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PART I

THE POLICY PROCESS

Chapter 1

Policy Parameters

Until the late 1980s, the process of European integration was associated most often in the public mind with economic and agricultural matters. The issues that drew the attention of policymakers and the media – even if the public was often less than thrilled – included subsidies to farmers, the promotion of free trade, competition policy, battles over the budget, harmonization of standards and the role of the European Community in international trade. For no particularly logical reason, a number of social scientists described these as matters of ‘high’ or ‘hard’ policy.

Since the early 1990s, the balance has shifted. The debate over European integration has expanded to incorporate a broader set of so-called ‘soft’ or ‘low’ policy areas such as consumer affairs, regional policy, development aid, social policy, technology and the environment. The change in focus came partly out of a new awareness that economic integration demands cooperation in a broader variety of policy areas than those originally envisioned by the authors of the Treaty of Rome. It was also prompted by a new realization that a multinational approach to many of these policy problems is often more effective than independent national approaches. Furthermore, cooperation in these areas has proved less controversial than it has been in matters of ‘hard’ policy.

The altered dimensions of the debate drew new levels of attention to Community activities on the environment, where it became clear that different standards were a significant barrier to the single market. The response has been remarkable: by the end of 1999, the EU had published five environmental action programmes, adopted nearly 850 pieces of environmental law, published numerous green and white papers, created a European Environment Agency to improve the quality of data-gathering, established a Green Forum to promote non-govern-

mental input into policy-making, run several programmes designed to finance environmental protection, and developed strategic approaches to problems in several key policy areas, including air and water quality.

Impressive though they are, however, these achievements should be treated with caution. Much of what the EU has done in the environmental field has been spillover from its primary concern of building the single market, its policies have often been opportunistic rather than deliberate, it has occasionally had an idiosyncratic notion of what constitutes an environmental issue, and the record on policy implementation has been mixed at best. It was only with the adoption of the Single European Act in 1987 that environmental policy became formally part of the European agenda, and that the Community began to address environmental problems for their own sake. The focus of its activities still does not always coincide with 'the environment' as it is conventionally understood by most national policymakers, there are substantial gaps in its range of activities, and its policy goals are sometimes long on broad principles and short on specific programmes.

This opening chapter is an attempt to clarify the nature of environmental policy as it is understood by EU policymakers. It begins with a discussion of the parameters of the environment as a policy arena, tries to pin down the underlying principles of EU environmental policy, and provides an overview of the activities of the EU in 14 key policy areas, several of which are considered in more depth in later chapters. It argues that the parameters of EU environmental policy are badly defined, and that the EU has been more productive – and involved in a greater variety of policy areas – than is conventionally acknowledged either by the EU itself or by commentators on EU environmental policy.

What is environmental policy?

The institutions of the European Union have an odd notion of the meaning of the word 'environment'. Take, for example, the way in which responsibilities have been divided up among the directorates-general of the European Commission; while the Environment DG (EDG) is responsible for most of the issues

conventionally defined by national policymakers as 'environmental' (such as air and water pollution, and waste management), fisheries conservation is part of the remit of the Fisheries DG, forestry and the control of pesticides are the responsibility of the Agriculture DG, and organic farming comes under Health and Consumer Protection. At the same time, EDG is responsible for a number of issues which are not 'environmental' as the term is conventionally understood at the national level, including noise pollution and civil protection.

A search through EU documents for a definition of 'environmental policy' raises as many questions as it answers. For example, the annual *Directory of Environmental Legislation in Force* (published by the European Commission) is restricted mainly to legislation generated by the EDG. Because the EDG has been responsible in the past for consumer issues and public health protection, the list includes laws on consumer credit, cancer prevention and the control of narcotics. At the same time, the directory *excludes* laws on fisheries management, energy conservation and organic agriculture, apparently because these are matters which come under the aegis of other DGs. A search through the EUR-Lex directory of EU legislation adds to the confusion. The pages relating to environmental policy list the EU's activities in such areas as waste management, air quality and biodiversity, but exclude its work on fisheries conservation, forestry and the control of pesticides.

