convention on inter- national trade in endangered species of wild flora and fauna (Washington Convention)	OJ C 327/105 14.12.1981	31.12.1982
(last amended 1998)	Reg. (EC) No 2214/98 OJ L 279/3 16.10.1998			19.10.1998
1983	Dir. 83/129/EEC OJ L 091/30 09.04.1983	Importation into Member States of skins of certain seal pups and products derived therefrom	OJ C 334/132 20.12.1982	30589
(last amended 1989)	Dir. 89/370/EEC OJ L 163/37 14.06.1989			

Year	Measure	Short title (abbreviated)	EP Opinion	Date of entry into force <sup>1</sup>
1986	Reg. (EEC) No 3528/86 OJ L 326/2 21.11.1986	Protection of forests against air pollution	OJ C 172/87 02.07.1984	24.11.1986
(last amended 1994)	Reg. (EC) No 1091/94, OJ L 125/1 18.05.1994			21.05.1994
1986	Dir. 86/609/EEC OJ L 358/1 18.12.1986	Protection of animals used for experimental and other scientific purposes	OJ C 255/250 13.10.1986	24.11.1989
(last amended 1987)	Corrigendum OJ L 117 05.05.1987			
1991	Regulation (EEC) No 3907/91 OJ L 370/17 31.12.1991	Action by the Community in relation to nature conservation (ACNAT)	OJ C 19/282 28.01.1991	01.01.1992
(last amended 1992)	Reg. (EEC) 1973/92 OJ L 206/1 22.07.1992		OJ C 267/211 14.10.1991	23.07.1992
1991	Reg. (EEC) No 3254/91 OJ L 308/1 09.11.1991	Protection of animals prized for their fur	OJ C 260/24 15.10.1990	09.11.1991
1992	Reg. (EEC) No 1973/92 OJ L 206/1 22.07.1992	LIFE	OJ C 267/211 14.10.1991	23.07.1992
(last amended 1996)	Reg. (EC) 1404/96 OJ L 181/1 20.07.1996		OJ C 323 04.12.1995	21.07.1996
1992	Dir. 92/43/EEC OJ L 206/7 22.07.1992	Conservation of natural habitats and of wild flora and fauna	OJ C 75/12 24.12.1990	10.06.1992
(last amended 1997)	Dir. 97/62/EC OJ L 305/42 08.11.1997			31.12.1997
1992	Reg. (EEC) No 2158/92 OJ L 217/3 31.07.1992	Protection of the Community's forests against fire	10.07.1992 (not yet published)	03.11.1992
(last amended 1998)	Reg. (EC) No 1460/98 OJ L 193/20 09.07.1998			12.07.1998



Year	Measure	Short title (abbreviated)	EP Opinion	Date of entry into force <sup>1</sup>
1993  (last amended 1994)	Decision 93/626 OJ L 309/1 13.12.1993 Corrigendum OJ L 082 25.03.1994	Convention on the conservation of biological diversity (Rio de Janeiro Convention)	OJ C 194 19.07.1993	25.10.1993
1995	Regulation (EC) No 3062/95 OJ L 327/9 30.12.1995	Operations to promote tropical forests	OJ C 315/644 22.12.1993	35063
1996  (last amended 1998)	Decision 96/191/EC OJ L 61/31 12.03.1996 Decision 98/118/EC OJ L 033/21 07.02.1998	Convention on the Protection of the Alps	OJ C 18/426 23.01.1995  OJ C 339 10.11.1997	26.02.1996  16.12.1997
1996	Decision 97/266/EC OJ L 107/1 24.04.1997	Site information format for proposed Natura 2000 sites		19.12.1996
1997  (last amended 1999)	Reg. (EC) No 2551/97 OJ L 349/4 19.12.1997 Reg. (EC) No 250/99 OJ L 029/5 03.02.1999	Suspension of the introduction of specimens of wild fauna and flora		22.12.1997  06.02.1999
1999	Dir.1999/22/EC OJ L 094 09.04.1999	Keeping of wild animals in zoos	OJ C 56/34 23.02.1998	37354

1 In the case of Directives, 'Date of entry into force' means the deadline for transposition into national law. In the case of other EC acts, 'Date of entry into force' is the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).

## 8. INTERNATIONAL COOPERATION

### 8.1 General

With the entry into force of the Single European Act on 1 July 1987, explicit reference to environmental policy as a task of the Community was for the first time made in Articles 130r to 130t of the revised EEC Treaty. The EC was also specifically empowered to engage in international cooperation in the field of environmental protection, providing this falls within its sphere of competence (see judgement of the European Court of Justice in the AETR case referred to in the Final Act of the Single European Act).

The Treaty on European Union adopted at Maastricht revised articles 130r to 130t. The changes mainly affected Parliament's participation, which, in addition to the consultation and cooperation procedures, now encompasses the co-decision procedure. The majority requirements in the Council were specifically dealt with though in practice they correspond to those of the European Single Act. A further change was the addition of the promotion of measures at international level to deal with regional or worldwide environmental problems as an objective of environmental policy under Article 130r(1) of the EC Treaty. Moreover, environmental protection requirements are no longer a mere component of other Community policies, but must be integrated into the definition and implementation of other Community policies.

Environment is a topic of growing awareness and concern to European citizens and the Treaty of Amsterdam puts "sustainable development" and "integration of the environment into other policy areas" at the core of the EU objectives for the future:

- In the introduction to the Treaty and its article 2, the protection and improvement of the environment and the achievement of a sustainable pattern of development are set out as fundamental objectives of the Union.
- In the article 6, "environmental protection requirements must be integrated into Community policies and actions in particular with a view to promoting sustainable development".

The new Treaty enhances environment provisions in 3 key areas:

- A greater recognition of the importance of environment in the definition of all policy areas; The Commission has to prepare environmental impact assessments when making proposals which may have significant environmental implications.
- More democracy and simplification in decision making on environmental legislation. The extension of the co-decision procedure to all environmental legislation represents an important improvement, but unanimity exceptions are maintained for the adoption of environmental measures in relation to energy, land use, water resources and taxation.
- Progress in the "environmental guarantees" under the internal market rules. The new paragraph (100A 5) opens the possibility to the Member States, under certain restrictive conditions, of to introduce stricter national measures after the adoption of a harmonisation measure where there is scientific evidence showing that such measures are needed to resolve problems in individual Member States.

It is characteristic of the Community's environmental policy that international obligations are assumed simultaneously by the Community and the Member States. Regional problems are, of course, considered

within a narrower context (the Mediterranean area, the alpine countries, the Nordic countries, pollution of the River Rhine; see below for further details).

The respective spheres of competence of the Community and the Member States in matters of environmental protection are, like all other Community activities, determined by the principle of subsidiarity (Article 3(b), second sub-paragraph, of the EC Treaty; under the Single European Act, the only specific reference to the principle was in the field of environmental policy, Article 130r(5) of the EEC Treaty): this requires that the Community should take action relating to the environment where an environmental problem can be better tackled at European level than at the level of the individual Member States. This is frequently the case: atmospheric, marine and radioactive pollution are all transfrontier problems and cannot therefore be satisfactorily dealt with by an individual state with limited resources at its disposal. The Community is entitled to take action in these cases.

In cases where the Community is responsible, it is required to engage in international cooperation (see Article 130r(4) of the EEC Treaty). The Community is therefore entitled to conclude an international agreement on any environmental issue concerning more than one Member State.

The Fifth Programme of Action on the Environment (1990-1994) provides inter alia for the following measures to be implemented at international level (see OJ No C 138, 17.05.1993):

- Greater participation of the Community in the protection of the climate and ozone layer,
- Participation in all relevant initiatives to protect regional seas and international watercourses,
- Promotion of regional cooperation to tackle specific cross-border problems,
- Assistance for the preparation of an international agreement on the protection of forests,
- Closer cooperation in environmental matters with non-Member States, particularly with members of the European Free Trade Association (EFTA), Japan and the United States.

The Review of the European Community programme of policy and action in relation to the environment and sustainable development "towards sustainability" (See OJ No L 275, 10.10.1998) states that the Community has to become the driving force in the further development of international environmental rules and that will seek to strengthen its role and take the lead, in particular as regards the international obligations.

Regarding **Central and Eastern Europe**, the priority objectives of the Community are:

- To develop a further comprehensive approach to environmental matters for the accession countries, with the aid of technical and administrative cooperation and financial support.
- To continue cooperation with and promote cooperation among the countries of this area within the framework of the Europe Agreements and to provide support for the approximation of laws and their implementation and enforcement, investment support for environmental infrastructure and cooperation to promote better environmental practice.

Regarding the **Mediterranean countries and Basin**, the priorities are:

- To develop a regional approach through regular dialogue within the framework of the Barcelona Declaration of November 1995.
- To establish a short and medium-term priority action programme in relation to the Mediterranean.

In relation to the **Baltic Sea region**, the priority is to strengthen environmental cooperation within the existing regional frameworks and to enhance the coordination of the relevant funds in order to support the Helsinki Commission activities and the implementation of the Joint Comprehensive Environmental Programme.

In relation to other international environmental issues and in the Rio process, the priority is to ensure an active Community participation in the process and in the follow-up, to strengthen the environmental component of cooperation with the countries of Asia and Latin America, to promote active participation in regional conferences and treaties in Europe, to support international work and to take an active part in negotiations on the adoption of a legally binding instrument.

In relation to trade and the environment, the priorities are to ensure that the WTO rules, provisions and procedures take full account of the need to promote a high level of environmental protection, to participate actively in international discussions dealing with the issue of trade and the environment and to give preference to multilateral solutions to trade and environmental problems.

## 8.2 Agreements

The Community, which is endowed with a legal personality under Article 210 of the EC Treaty (article 281 of the Amsterdam Treaty) is a contracting party to numerous international conventions and agreements.

The power to conclude agreements with third countries derives from Articles 228 and 238 of the EC Treaty (articles 300 and 310 of the Amsterdam Treaty). The Commission negotiates agreements in accordance with Article 228 of the EC Treaty and submits them to the European Parliament and the Council of Ministers, which has the final power of decision.

**8.2.1** As regards **conventions of international scope** signed by the Community, particular reference should be made to the following:

- the Convention on the conservation of European wildlife and natural habitats (Berne, 1979),
- the Convention on the conservation of migratory species of wild animals (Bonn, 1979),
- the Convention on long-range transboundary air pollution (Geneva, 1979),
- the Convention on international trade in endangered species of wild flora and fauna (Washington, 1982),
- the Convention on the protection of the ozone layer (Vienna - 1988, Montreal Protocol - 1988 (continually updated), London agreement on the industrialized countries' cessation of HCFC production by the year 2000, aid funds for the Third World totalling US\$ 240 million and the Copenhagen Protocol, 1992),
- the Convention on the avoidance of nitrogen oxide emissions in industry and transport in Europe (Sofia, 1988),
- the Convention on the control of transboundary movements of hazardous waste (Basle Convention - 1989),
- the Framework Agreement on Climate Change (Rio de Janeiro Convention - 1992, annual reviews),
- the Convention on Biological Diversity (Nairobi Convention - 1992),
- the Convention on combatting desertification and the consequences of drought, especially in Africa (Paris 1994),

- the Convention on environmental impact assessment in a transboundary context (Espoo Convention - 1996).

### **8.2.2** The Community is party to the following **conventions of regional importance**:

- the Convention on the protection of the Rhine against chemical pollution (Bonn, 1976),
- the Convention for the protection of the Mediterranean Sea against pollution (Barcelona, 1976),
- the Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances (Bonn, 1984),
- the Convention on fishing and conservation of the living resources of the Baltic Sea and the Belts (Oslo, 1983),
- the Convention on the conservation of Antarctic marine living resources (Canberra, 1980),
- the Convention for the protection of the Elbe against pollution (Magdeburg, 1990),
- the Convention on cooperation in the protection of the North-East Atlantic against pollution as a result of accidents (Lisbon Convention - 1990),
- the Convention for the protection of the marine environment in the North-East Atlantic (Paris Convention - 1992),
- the Convention on the Protection of the Alps (Salzburg - 1991),
- the Convention on the Protection of the Oder (1996).

### **8.2.3** **Bilateral agreements**

The Community has signed a number of bilateral agreements, notably with Norway on research and development in the field of environmental protection (1989) and with Hungary and the Czech and Slovak Federative Republics on the Gabčíkovo-Nagymaros dam project (1992).

## **8.3** **Action at international level - participation in international bodies**

### **8.3.1** **General**

The article 174 of the new Treaty of Amsterdam establishes that one of the objectives of the Community policy on the environment is to promote measures at international level to deal with regional or worldwide environmental problems. The Community has to cooperate with third countries and with the competent international organisations.

Since the 70's the Community has played an active role, being party of more than 30 conventions and agreements on the environment and is involved in the work of international organisations, such as the OECD; it has been a member of the United Nations Food and Agriculture Organisation (FAO) since 1991 and has steadily developed its cooperation with the Council of Europe.

The Community also takes part, normally as an observer, in the activities and negotiations taking place under the auspices of the United Nations. The EC Commission represents the Community within the UN's Economic Commission for Europe (ECE), the UN environmental protection agencies, the United Nations Environment Programme (UNEP) and takes a full part in the work of the United Nations Commission for Sustainable Development, which is the body responsible for the following up of the Conference on Environment and Development held at Rio de Janeiro in June 1992.

### 8.3.2 Relations with Central and Eastern Europe

As regards central and eastern European states, the establishment of official relations with the Council for Mutual Economic Assistance (COMECON) in June 1988 led to contacts with a view to cooperation in the field of environmental protection, although the Europe Agreements are the first legal instrument of approximation, where article 70 refers to the need for the approximation of environmental legislation and article 81 precises the cooperation in all aspects of the environment.

Following the Helsinki Conference on Security and Cooperation in Europe (CSCE), the Convention on Long-Range Transboundary Air Pollution was signed in Geneva in 1979 with the Community as one of the contracting parties. In the autumn of 1988 24 Member States of the United Nations, including 12 Western European and a number of Eastern European states, signed a declaration in which the Western European states committed themselves to a 30% reduction in nitrogen oxide emissions from power stations, industrial plants and motor vehicles by 1998 and the technologically less advanced Eastern European states agreed to freeze their national emission levels at 1987 levels. The protocol constitutes a supplement to the 1985 Helsinki protocol, which provides for a 30% reduction in sulphur dioxide emissions.

At the first special CSCE Conference on the Environment, which was held in Sofia (Bulgaria) in October and November 1989 and attended by 35 states, the European Community was represented by the President of the Council and the competent Member of the Commission. The principal topics at this conference were as follows: how to prevent environmental disasters caused by industry and to combat the effects of such disasters beyond national borders, the handling of dangerous chemicals and the pollution of transfrontier rivers and other waters.

At the fifteenth world economic summit in Paris in July 1989 the PHARE programme (of aid for economic reconstruction in Poland and Hungary, OJ L 375, 23.12.1989) was adopted. The programme has since been extended to include Bulgaria, the Czech Republic, Slovakia, the former GDR (until 3 October 1990), Romania, Albania, Estonia, Latvia, Lithuania and the former Yugoslav republics of Slovenia, Macedonia and Bosnia-Herzegovina.

**Table 11: PHARE environmental programmes, 1990-1995, in ECU million**

TABLE 1 Environment and nuclear safety Funds allocated by country 1990-1997 (ECU million)						
	1990-93	1994	1995	1996	1997	Total
Albania	3.3	0	0	1.5	6.7	11.5
Bosnia and Herzegovina	0	0	0	0	0	0
Bulgaria	49.1	5	7	6	0	67.1
Czech Republic	0	0	0	5	0	5
Estonia	0	2.5	0	1	0	3.5
FYROM	0	0	0	0	2	2
Hungary	47	15.5	12	0	0	74.5
Latvia	0	5.5	0	1.1	0	6.6
Lithuania	0	1	0	2.5	0	3.5
Poland	75	12	22	5	0	114
Romania	5	0	0	8.4	35	48.4
Slovakia	0	0	1	0	0	1
Slovenia	0	0	0	0	4	4
Multi-country programmes	88.5	13	20	10	17	148.5
Other	20	23	20	15	11.7	89.7
Czechoslovakia	35	0	0	0	0	35
TOTAL	322.9	77.5	82	55.5	76.4	614.3

Source: European Commission, DG IA, F6 (19.03.1998)

In 1995, for example, expenditure on the environment and the nuclear sector accounted for only 7% of all the resources available for PHARE.

Since 1995, the PHARE programme has required all infrastructure projects to include environmental impact assessments. The importance of environmental sustainability within the PHARE programme is a key principle within the new PHARE guidelines and for the period 1995-1999, a new strategy has been devised where PHARE grants for environmental projects will be allocated in four sectors:

1. Legislation and policy geared to implementation and enforcement, approximation to EU law and integration in general.
2. Development of environmental financing through new financing instruments, the development of key financial institutions and the financing of environmental projects that are too risky to attract private or government money alone.
3. Support for active institutions.
4. Increase in environmental awareness

From 1998, the new PHARE aid will be more closely linked to the accession requirement, such as compliance with democratic principles, the fulfilment of obligations arising from Europe Agreements and the implementation of the most important provisions of the White Paper.