These idiosyncrasies are reflected in studies of European environmental policy, most of which selectively focus on the issues dealt with by the EDG, while largely ignoring those dealt with by other DGs. The advice they provide is sometimes contradictory, often incomplete, and occasionally eccentric. For example, John Salter's guide to EU environmental law includes secondary 'environmental' laws dealing with such matters as the control of animal and vegetable diseases, the acidity of wine, and even television broadcasting (1995, chapter 7). Ludwig Krämer argues that environmental issues include the protection of archaeological heritage (1995, p. 41). Richard Macrory suggests that while the regulation of pollution and the protection of wildlife would be described by many environmental lawyers as their 'core concerns', it is also clear that many other areas of law – such as health and safety at work, land-use planning and consumer protection – have 'substantial environmental impli-

cations', and that 'the principles upon which apparently unconnected areas of law, such as competition or trade law, operate may be far from neutral in their potential impacts on the environment' (1996, p. 3).

The problem of definition is a consequence mainly of the manner in which the European response to environmental issues has evolved: as discussed in Chapter 2, that response was long driven less by a rational attempt to understand and resolve environmental problems, and more by the often reactive and improvisational manner in which the interests and priorities of European integration developed. Because Community activity on the environment was initially driven by a desire to remove barriers to free trade and to protect human health, the Community was active on issues such as air and water pollution, the control of chemicals and pesticides, and the conservation of fisheries, but was less active on issues such as forestry, land and soil management, or energy conservation, none of which were raised in the early debates over free trade. In some cases, policy priorities were determined by institutional accident: for example, the high level of EU activity on chemicals policy is explained in part by the fact that European environmental laws were initially developed in the directorate-general of the European Commission responsible for industrial affairs, thus chemicals were very much a part of the programme to develop common policies on industry from the outset.

In a sense, trying to define the parameters of the environment is an exercise in futility, because almost every activity in which humans take part and governments take an interest – particularly agriculture, industry, transport, energy, rural development and urban development – has an environmental element. As the European Green Forum puts it,

there is no such thing as an 'environmental sector'. Pollution and other types of damage to the natural environment and human health take place in the real sectors of society such as agriculture, industry and transport. Successful policies leading to sustainable development will have the potential to benefit the whole of society. This will require the full participation of stakeholders in all sectors. (Statement on environmental integration to the 1998 Cardiff summit of the European Council, DGXI Web page, 1998)

However, it is important to be clear about the meaning of ‘the environment’, for three main reasons:

- Since the Single European Act (SEA), ‘environmental protection requirements’ have had to be integrated into all the other activities of the EU. This cannot be done effectively unless it is understood just when and where the environment needs protecting, what kinds of activities have or do not have an environmental component, and where the responsibilities of the EDG begin and end.
- The EU institutions must work with national and local administrative agencies that have their own understanding of the term; if the three levels have different ideas about the parameters of environmental policy, effective coordination and cooperation will be difficult to achieve.
- No analysis of EU environmental policy can be complete unless the parameters of that policy are fully understood, and unless the activities of the EU in all the areas conventionally defined as being part of ‘environmental policy’ are fully assessed.

For the purposes of the chapters that follow, then, ‘the environment’ is defined as the natural surroundings in which humans exist and the natural resources on which they depend, ‘environmental issues’ as matters relating to the impact of human activities on those surroundings, those resources and on humans themselves, and ‘environmental policy’ as any actions deliberately taken – or not taken – by government that are aimed at managing human activities with a view to preventing harmful effects on nature and natural resources, and ensuring that man-made changes to the environment do not have a harmful effect on humans. Some of the issues that are typically defined as ‘environmental’ are listed in Table 1.1.

The priorities of European policy

Before discussing the specific actions taken by the EU in the field of environmental policy, it is important to be clear about the underlying policy priorities of the Union. There is no European Union environmental policy as such, and responses to environmental issues have developed incrementally rather than as a