The era of Soviet central planning left an appalling legacy of environmental problems, which are just now beginning to come to terms. Urgent action is now needed to restore and protect the environment in the NIS. The TACIS programme (Technical Assistance to the Commonwealth of Independent States of the former Soviet Union, OJ L 187, 29.07.1993) supports also environmental programmes and has allocated ECU 2224 m for the period 1996-1999. A new regulation of the TACIS programme has been proposed for the years 2000-6 by the Commission, focussing on fewer, larger and better projects in key sectors. The EU will allocate approximately 4.000 million Euro over the period 2000-6.

The TACIS' focus on the environment aims to promote collaboration, investment, the incorporation of environmental considerations into the process of economic reconstruction, ensure sustainable development and adherence to international trade standards, the establishment of immediate programmes to bring relief to regions where human health or natural ecosystems are severely jeopardised by environmental hazards and to raise public awareness of environmental issues and of the major environmental challenges.

Within TACIS, the Joint Environment Programme (JEP) assists the NIS in the further implementation of the National Environmental Action Programmes (NEAPs), the New Regional Environment Centres act as an independent, non-profit-making organisation, with the mandate to help environmental interest groups and NGOs to provide public access to environmental information and the HACCP food testing centre follows the legacy of industrial pollution, the Chernobyl accident and the consequent environmental damage caused.

The objectives in the environmental field for the new TACIS programme include the promotion of a strong legislative and regulatory framework, ecologically sound and efficient exploitation and use of natural resources, the improvement of environmental infrastructure and the effective reduction of cross border pollution. In addition, it remains imperative that environmental considerations are taken into account in the implementation of projects in other areas, such as agriculture, energy or infrastructure.



During 1999, the new TACIS Regulation will be adopted in which the Commission has proposed to strengthen the environmental aspects of the programme including environmental integration.

The Agenda 2000 (COM (97)2000 final) sets out an enlargement strategy for the Union and the associated countries and underlines that with the enlargement, cross-border environmental issues will become more important for the EU. The EP in its resolution about the Agenda 2000 of December 1997 notes that "speedy and full accession of all candidate Member States will, in the long term, improve the environment throughout Europe, assuming a more intensive approach to important policy areas such as the environment, transport and energy". The EP believes that full compliance with the environmental acquis will be impossible in the near future, but requests the Commission to draw up a list of the most important elements of EU environmental legislation geared to environmental criteria. Derogations must not be permitted in any circumstances and transitional provisions should be allowed only in moderation and restricted to 'duly justified cases'.

### **8.3.3 Relations with EFTA and EEA**

The EEA Agreement extends the single market of the EU to three out of the four EFTA countries, namely Norway, Iceland and Liechtenstein. Switzerland, while being a member of EFTA is not a part of the European Economic Area.

Within the EEA there is free movement of goods, services, capital and persons. In addition to internal market legislation, the Agreement includes additional fields of co-operation such as research and development, statistics, education, social policy, the environment, consumer protection, tourism, small and medium-sized enterprises, culture, information services and audio-visual services. The EFTA EEA countries participate in EC programmes in these fields and in the field of environmental protection, the cooperation began in 1994. The environment ministers of the EC and EFTA Member States and Commission representatives established the framework and substance of their cooperation at a joint meeting in October 1987 in Noordwijk.

Cooperation covered atmospheric pollution, the protection of soil and water, environmental disasters and clean technologies. In addition to contacts between the organisations, there were bilateral meetings between representatives of the EEC and the individual EFTA Member States. Specific projects have already been agreed on within this framework, for instance, the funding of a study on the construction of a Brenner tunnel from the EC budget. The EEA agreement also covers environmental protection.

In addition to internal market legislation, the Agreement includes so-called "flanking and horizontal policies" intended to strengthen the internal market. These additional fields of co-operation include research and development, statistics, education, social policy, the environment, consumer protection, tourism, small and medium-sized enterprises, culture, information services and audio-visual services. The EFTA EEA countries participate in EC programmes in these fields and have a voice in developing and managing them through participation in their committees.

### **8.3.4 Relations with Asia**

The Commission Communication of October 1997 on a Europe-Asia Cooperation Strategy in the Field of Environment has as a goal to enhance the efficiency of cooperation between Europe and Asia in the field of the environment by promoting a proactive regional strategy.

The environmental problems are a major issue in Asia and the repercussions of pollution affect both continents Asia and Europe. Europe's position at the forefront of environmental technologies and services (it holds almost 60% of the world's patents for environmental technologies) makes it a key partner for the Asian countries in this sphere.

The Member States are already involved in Europe-Asia environmental cooperation (providing official development assistance, loan guarantees, etc.). The Community has acted under bilateral agreements with the Asian countries (e.g. funding for tropical forests), fostering dialogue in ASEM and ASEAN and granting loans financed by the European Investment Bank (EIB) in the transport and energy sectors.

The bilateral relations between the Community and the ASEAN member states have continued to develop. The EEC-Singapore Regional Institute for Environmental Technology was inaugurated on 27 July 1993 and at the ASEM II meeting in London in 1998, an Asia-Europe Environmental Technology Centre was launched in Thailand. The Centre will provide policy guidance and R&D co-ordination in certain key priority fields such as megacities, bio-remediation, enhancement of public involvement in environmental matters and the anticipation, management and remediation of major natural disasters.

### **8.3.5 Relations with Mediterranean countries**

The Short and Medium-term Priority Environmental Action Programme (SMAP) is a framework programme of action for the protection of the Mediterranean environment, within the context of the Euro-Mediterranean Partnership. It was adopted unanimously by the Euro-Mediterranean Ministerial Conference on the Environment, held in Helsinki in November 1997.

The SMAP is intended to become the common basis for environmental purposes (as regards both policy orientation and funding) in the Mediterranean region. It foresees as priorities the following fields: Integrated Water Management, integrated waste management, the hot spots (with the establishment of emergency environmental plans), integrated coastal zone management and combatting desertification.

### **8.3.6 Relations with Third World countries**

In April 1997, the Council adopted a Regulation on environmental measures in developing countries in the context of sustainable development which seeks to promote measures that deal with environmental problems in developing countries and enhance the integration of environmental concerns in all programmes of EU developments co-operation. This is achieved by providing seed money for special projects to support sustainable development. A sustained Regulation has been presented in 1999 which allows for support to more strategic, structural actions such as the development of national strategies for sustainable development, developing countries participation and implementation of international conventions and capacity building.

Special reference should be made in this connection to cooperation between the European Community and the 71 ACP States through the Fourth Lomé Convention, which expires in the year 2000. The Convention provides for general cooperation in the field of environmental protection.

The Agreement amending the Fourth ACP-EC Convention of Lomé signed in Mauritius on November 1995, agreed to give priority in their activities to:

- a preventive approach aimed at avoiding harmful effects on the environment as a result of any programme or operation;

- a systematic approach that will ensure ecological viability at all stages, from identification to implementation;
- a trans-sectoral approach that takes into account not only the direct but also the indirect consequences of the operations undertaken.

The negotiations of the new cooperation agreement are taking place already and in the Policy guidelines for future EU-ACP relations (COM (97)537 final, 29.10.97), one of the three horizontal guiding principles is "integrating the principles of conserving natural resources and protecting the environment". Also, particular attention should be given to:

- Capacity building and the improvement of environmental assessment practices;
- The links between alleviating poverty and environmental problems, including the redistributive aspects of fiscal instruments;
- Increasing internalisation of environmental costs when supporting economic reform, taking social and environmental impact into account;
- The establishment of effective public/private partnerships, notably for the transfer of clean technologies;
- Specific schemes in some sectors, with priority going to water resources, energy efficiency, desertification, urban development, sustainable forestry management and the preservation and sustainable management of biological diversity and fishery resources.

The EEC and ACP States have thus agreed to a general ban on exports of hazardous waste and radioactive waste to the ACP States and the Community provides also available technical information on pesticides and other chemical products with a view to helping them develop or reinforce a suitable and safe use of these products.

### **8.3.7 Rio de Janeiro Conference**

In addition to the Member States, the European Community was represented as a full member in its own right at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro from 3 to 24 June 1992. The conference involved more than 170 states and over 100 heads of government and although the outcome of the conference did not come up to the Community's original expectations, the conference did establish the basis for improved international cooperation with a view to achieving long-term environmentally sustainable development. The conference adopted Agenda 21, an action programme to create the basis for environmentally sustainable development at a local, national and international level by the year 2000, the Rio Declaration comprising 27 principles for the transition to environmentally sustainable development, including the statement of principles on the management, conservation and sustainable development of all types of forests, on the trans-regional fish stocks and migratory fish species, and on desertification (Convention of 17 June 1994, Paris). The Convention on Climate Change and the Convention on Biological Diversity were also signed at the conference. In order to finance the solutions to the worldwide environmental problems, the Community recommended the creation of the 'Global Environment Facility' (GEF). The parties to the Framework Convention on

Climate Change agreed to stabilise the exhaust emissions responsible for the greenhouse effect at their 1990 level until the year 2000.

In the run-up to the 1997 special sitting of the United Nations General Assembly to commemorate the fifth anniversary of the Rio conference, a European Parliament resolution (A4-0083/97) was particularly critical of the EU Member States, who are among those mainly responsible for global pollution, for not keeping the promises they made at the Rio conference.

The Earth Summit was a milestone in the international debate on environmental issues, calling for a change in attitudes and an integrated approach to environmental, economic and social aspects of development. In line with its commitments, the EU has been trying to develop principles and new practices conducive to economically, socially and environmentally sustainable development.

The Parties to the Convention therefore decided to meet in Berlin in March 1995 and negotiate a Protocol containing measures to reduce emissions for the period beyond 2000 in the industrialised countries. The work of the so-called "Berlin Mandate" Ad Hoc Group resulted in adoption of the Protocol on 10 December 1997 in Kyoto. Although the Protocol is less ambitious than the EU's proposed objective of a 15% cut by the year 2010 (with an intermediate goal of 7.5% by 2005) in emissions of carbon dioxide, methane and nitrous oxide, it is still an important step forward in the fight against global warming as it contains binding and quantified objectives to limit and reduce greenhouse gases.

The Parties undertake to reduce greenhouse gas emissions by at least 5% below 1990 levels during the period 2008 to 2012 and the EU Member States collectively must reduce their greenhouse gas emissions by 8% between 2008 and 2012. The Protocol was signed on behalf of the European Community on 29 April 1998 (Kyoto Protocol COM(98) 96 final).

In November 1998 the 4th Conference of Parties to the UN Framework Convention on Climate Change (COP4) took place in Buenos Aires. The EU took a leading role in this process which was strengthened by the fact that it is on track to stabilise its CO<sub>2</sub> emissions by the year 2000 at the level they were in 1990 as promised in Rio in 1992.

The Conference made concrete progress on several issues, such as transfer of technology, compliance (there is now a common understanding by all Parties that a strong and comprehensive regime is needed to ensure an effective implementation of the Kyoto Protocol) and adaptation (vulnerable countries will receive further support to plan concrete measures to adapt to adverse impacts of climate change).

A Buenos Aires Plan of Action was adopted, including deadlines for important issues, such as: financial mechanisms, further work on policies and measures, development and transfer of technologies, rules governing the Kyoto mechanisms on emission trading, Joint implementation and with a priority to the Clean Development Mechanisms and a solid promise to discuss number of particular concerns to the EU – such as complementarity, ceilings, long term convergence and equity.

In May 1999, the Commission presented a Communication to the Council and the Parliament on "Preparing for Implementation of the Kyoto Protocol" (COM (99) 230). The Commission notes that the first objective is a rapid entry into force of the Kyoto Protocol and it remarks with concern that, after falling in the early 1990s, greenhouse gas emissions within the EU have been increasing again since the middle of the decade. Action is considered necessary in the following areas to reverse this trend:

- A reinforcement of both national and common and co-ordinated policies and measures.
- Rapid adoption and implementation of planned policies and measures by the Member States and also others measures taken at Community level which should be a useful complement.
- The Commission urges the Ecofin Council to adopt as a priority the Proposal for a Directive on an energy product tax and the Member States should develop other appropriate fiscal incentives.
- Effective and ambitious environmental agreements may constitute a basis for important emission reductions in specific industrial sectors.
- Reliable and pro-active monitoring and verification systems are essential for the assessment of progress.
- The mechanisms which allow for flexibility in the way that Parties achieve their emission reduction targets, are to be further elaborated.
- The Commission invites the EIB and EBRD to explore concrete ways on how to contribute to achieving the Kyoto commitments.
- The Commission urges high level EU representatives to use their meetings with relevant Parties, in particular the G8 Heads of State meeting, to strongly argue in favour of credible and ambitious domestic action plans.
- Finally, the enlargement represents an opportunity to enhance the institutional and technical capacity in the candidate countries, to raise the profile of climate change with stakeholders and the public in general in Central and Eastern European countries, ensuring sustainable growth with controlled greenhouse gas emissions.

**MAIN EC LEGISLATION ON INTERNATIONAL COOPERATION**

Year	Measure	Short title	EP opinion	Entry into force <sup>1</sup>
1975	Decision 75/437 OJ No L 194/5 25.07.1975	Convention on the Prevention of marine pollution from land-based sources (Paris Convention)	OJ No C 127/32 18.10.1974	06.05.1978
1977	Decision 77/586/EEC OJ No L 240/35 19.09.1977	Convention concerning the International Commission for the Rhine (Berne Convention)	OJ No C 293/63 13.12.1976	
1977	Decision 77/585 OJ No L 240/1 19.09.1977	Convention on the protection of the Mediterranean Sea against pollution (Barcelona Convention)	OJ No C 259/42 04.11.1976	
1981	Decision 81/420 OJ No L 162/4 19.06.1981	Protocol concerning cooperation in combatting pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency	OJ No C 28/55 09.02.1981	
1981  (last amended 1993)	Decision 81/462 OJ No L 171/11 27.06.1981  Decision 93/361 OJ No L 149/361 21.06.1993	Convention on long-range trans-boundary air pollution	OJ No C 59/71 10.03.1980  OJ No C 150/226 15.06.1992	
1981	Decision 81/691 OJ No L 252/26 05.09.1981	Convention on the conservation of Antarctic marine living resources (Convention of Canberra)	OJ No C 101/116 04.05.1981	
1982  (last amended 1990)	Reg. (EEC) No 3626/82 OJ No L 384/1 31.12.1982  Reg. (EEC) No 2214/98 OJ No L 279 16.10.1998	Regulation on international trade in endangered species of wild flora and fauna (Convention of Washington - Cites Convention)	OJ No C 327/105 14.12.1981	31.12.1992
1982	Decision 82/461 OJ No L 210/10 19.07.1982	Convention on the conservation of migratory species of wild animals (Bonn Convention)	OJ No C 327/95 14.12.1981	
1982	Decision 82/72 OJ L 38/1 10.2.1982	Convention on the conservation of European wild life and natural habitats (Berne Convention)	OJ No C 175/18 14.07.1980	
1983	Decision 83/101 OJ No L 67/1 12.03.1983	Protocol for the protection of the Mediterranean Sea against pollution (from land-based sources)	OJ No C 334/136 20.12.1982	
1983	Decision 83/414 OJ No L 237/4 26.08.1983	Convention on fishing and conservation of the living resources of the Baltic Sea and the Belts	OJ No C 242/128 12.09.1983	

Year	Measure	Short title	EP opinion	Entry into force <sup>1</sup>
1984	Decision 84/358 OJ No L 188/7 16.07.1984	Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful pollutants (Bonn Agreement)	OJ No C 127/120 1984	
(last amended 1993)	Decision 93/540 OJ No L 263 22.10.1993		OJ No C 42/36 15.02.1993	
1987	Decision 87/57 OJ L 24/46 27.1.1987	Protocol amending the Convention for the prevention of marine pollution from land-based sources	OJ No C 322 1986	
1988	Decision 88/540 OJ No L 297/8 31.10.1988	Vienna Convention on the protection of the ozone layer	OJ No C 187/53 18.07.1988	
1988	Decision 88/540 OJ No L 297/8 31.10.1988	Montreal Protocol on substances that deplete the ozone layer	OJ No C 187/53 18.07.1988	
(last amended 1994)	Decision 94/68 OJ No L 33/1 07.02.1994		OJ No C 268/191 04.10.1993	
1990	Council Decision 90/100/EEC OJ No L 90/18 05.04.1990	Cooperation on the management of water resources in the Danube basin	OJ No C 256/152 1989	
1993	Decision 93/98 OJ No L 39 16.2.1993	Convention on transboundary movements of hazardous waste (Basle Convention)	OJ No C 72/67 18.03.1991	
1993	Decision 93/550 OJ No L 267/20 28.10.1993	Convention on the protection of the Coasts and Waters of the North-East Atlantic against pollution (Lisbon Convention)	OJ No C 176/211 28.06.1993	
1993	Decision 93/626 OJ L 309/1 13.12.1993	Convention on Biological Diversity (Convention of Rio de Janeiro)	OJ No C 194/401 19.07.1993	
1994	Decision 94/69 OJ No L 33/11 07.02.1994	Framework Convention on Climate Change	OJ No C 194/358 19.07.1993	
1994	Decisions 94/156, 157 OJ No L 73/1 16.03.1994	Convention on the Protection of the Marine Environment of the Baltic Sea Area (1974 Helsinki Convention as revised in 1992)	OJ No C 315/627 22.11.1993	
1995	Reg. 3062/95 OJ No L 327 30.12.1995	Operations to promote tropical forests	OJ No C 166/95 03.07.1995	