TABLE 1.1 *Key environmental issues*

Air quality	Ozone layer depletion Global warming Pollution: acidification, tropospheric ozone, vehicle and industrial emissions
Water quality	Pollution: acidification, sewage, industrial emissions, urban runoff, agricultural runoff, oil spills Algal growth (eutrophication) Siltation Overextraction
Waste	Production, disposal and shipment
Renewable natural resources	Water (pollution, overuse, siltation) Air (pollution) Forests (deforestation, pollution) Soils (erosion, loss of fertility, contamination) Fisheries (overfishing, pollution) Crops and arable land (loss to urban spread, desertification, and soil erosion; contamination by chemical fertilizers, pesticides and herbicides) Recreational (pollution, loss to urban spread)
Energy	Pollution from fossil fuels Nuclear power Promotion of energy efficiency Promotion of clean and renewable energy Overuse of fuelwood and biomass
Biodiversity	Endangered/threatened species (trade, protection) Natural habitats (wetlands, forests, marshes, mangroves, coral reefs) Wild genetic resources

result of a blueprint of any kind. Thus there is no EU environmental ‘mission statement’, and the priorities of the EU must instead be sought in a combination of (1) the objectives listed in the Fifth Environmental Action Programme (EAP); (2) the mission statement of the Environment DG (EDG); and (3)

Article 174 of the treaties. A study of these three sources produces a list of six major objectives:

Preserving, protecting and improving the quality of the environment (Article 174). Noble though this goal may be, it uses adjectives which have very specific meanings, but which may not be the meanings intended by their authors, and which are contradictory. The term ‘preservation’ has conventionally been taken to mean leaving a species or a habitat in its natural state, and has implied the absence of exploitation involving change. Yet the EU has also adopted the notion of sustainable development (see below), which implies managed exploitation, or the efficient use of natural resources. Furthermore, while ‘preservation’ and ‘protection’ imply a lack of change, ‘improving’ implies the acceptance of man-made change, and thus the three terms would appear to be incompatible. Even if we accept the notion of ‘improvement’ as a goal of environmental policy, does this imply the restoration of the environment to a pre-industrial state, or to some idealistic human notion of what it *should* be like?

Protecting human health (Article 174). This is an objective which goes substantially beyond the bounds of environmental policy, because not all activities aimed at protecting human health have an environmental dimension, and vice versa. Nowhere in the body of EU law and policy is it explained where the interests of public health end and concern for the quality of the environment begins, and yet the two goals have often been used to justify EU activity. A study of EU water quality legislation, for example, reveals that the rationale behind many early laws was the protection of public health – ensuring that water was clean enough to drink and to swim in. By the late 1980s, however, the public health and environmental arguments were being quoted together, and in some cases the protection of the aquatic environment was the sole concern.

Prudent and rational (or equitable (EDG)) utilization of resources (Article 174), *or the maintenance of continued access to natural resources* (Fifth EAP), *and the preservation of the rights of future generations to a viable environment* (EDG). This notion is emphasized in the addition to Article 2 of the treaties

of the goal of ‘sustainable and non-inflationary growth respecting the environment’, a concept otherwise known as ‘sustainable development’ or ‘conservation’. It is commonly interpreted as having an economic motivation, or as being a management principle, but there is a problem with the terms ‘prudent’ and ‘rational’, which are subjective and can be defined to have very different meanings. For an ecologist, for example, the ‘rational’ use of forests might mean their management as habitats or ecosystems, while the timber industry might define the term as meaning the removal and replanting of trees in the interests of providing a steady source of wood, pulp and paper.

Promoting measures at the international level to deal with regional or worldwide environmental problems (Article 174). Introduced by Maastricht, this is the least troublesome of the key objectives. As noted in Chapter 10, the EU has adopted numerous laws implementing the terms of international environmental treaties, and has become increasingly active in international negotiations on global, regional and transboundary problems such as climate change, acid pollution, and the management of shared rivers and fisheries. The European Environment Agency, meanwhile, has been active in improving the quality of the data gathered on the quality of the European environment, thereby providing stronger foundations to the underlying rationale and goals of policy.

Improvement (or maintenance (Fifth EAP)) *of the quality of life* (EDG). This is a concept that is so broad and general as to be impossible to measure or define, so it is largely meaningless as a policy objective. How can we know when we have succeeded in maintaining or improving the overall quality of life? Who would be in favour of a *reduction* in the quality of life? What factors should be included and excluded from the measurement of the quality of life?

Increased environmental efficiency (EDG). The environmental debate in recent years has seen more attention paid to the idea of eco-efficiency, meaning improvements in the efficiency with which resources are used so that consumption can be reduced. While this has been discussed within industry and think-tanks, leading to the concepts of Factor Four and Factor Ten (respec-

tively, reducing resource use by a factor of four, and reducing resource use to the extent needed to achieve sustainable development – see *ENDS Report 271*, September 1997, pp. 20–4), it has not yet found its way into the core of EU policy, beyond the attempts made to reduce waste and to promote energy efficiency. As with much national policy within the member states, European environmental policy is still heavily driven by reacting to problems rather than preventing the problems from being created, despite the centrality of the prevention principle to that policy (see Chapter 3).