## The EP and the environment policy of the EU

Year	Measure	Short title	EP opinion	Entry into force <sup>1</sup>
1996	Decision 96/191 OJ No L 61 12.03.1996	Convention on the protection of the Alps (Alpine Convention)	OJ No C 18/245 23.01.1995	
1997	Decision 97/825 OJ No L 342 12.12.1997	Convention on cooperation for the protection and sustainable use of the river Danube (Convention for the protection of the Danube)	OJ No C 347/96 18.11.1996	24.11.1997
1998	Decision 98/241 OJ No L 096 28.03.1998	Approval of PARCOM Decision 96/1 on the phasing-out of the use of hexachloroethane in the non-ferrous metal industry	OJ No C 80/98 16.03.1998	23.03.1998
1998	Decision 98/216 OJ No L 083 19.03.1998	UN Convention to combat desertification in countries seriously affected by drought and/or desertification, particularly in Africa	OJ No C 339/97 10.11.1997	09.03.1998
1998	Decision 98/249 OJ No L 104 03.04.1998	Convention for the protection of the marine environment of the North-East Atlantic	OJ No C 89/95 10.04.1995	07.10.1997
1998	Decision 98/685 OJ No L 326/001 03.12.1998	Convention on the transboundary effects of industrial accidents	OJ No C 267/60 03.09.1997	23.03.1998
1998	Decision 98/686 OJ L No L 326 03.12.1998	Conclusion of the protocol to the 1979 Convention on long-range transboundary air pollution on further reductions of sulphur emissions	OJ No C 14/98 19.01.1998	23.03.1998
1999	Decision 99/257 OJ No L 100 15.04.1999	Convention on the International Commission for the protection of the Oder	16.12.1998	29.03.1999

<sup>1</sup> In the case of directives 'entry into force' indicates the deadline for transposition of incorporation into national law. In the case of other EC acts, the "date of entry into force" means the date specified in them or, if no date is specified, the twentieth day following their publication (Article 191 of the Treaty of Rome).



## **9. IMPLEMENTATION OF ENVIRONMENT POLICY**

### **9.1 General - information systems**

The Community has devised a number of accompanying measures that have proved indispensable for the implementation of an effective environmental policy.

The range of environmental instruments available has expanded as environmental policy has developed. Not only has the Community adopted framework legislation providing for a high level of environmental protection while guaranteeing the operation of the internal market but it has introduced a financial instrument (the LIFE programme) and also some technical instruments (Eco-labelling, the Community system of environmental management and auditing and a system for assessment of the effects of public and private projects on the environment).

The European Environment Agency has come to play an increasingly important role in recent years. It was set up to gather and disseminate comparable environmental data. Although its role is purely advisory, its work has become more and more crucial for the adoption of new measures and for assessing the impact of decisions already adopted.

At present, emphasis is being placed on diversifying environmental instruments and, in particular, on introducing environmental taxes (the "polluter pays" principle), environmental accounting and voluntary agreements. Besides all this, no progress can be made unless environmental legislation is actually implemented and effective implementation involves introducing incentives for economic operators (businesses and consumers).

For several years, the European Commission has been co-operating with the OECD in order to define environmental indicators that will better incorporate environmental conditions into national accounts. Eurostat has taken part in such activities.

In June 1985 the Council adopted a Commission work programme concerning an experimental project for gathering, coordinating and ensuring the consistency of information on the state of the environment and natural resources in the Community (OJ No L 176, 06.07.1985). The programme covers the following main areas:

- The identification and description of biotopes of major importance for nature conservation;
- The collecting and processing of data on acid precipitation;
- The gathering and organisation of consistent information concerning the environmental resources and characteristics of the Mediterranean regions (land use, soil erosion, water quality, seismic risks and coastal areas);
- The comparability and availability of environmental data collected in the Member States and the choice of data analysis methods.

The information thus gathered will be made public, subject to rules of confidentiality.

Another of the objectives of the Community action is to improve the comparability of Member States' statistics. This is one of the tasks of the European Environment Agency and the European Environmental Information and Observation Network, decided upon on 7 May 1990 (OJ No L 120, 11.5.1990, p. 1). In this sense, in 1997, the Council Decision 97/101/EC (OJ No L 296, 21.11.1996) introduced

a reciprocal exchange of information and data relating to the networks and stations set up in the Member States to measure air pollution and to the air quality measurements taken by those stations.

The Fifth Programme of action in relation to the environment and sustainable development: "Towards sustainability" was reviewed in September 1998 by the European Parliament and Council Decision 2179/98/EC. The objective of this Programme is to transform patterns of growth in the Community in such a way as to promote sustainable development. The programme tackles environmental problems but also aims to establish new relations between the actors in the environmental sector.

The programme provides for the development of broader instruments, such as:

- Regulatory instruments: fixing new minimum levels of protection, implementing international agreements and establishing rules and standards with a view to the internal market.
- Financial instruments: incentives for producers and consumers to protect the environment and use natural resources in a responsible manner and "price corrections" to ensure that products and services which respect the environment are not penalised in terms of cost.
- Horizontal measures: improving information and environmental statistics, promoting scientific research and technological development, improving sectoral and spatial planning, public information and professional training.
- Financial support mechanisms: the LIFE programme, the Structural Funds, the Cohesion Fund and EIB loans.

The review of the programme in 1998 has given new impetus in certain priority areas, among them:

- The integration of the environment into other policy areas;
- The extension of the range of environmental instruments with a view to greater efficiency;
- The increasing public awareness of environmental problems and access to information;
- The strengthening of international cooperation;
- The improvement of environmental information;

Since 1995, at the "Environment for Europe" Ministerial Conference in Sofia, the participants stressed the need for increased public participation in environment policy and following the guidelines taken in Sofia, negotiations were initiated in the framework of the United Nations Economic Commission for Europe. Negotiations ended in March 1998 with the Aarhus Convention (COM (98) 344 final) and currently there is a proposal for a Council Decision on the signature by the European Community of this Convention.

The objective of this convention is to raise public awareness of environmental concerns by promoting access to information and participation in the decision-making process and it is designed to help protect the right of every person of present and future generations to live in an environment adequate to his or her health and well-being.

The convention provides for action in three areas:

- Developing public access to information held by the public authorities;
- Fostering public participation in decision-making, which affects the environment;
- Extending the conditions of access to justice.

## 9.2 Research programmes

The following research programmes are currently in progress:

- Programmes carried out by the Joint Research Centre (JRC) in the form of direct action. The JRC is a multi-disciplinary research centre established in the 1960s to carry out nuclear research throughout Europe. Its role has been reinforced, not only for the benefit of research and technological policy, but also for areas such as agriculture, energy and environment. The JRC Environment Institute in Ispra carries out important environmental work in the following areas: air pollution, water quality and chemicals waste. It also contributes to the international efforts on global change research. This Institute is available for collaborative research and work for third parties. It performs research on both indoor and outdoor pollution and has developed information databases directed at environmental concerns.
- Programmes carried out as part of contract action (indirect action) and concerted action (scientific and technical cooperation with third countries - COST).

The new Fifth Framework Programme of the European Community for research, technological development and demonstration activities (1998 to 2002) was approved on December 1998 (Decision No 182/1999/EC of the European Parliament and of the Council) (OJ No L 026, 01/02/1999) for a maximum overall amount of ECU 13.700 million.

The aim of the programme is to improve the competitiveness of European industry, to enhance the quality of life and to develop the scientific and technological basis for the promotion of sustainable development, environmental protection and other common policies.

In the environmental and sustainable development sector, the programme lists four main areas of activity:

- Sustainable management and quality of water in order to produce the knowledge and technologies needed for the rational management of water resources for domestic needs and those of industry and agriculture.
- Global change, climate and bio-diversity with the aim of developing the scientific and technological basis and tools necessary to underpin implementation of Community policies.
- Sustainable marine ecosystems with the aim of promoting sustainable integrated management of marine resources and to contribute to the marine aspects of the fifth action plan on the environment.
- The city of tomorrow and cultural heritage. The aim is the harmonious development of the citizens' urban environment from a global, innovative and resource-saving viewpoint in an environmentally sound manner.

On January 1999, the Council adopted a specific programme for research, technological development and demonstration on energy, environment and sustainable development (1998 to 2002) (99/170/EC, OJ No L 064, 12.03.1999) with 2.125 million EURO earmarked for the programme. This programme is essential for the social well being of Europe's citizens and the implementation of Union policies. Making use of the knowledge and technologies developed by this programme will make possible to meet a wide range of social and economic needs so reconciling economic development with environmental sustainability. The results of this programme will provide the basis for policies

formulated at Community level or deriving from international environmental commitments, as the implementation of the Kyoto Protocol.

This programme encourages integrated multi disciplinary approaches seeking to solve problems with a European dimension for which scientific and technological developments are needed. People are a key interactive component of the ecosystem and, therefore, a fair balance between scientific and socio-economic disciplines must be found in project implementation.

### **9.3 Cohesion Fund**

Under Article 130d of the EC Treaty as amended by the Treaty on European Union a Cohesion Fund was established for the part-financing of projects in the fields of the environment and trans-European networks relating to transport infrastructure.

Under Regulation 1164/94 a total of over ECU 15 billion has been made available for the period 1993-1997. The beneficiaries of the Cohesion Fund are Spain, Greece, Portugal and Ireland (states with a per capita GDP of less than 90% of the Union's average). In 1996 part-financing in the environmental protection sphere raised to 1.217 million ECU and focussed on water supply, waste water treatment, waste disposal and measures to combat soil erosion. The overall amount allocated for environment for the period 1993-1996 is 3.783 million ECU.

In the Commission communication to the Council and to the European Parliament on the establishment of a new financial perspective for the period 2000-2006, the Cohesion Fund keeps unchanged, being its allocation fixed at EURO 3 billion per year over the whole period.

Unlike the Structural Funds, which are intended to help reduce regional disparities, the Cohesion Fund contributes to individual projects rather than programmes and only in the two areas specified. Nevertheless, environmental considerations are taken into account in the Structural Funds.

### **9.4 Promoting investment to improve the environment**

The European Investment Bank (EIB) makes loans for the construction of waste treatment and sewage plants and for projects to improve water quality and to reduce atmospheric pollution and noise pollution, etc. It also finances projects relating to advanced technology, regional development or the energy sector. Many subsidies with similar objectives are granted under the European Regional Development Fund, and these are being increased within the framework of ENVIREG, programme aimed specifically at the environment. Moreover, since 1984 the Community has had the power - on the basis of the ACE programme - to fund Community-wide environmental measures relating to the development of environmentally sound technologies, waste recycling or the conservation of important biotopes.

In the ten-year period, 1986 -1995, about 25 % of EIB lending of about ECU 125 billion in the EU made a direct contribution to the protection of the environment. Outside the EU, in the same period, the lending for environmental projects was about ECU 1.5 billion, notably in the Mediterranean region and in the Central and Eastern European countries (CEECs).

The EIB launched its "Amsterdam Special Action Programme" (ASAP) designed to support investment in labour-intensive or job-creating sectors associated with innovative SMEs, health and education, urban renewal, the environment and trans-European networks. Within 18 months, EIB loans amount to more than EURO 8.8 billion committed. This three-year programme (October 1997-2000) is intended to have a leverage effect, with some EURO 20 billion being mobilised under co-financing arrangements at Union level. For environment, EURO 1.3 billion has been approved for ten or so more traditional water resource management and waste processing projects in France, the United Kingdom, Germany, Spain, Portugal and Belgium. These operations include various global loans, such as one being deployed in the Seine-Normandie area of France, specifically intended for financing environmental schemes undertaken by SMEs.

The aim of the Regulation establishing a financial instrument for the environment (LIFE) is to enable the EC to contribute to the development and implementation of the Community's environment policy and environmental protection legislation. LIFE is the only EU financial instrument specifically dedicated to the environment. It was adopted in 1992 and its second phase (Regulation 1404/96) has a financial limit of ECU 450 million. It co-finances environmental activities in the Community and in certain non-Community countries (bordering on the Mediterranean and the Baltic Sea and the countries of central and eastern Europe which have signed Association Agreements with the European Community).

The third phase starting on 1 January 2000 is provided for by a proposal for a Regulation (COM (98) 721 final). This proposal focuses the LIFE action for the five years covered (2000 - 2004) on three essential fields:

- LIFE-Nature to encourage implementation of the Natura 2000 network.
- LIFE-Environment to contribute to the integration of the environment in other European Union policies as well as to the implementation and updating of environmental policy.
- LIFE-Third Countries for the creation of administrative capacities and structures in the environmental sector in certain third countries bordering the Mediterranean and Baltic seas other than the associated CEECs.

The programme ALTENER (Council Decision 93/500/EEC of 13 September 1993 (OJ No L 235/41, 18.09.1993)) aims to promote renewable sources of energy in the Community. ALTENER II (1998-1999) follows on from the previous programme and ECU 22 million has been provided for the programme and it is open to the countries of Central and Eastern Europe and to Cyprus and some of its objectives are: to limit CO<sub>2</sub> emissions and to increase the proportion of renewable energy sources in the energy balance.

Energy technology in Europe is further promoted by the THERMIE programme, while the SAVE programme seeks to encourage energy conservation. SAVE I allocated a total of ECU 35 million for the period 1991-1995.

The follow-up programme, SAVE II allocates ECU 45 million for the period 1996-2000. The intention is to provide incentives for energy efficiency measures in all spheres, to encourage public and private consumers and industry to invest in energy conservation and to lay the foundations for an improvement in the energy intensity of final consumption.

**Table 12: Resources entered in the budget under 'environment' (in ECU)**

<b>Year</b>	<b>Commitments</b>	<b>Payments</b>
<b>1986</b>	<b>30 899 463</b>	<b>21 750 325</b>
<b>1987</b>	<b>38 281 816</b>	<b>31 667 008</b>
<b>1988</b>	<b>36 845 905</b>	<b>35 220 000</b>
<b>1989</b>	<b>43 985 000</b>	<b>37 010 400</b>
<b>1990</b>	<b>51 980 000</b>	<b>48 269 000</b>
<b>1991</b>	<b>83 503 000</b>	<b>48 897 000</b>
<b>1992</b>	<b>147 613 000</b>	<b>116 061 000</b>
<b>1993</b>	<b>101 233 000</b>	<b>110 342 000</b>
<b>1994*</b>	<b>133 450 000</b>	<b>112 698 000</b>
<b>1995*</b>	<b>135 000 000</b>	<b>120 000 000</b>
<b>1996</b>	<b>133 400 000</b>	
<b>1997</b>	<b>131 769 000</b>	

\* including emergency aid

Source of the latest figures: Commission's general report on the activities of the European Union in 1996

## **9.5 Environment and employment**

On the eve of the European Summit on Employment in Luxembourg, the Commission adopted a Communication on Environment and Employment: "Building a sustainable Europe" (COM (97) 592 final) which shows how environmental protection can contribute to job creation, how environmental and employment policy can be made mutually reinforcing, and how both these policies of common concern can be integrated into wider EU policy making. It devises a strategy to generate synergies between environmental and employment policy.

The basis for the Communication is the European Council in Amsterdam June 1997 and the new Amsterdam Treaty which gives renewed impetus to employment and the environment by including a new objective on employment ("a high level of employment") and a stronger commitment on the environment ("sustainable development"). The economic, environmental and social dimensions are thus brought together in the new Treaty.

The Communication calls for that the "under use" of labour resources and, at the same time, the "overuse" of environmental resources must be reversed in Europe. High levels of unemployment now go together with environmental degradation caused by specific sectors (industry, transports, energy, agriculture and consumption patterns). As a whole, EU patterns of production and consumption are far from sustainable.

It is estimated that there are currently at least 3.5 million environment-related jobs in Europe, of which:

- 2 million are in the area of clean technologies, renewable energy resources, waste recycling, nature and landscape protection, and ecological renovation of urban areas;
- The remaining jobs are in "Eco-businesses" producing technologies, goods and services "to measure, prevent, limit or correct environmental damage to water, air and soil, as well as problems related to waste, noise and Eco-systems".

The Commission has put forward the following key actions to stimulate and support the development of long-term strategies by the Member States:

- The adoption of reference criteria to enable better comparison of the achievements of businesses and economic sectors in terms of employment and environmental impacts, in order to identify and disseminate good practice;
- Enlargement of the existing schemes for selecting the best available technology by including employment effects and more detailed assessments of energy and resource usage;
- Building upon Agenda 2000, intensification of the efforts to ensure that Community funds and instruments support employment and sustainable development in an integrated way. Urban renewal and rural development would seem to be the two priority areas in this respect;
- Continuation of the gradual restructuring of tax systems by reducing non-wage labour costs and by incorporating environmental and national resource costs into the market prices of goods and services;
- Promotion of environmental education and training in order to support the use of "greener" technologies and working methods.

The 1999 employment guidelines endorsed by the Vienna European Council and adopted by the Council on February 1999 aim at the exploitation of the potential for job-creation offered by environmental services and technologies. They promote a reform of taxation encouraging the efficient use of natural resources while alleviating the tax burden on labour. The European Social Fund is available to respond to environment-related skill shortages and promote employment and environmental services.

## **9.6 Integration of the environment into other EU policies**

The need to integrate environmental concerns into other EU policies has been acknowledged since the Single European Act and the Luxembourg European Council called on the Commission to put forward a strategy for implementing Article 6 of the consolidated EC Treaty, which states that environmental protection is to be integrated into the definition and implementation of all Community activities and policies.