The formal goals of EU environmental policy may provide some clarity to the EU definition of ‘the environment’, but they are no more than broad principles. The true measure of the definition of EU policy lies in the specific actions agreed and taken. Many of the specific policy interests and priorities can be gleaned from the content of action programmes, white papers green papers and specialist reports, but the most telling indicators of those interests can be found in the environmental *acquis*, or the body of laws developed by the EU which reflects the specific obligations agreed by policymakers.

Bypassing the EU’s own limited definition of the environmental *acquis* – which is heavily based on the output of the EDG – and applying a definition of environmental policy that is more in keeping with the definition employed at the national level, it transpires that the EC/EU by the end of 1999 had adopted 845 pieces of environmental law. Using the adoption of these laws as a measure, and ranking them according to the adoption of new laws (see Figure 1.1), EU environmental policy has so far focused on 14 key areas:

- 1 *Water quality*. The EU’s programme of water pollution control is one of the oldest segments of EU environmental policy, and the focus of the biggest body of EU environmental legislation to date: more than 16 per cent of new laws, and more than 10 per cent of all laws. The underlying logic of European cooperation in this sector is clear given that many of the longest rivers in Europe (such as the Danube, the Elbe and the Rhine) cross national borders, that the welfare of coastal waters affects multiple jurisdictions, that water is put to many different uses, and that every consumer is reliant on water in several ways.

FIGURE 1.1 EU environmental laws by subject, 1958–99

The earliest EU legislation on water was motivated mainly by concerns for public health, and was based on the setting of water quality objectives for drinking and bathing water, aimed at ensuring no damage to human health. The first EU law on water pollution was adopted in 1973 and dealt with the biodegradability of detergents. It was followed in 1975 and 1976 with two broader-ranging pieces of legislation: the surface water directive, which was designed to establish common standards for surface water abstracted for use as drinking water, and the bathing water directive, which was designed to improve the quality of water used for swimming and bathing. The 1975 directive was motivated mainly by public health concerns, but it had the effect of controlling pollution by setting mandatory values (required of all states) and guide values (ideal goals) for nearly 50 parameters, including colour, odour and quantities of chemicals and heavy metals.

The first law aimed at protecting the aquatic environment as such, rather than human health, was the 1976 directive on the discharge of dangerous substances into inland, coastal and territorial waters. This combined the water quality objective approach with the setting of emission limit values, included lists of controlled substances, and paved the way for a series of directives on pollutants such as mercury and cadmium. A supplementary 1980 directive set binding quality targets for drinking water throughout the Community, and was followed by several more laws dealing with the quality of water as it affected freshwater fish and shellfish, and placing limits on emissions from the paper pulp and titanium dioxide industries, and on nitrates from agriculture.

Except for the protection of shellfish, the management of marine pollution has been a relatively small part of the EU water quality programme, and most activities in this area have been driven by the requirements of international treaties to which the EU is party. The 1977 accident at the Bravo-Ekofisk drilling rig in the North Sea and the 1978 grounding of the oil tanker *Amoco-Cadiz* off the coast of Brittany heightened public and political awareness about the threats faced by coastal waters in particular, but the Commission did little more than agree an action programme, create a consultative committee and set up data-exchange systems.

Following a ministerial review of water policy in 1988, there was agreement that several important gaps existed on water policy, the most important need being a programme to deal with urban waste water treatment. In 1991, Directive 91/271 was adopted, giving urban areas deadlines of between four and 14 years to set up collection and biological treatment systems for domestic waste water, and creating a permit system for discharges from 11 industries in the food processing sector.

At the same time, the Commission, the Council of Ministers and Parliament had all begun thinking about a more global and strategic approach to water policy, an approach that was confirmed by the conclusions of a Water Conference held in Brussels in 1996 – delegates agreed that EU water policy was fragmented, and that there was a need for a new water framework directive that would bring together all the requirements for water quality management into a single system, and coordinate all the different objectives for which water was protected. It was decided to base the system around river basins instead of political boundaries, and it was agreed that the four basic objectives of EU water policy were the protection of aquatic ecology, the protection of habitats, the maintenance of clean drinking water and the protection of bathing water.