In May 1998, the Commission presented to the Council the Communication on a partnership for integration: a strategy for integrating the environment into EU policies (Cardiff - June 1998) (COM (98)

333 final) with the aim of introducing a horizontal approach to environmental policy by integrating it into all Community policies.

In addition, the Fifth environmental action programme established this objective also as a priority. For the Commission, the fully integration of the environment into all Community policies is a long-term challenge while in the short term, it proposes a gradual approach based on two priority objectives: Agenda 2000 and the Kyoto Protocol.

Environmental concerns are already included in Agenda 2000, firstly in the framework of the reform of the Common Agricultural Policy (CAP) and Cohesion Policy and, secondly, in the strategies for enlargement to include the countries of Central and Eastern Europe.

The Cardiff European Council (15-16 June 1998) noted the will of the Commission and the Council to integrate environmental issues into all Community policies and stressed the need to evaluate the environmental impact of Commission proposals with a significant impact. The Vienna European Council invited the Council to develop further this job in other Community policies, particularly in the Development, Internal Market and Industry Councils. The Cologne European Council has given a further momentum to this process leading to Helsinki where there will be a review of the overall progress on integrating environment and sustainable development in order to link the sectoral strategies developed by the various Councils. It will also be considered a report from the Commission on future strategy and an indicators report for monitoring the progress.

The Millennium Round of the World Trade Organisation (WTO) offers the EU the opportunity to pursue environmental integration in the context of trade liberalisation. It is desirable that the WTO becomes more responsive to environmental concerns, therefore the Commission has decided to undertake a full sustainability assessment of the new round, what it would provide a good basis for integrating and main streaming environmental considerations throughout the various trade issues on the Millennium Round Agenda.

On 9 June 1999, the Commission adopted a communication to the Council and the European Parliament on the single market and the environment. It shows that the EU can and must consolidate and further develop the positive interaction between two legitimate demands of European citizens: the smooth operation of the single market and a sufficient degree of environmental protection.

It identifies some of the more promising ways in which these two areas can strengthen each other, in areas such as standardisation, public contracts, environmental labelling, transport and energy and it suggests some key initiatives for future progress like a technical handbook on Articles 28 to 30 (formerly Articles 30 to 36) of the EC Treaty, an interpretative communication clarifying how environmental considerations can be included in public contracts, update the Commission's current database on the ecological taxes and duties applied in the single market, adopt a programme to gradually integrate environmental considerations into the work of the European standardisation bodies, development of the role of environmental agreements covering the entire EU, enhance the role and contribution of the programme for awarding the EU's Community ecological label with regard to the single market, to periodically examine the national technical regulations on the environment notified pursuant to Directive 98/34 in order to determine whether harmonisation measures are required, reassess the Community rules on State aids for environmental protection, publish a recommendation on how environmental considerations may be integrated into financial information.



## 9.7 Socio-economic policies

Future improvements in environmental quality will not come just directly from environmental policies, but also from socio-economic policies supported by environmental policies. Here, it is included, apart from policies on energy, transport, agriculture, tourism, etc, instrumental "horizontal" policies, in particular in financing and fiscal matters, although none of these measures should be allowed unjustifiably to create barriers within the Single Market.

In 1992, the Commission presented a proposal for an EU-wide energy tax which was highly controversial and finally not approved, but the fifth Environmental Action Programme includes the broadening of the range of environmental policy instruments as one of its key priorities.

The Commission Communication of March 1997 on environmental taxes and charges in the Single Market (COM (97) 9 final, OJ No C 224, 23.07.1997) has the objective of promoting the use of fiscal instruments by Member States to increase the efficacy of environmental policy and ensure that environmental taxes and charges are used in accordance with Community legislation.

Environmental taxes and charges can be a way of implementing the "polluter pays" principle by inducing consumers and producers to adopt more environmentally compatible behaviour.

This Communication proposes two categories of environmental levies, those charged on pollutant emissions and those charged on products.

The CO<sub>2</sub>/energy tax was proposed by the Commission in October 1991, reflecting the increasing awareness of potential environmental degradation due to high carbon dioxide emissions. The proposal, which foresaw an increase in the tax to USD 10 per barrel of oil by the end of the century, was virtually abandoned following considerable opposition in the Council. A revised proposal was put forward in May 1995 which introduced the concept of a transitional stage whereby Member States would agree the scope and structure of a common tax but would be free to decide product by product, whether to introduce a positive rate of tax and the level of tax they wished to apply. However, discussions broke down on the question of what was to happen at the end of the transitional period. The Ecofin Council of March 11, 1996 called on the Commission to prepare new proposals for the taxation of energy products by expanding the Community excise duty rules on mineral oils into a new taxation scheme for all energy products. The European Parliament and the Economic and Social Committee have also argued in favour of such an approach.

The Commission has prepared new proposals intended to strengthen the deepening of the internal market and at the same time to permit the introduction of energy taxation according to national preferences including the granting of tax exemptions for energy-intensive industries. The Cologne European Council insists in the need by the Ecofin of adopting the proposal on energy taxation.

## **PART II: TERMS OF REFERENCE OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND CONSUMER PROTECTION**

This Committee is responsible for the following:

1. environmental policy and protection of the environment:
  - a) Pollution of air, soil and water;
  - b) The classification, packaging, labelling, transport and use of dangerous substances;
  - c) Setting maximum permitted noise levels;
  - d) Waste storage and treatment (including recycling);
  - e) International and regional measures and agreements on protection of the environment (for example, the Rhine and the Mediterranean);
  - f) Conservation of fauna and the habitat of fauna;
  - g) Opinions on energy and research programmes affecting the environment;
  - h) The law of the sea and environmental protection aspects.

2. Consumer protection:

Issues connected with implementation of the legislation proposed in the Community's action programmes, i.e.:

- a) Protection of consumers from health and safety risks;
- b) Protection of the economic interests of consumers;
- c) Improving the legal protection of consumers (legal assistance, advice and the right of appeal);
- d) Improving consumer information and education;
- e) Appropriate consultation and representation of consumers preparatory to decisions which affect their interests.

3. Public Health:

- a) Health education (with particular emphasis on preventive measures with regard to tobacco, drugs, cardio-vascular illnesses, dietary matters);
- b) Controls on foodstuffs;
- c) Veterinary legislation in respect of protection of human health from risks emanating from bacteria and residues in animal-based foodstuffs; official inspection of food (meat, milk, etc.) and production facilities (slaughter houses and dairies, etc.);
- d) Pharmaceuticals, including veterinary products;
- e) Medical research;
- f) Cosmetic products;
- g) Civil defence.

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## INDEX

Accumulators	48, 55, 56, 65
Acid rain	27
ACP	51, 97, 98
Action programme	2, 10, 11, 15, 16, 38, 49, 52, 59, 64, 68, 77, 84, 90, 95, 97, 99, 107, 111, 112, 113
Agenda 21	77, 98
Aircraft	28, 41, 68, 69, 70, 71, 74, 75
Aldrin	58
Alps	82, 83, 88, 92, 103
Altener	8, 16, 108
Altener II	8, 16
Amazon	84
Animal experiments	80
Antarctic	78, 86, 92, 101
Asbestos	32, 58
ASEAN	97
Atmospheric pollution	46, 48, 96, 107
Auto/Oil Programme	10, 24
Baltic Sea	38, 41, 80, 83, 91, 92, 101, 102, 108
Barcelona Convention	41, 101
Basle Convention	50, 51, 55, 91, 102
Bathing water	39, 42, 43
Batteries	48, 55, 56, 65
Berne Convention	77, 101
Biocidal	59, 65
Biocide	59
Biological diversity	41, 77, 78, 79, 80, 88, 91, 98, 102
Biotechnology	57, 61, 62, 67
Birds	8, 78, 86
Blue Flag	41, 42
Bonn Convention, migratory species	77, 86, 91
Bonn Convention, North Sea	40, 92, 102
Bonn Convention, Rhine	92, 101
BRIDGE	62
Brown bears	84
Cadmium	39, 44, 64
Canberra Convention	78, 86
Carbon monoxide	17, 22
Carbon tetrachloride	26
Cars	24, 26, 28, 68, 69, 70, 73
Car tyres	73
Chemical substances	57, 63
Chlordane	58
Chlorofluorocarbons	17, 24, 25, 64
CITES	78, 101
Civil protection	11, 16
Classification, packaging and labelling of dangerous substances	57, 63

Climate	2, 4, 10, 17, 24, 25, 26, 34, 36, 77, 90, 91, 98, 99, 100, 102, 106
Climate change	10, 17, 24, 25, 26, 34, 77, 91, 98, 99, 100, 102
Coastal waters	39, 42
Cohesion Fund	105, 107
Combustion	22, 23, 24, 27, 28, 32, 34
COMECON	93
Commercial vehicles	19, 21, 22, 73
Community eco-management and audit scheme	7
Community forestry	81
Community information system	40, 44
Community law	12
Cooperation procedure	2, 37, 89
CSCE	93
Dangerous chemicals	3, 62, 64, 93
Dangerous goods	62, 66
Dangerous waste	47, 49, 54
Danube	38, 39, 45, 102, 103
DDT	58
Deforestation	4, 77, 84
Desertification	82, 91, 97, 98, 103
Detergents	5, 37, 60, 63
Dieldrin	58
Diesel	19, 20, 22, 23, 24, 28, 31, 32, 34, 73
Dioxin	48, 49, 55, 58, 60
Domestic appliances	68, 69
Drinking water	3, 36, 37, 39, 43
Dumping	10, 40, 41, 46, 49, 52
ECE	22
Eco-audit	6, 15
Eco-labels	5, 73
Eco-systems	77, 80, 110
EEA Agreement	96
EFTA	90, 96
EINECS	57, 58
Elbe	38, 92
Emissions	8, 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 37, 46, 49, 52, 55, 68, 69, 70, 72, 73, 74, 75, 91, 93, 99, 100, 103, 108, 112
Endrin	58
Energy tax	26, 112
ENVIREG	107
Environment and trade	10
Environmental agreements	9, 19, 100, 111
Environmental damage	2, 3, 7, 10, 95, 110
Environmental impact assessment	3, 4, 10, 15, 71, 73, 89, 92, 95
Environmental indicators	10, 104
Environmental inspections	12, 13
Environmental law	12, 13
Environmental management	6, 7, 104
Environmental protection and public opinion	3

Environmental standards	7, 12, 47
Environmental statistics	105
Environmental technologies	10, 97
Espoo Convention	4, 97
European Consultative Forum on the Environment and Sustainable Development	12
European Environment Agency	4, 5, 15, 16, 27, 104
European Environment Information and Observation Network	4, 15
European Investment Bank (EIB)	97, 107
EURO 2 standard	20
Exports of hazardous waste	50, 98
FAO	92
Farmyard manure	37
Fauna and flora	2, 4, 77, 78, 79, 88
Fifth Programme of Action on the Environment	90
Forests	3, 27, 80, 81, 85, 87, 88, 90, 97, 98, 102
Framework Convention on Climate Change	24, 26, 34, 77, 99, 102
Free access to information	5, 10
Fur	80
Gabcíkovo-Nagymaros dam project	92
GATT	10, 85
Geneva Convention, transboundary air pollution	91, 93
Geneva Convention, whales	80
Global environmental facility	10
Green Paper on remedying environmental damage	7
Greenhouse effect	3, 17, 24, 82, 99
Greenhouse emissions	8
Groundwater	3, 37, 38, 39, 42, 43, 45, 49, 50
Habitat directive	79
Habitats	9, 77, 79, 82, 84, 86, 87, 91
Halons	26, 32
Hazardous waste	4, 10, 46, 48, 50, 51, 54, 55, 91, 98, 102
Hearings	10, 12, 13, 42
Heavy goods vehicles	20, 21, 69
Heavy metals	38, 40, 48
Helsinki Convention	41, 102
Helsinki Protocol	93
Hexachlorocyclohexane	39, 44
Hydrocarbons	17, 22, 40
Hydrochlorofluorocarbons	26
Incineration plants	3, 4, 32, 33, 48, 49, 54, 55
Industrial noise	72
Industrial risks	57, 66
Information system	40, 44, 62, 83
Integrated pollution prevention and control	7, 17, 27, 33
Integration principle	2
Intergovernmental Conference	13
International agreements	40, 83, 105
International cooperation	38, 89, 90, 98, 101, 105

Joint Research Centre (JRC) .....	83, 106
Landfill .....	49, 50, 72
Lead content of petrol .....	23, 32
Legal basis .....	2
Legal personality .....	5, 6, 91
Leghold traps .....	80
LIFE .....	8, 9, 16, 83, 84, 87, 104, 105, 108
LIFE II .....	8, 16
Light commercial vehicles .....	19, 21, 22
Liquid fuels .....	23, 31, 33
Lisbon Convention .....	92, 102
Lomé Convention .....	97
Low noise train .....	72
Maastricht .....	2, 37, 41, 89
Management systems .....	6, 7
Marine pollution .....	39, 40, 44, 101, 102
Marine species .....	78, 86
Marpol Convention .....	40
Mediterranean .....	8, 9, 40, 41, 81, 83, 84, 90, 92, 97, 101, 104, 107, 108, 113
Mercury .....	39, 44, 48, 58, 64
Methane .....	17, 24, 25, 26, 99
Methane gas .....	26
Micro-organisms .....	61
Mobile machinery .....	22, 34
Monk seals .....	84
Montreal Fund .....	25
Montreal Protocol .....	26, 33, 91, 102
Mopeds .....	22
Motorcycles .....	22, 70, 75
Nature conservation .....	8, 77, 78, 84, 86, 87, 104
Natura 2000 .....	9, 79, 88, 108
NGOs .....	6, 95
Nitrates .....	37, 40, 45
Nitrogen oxides .....	17, 22, 28
Noise .....	3, 7, 28, 68, 69, 70, 71, 72, 73, 74, 75, 76, 107, 110, 113
Noise abatement zones .....	73
Noise levies .....	69
Noise licences .....	69
Noise register .....	68
North-East Atlantic .....	41, 45, 92, 102, 103
North Sea .....	40, 41, 92, 102
Novel foods .....	61, 67
Nuclear fuels .....	3
Oder .....	38, 45, 92, 103

OECD	10, 19, 50, 51, 68, 70, 92, 104
Off-shore installations	41
OSPAR (Paris) Convention	41, 52, 92, 101
Ozone	3, 17, 24, 26, 28, 32, 33, 35, 77, 90, 91, 102
Packaging	6, 46, 48, 55, 57, 59, 63, 113
Packaging waste	6, 48, 55
Paris Convention, desertification	82, 91, 98
Parliamentary cooperation	10
PCB (polychlorinated biphenyls)	40, 58, 65
PCT (polychlorinated triphenyls)	58, 65
PCP (pentachlorophenol)	58
Petrol	19, 23, 24, 34
Petrol engines	19
Pesticides	58, 59, 63, 98
PHARE	93, 94, 95
Polluter-pays principle	2, 10, 47, 53, 69
Procedure of codecision	2
Quality of water	37, 39, 44, 45, 106
Radioactive waste	41, 51, 52, 98
Rainforests	77, 80, 84
Recycling	3, 10, 46, 47, 48, 49, 50, 52, 107, 110, 113
Research programmes	106, 113
Rhine	38, 90, 101, 113
Rio Declaration	77, 98
Rio de Janeiro	77, 78, 88, 91, 92, 98, 102
SAVE	33, 108
Seal pups	88, 86
Seals	84
Seas	3, 36, 90, 108
Seveso	48, 58, 60
Sewage sludge	41, 47, 54
Shellfish waters	43
Shipments	50, 51, 52, 55
Single European Act	2, 89, 90, 110
Sofia Convention	39, 91
Soot particles	17
Subsidiarity principle	2, 39
Sulphur content	23, 28, 31, 33
Sulphur dioxide	17, 23, 27, 28, 31, 48, 93
TACIS	95, 96
Tax	8, 12, 18, 20, 24, 26, 50, 73, 100, 110, 112
THERMIE	108
Titanium dioxide	44, 47, 54, 64



Toxic and dangerous waste	47, 54
Tractors	31, 69
Transboundary movements of hazardous waste	50, 91, 102
Treaty of Amsterdam	2, 14, 89, 91, 92, 109
Treaty of Maastricht	2, 37, 41
Treaty of Rome	2, 16, 35, 45, 56, 65, 66, 67, 76, 88, 103
Tropical forests	3, 80, 81, 85, 88, 97, 102
UNCED	77, 98
UNEP	92
Urban waste water	38
Vehicles	18, 19, 20, 21, 22, 23, 24, 31, 32, 49, 68, 69, 70, 72, 73, 75, 93
Vessels	40, 45, 66
Vienna Convention	91, 102
Volatile organic compounds (VOCs)	17, 23, 28, 34
Warsaw Convention	41
Washington Convention	78, 86, 91, 101
Waste	3, 4, 6, 7, 8, 9, 10, 26, 27, 33, 36, 37, 38, 40, 41, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 61, 64, 92, 97, 98, 102, 106, 107, 108, 110, 113
Waste disposal	37, 46, 47, 54, 107
Waste incineration plants	3, 33, 49
Waste oils	47, 54
Waste water treatment plants	38
Water policy	38, 42
Whaling	79
Wild animals	82, 86, 88, 91, 101
Wild birds	78, 86
Wolves	84
WTO	10, 85, 91, 111
Zoos	81, 82, 88