2 *Waste control.* The growth in the production of waste from agriculture, mining, industry and domestic households prompted the Community in the second half of the 1970s to begin developing a series of measures on waste management, aimed at reducing the amount of waste produced, encouraging the recycling or reuse of waste, improving controls on waste disposal, and controlling the transport of wastes across national borders.

The first major piece of legislation was the 1975 framework directive on waste, which was designed to harmonize national waste measures, encourage member states to draw up national waste management plans, prevent waste generation and encourage waste recovery. The energy crisis of 1973 emphasized the importance of reducing waste generation and prompted renewed interest in recycling, so the new waste directive proved less politically contentious in the Council than did the directives on air and water quality that were then under discussion (Johnson and Corcelle, 1995, p. 184).

Several other directives were also agreed on radioactive waste, waste oils and sewage sludge, but it was not until the Seveso scandal in 1982–83, when barrels of hazardous waste collected after an accident at a chemical plant in Italy disappeared and were later found in France, that waste became a prominent political issue. A committee of inquiry set up by the European Parliament highlighted the problem of the transport of toxic and hazardous wastes, particularly across borders, leading to a 1984 directive on shipments of hazardous waste. Progress on the issue was hampered by a debate over the definition of the term ‘waste’, and another over whether or not wastes were goods that could be traded as freely as any other commodity.

Subsequent directives focused on the disposal of specific wastes such as packaging, batteries and accumulators. Several directives have also been adopted to deal more generally with hazardous wastes and pollution from waste incinerators, and an Eco-label scheme has been developed to reward manufacturers for making products that are environmentally friendly. More recently, the EU has turned its attention to the development of an integrated product policy designed to minimize resource use, avoid the use of hazardous substances, prolong product life, and make reuse and recycling easier. At the same time, it has been considering proposals aimed at reducing the amount of electrical and electronic waste being produced by consumers, and at dealing with the disposal of end-of-life vehicles.

3 *Air quality.* Given that air is a common pool resource that does not respect national boundaries, and that different air quality standards could act as a technical barrier to the single market, it is not surprising that the EU has been active in promoting the harmonization of the air pollution control strategies of the member states. Although the first piece of EU law on air pollution was a 1970 directive on carbon monoxide and hydrocarbon emissions from road vehicles, the bulk of the key pieces of law date from the late 1980s, and most are based either on setting uniform air quality standards for specified pollutants or on controlling emissions from particular sources, such as vehicles or industrial plants.

EU policy on air quality has used multiple different control methods – including air quality standards, emission limit values, and reductions by manufacturers in the production of pollutants – and has focused on six main areas: limits on emissions from

road vehicles, controls on the content of fuels, emissions from industrial plants, the reduction of acidification, rules on specific air pollutants, and contributions to international attempts to limit the use of chemicals that deplete the ozone layer and to address the causes of climate change. Directives have been adopted on the sulphur and lead content of fuels, limits have been set for sulphur dioxide, particulates and nitrogen dioxide, controls have been placed on the production of chlorofluorocarbons and other ozone-depleting substances, and the EU has been active in international negotiations on the reduction of greenhouse gases. An extensive body of legislation has been developed to reduce pollution from road vehicles, including carbon monoxide, hydrocarbons, nitrogen oxide and lead. Finally, several key pieces of legislation have been adopted aimed at reducing pollution from industrial plants, mainly with a view to dealing with acid pollution.

Just as discussions had led to the conclusion in the early 1990s that there was a need for a more global approach to water policy, so there was a concern that the EU lacked an overall policy on air pollution. The response was the 1996 framework directive on ambient air quality, which was designed to harmonize air quality assessment and management and to generate new laws dealing with 12 specific pollutants. From this, 'daughter' directives (laws dealing with more specific elements of a problem) were subsequently developed on sulphur dioxide, lead, fine particles, nitrogen dioxide, benzene, carbon monoxide, polyaromatic hydrocarbons and heavy metals. Also in 1996, the EU adopted a pollution prevention and control directive designed to encourage an integrated approach to air, water and soil pollution.

A proposal to develop a carbon tax to be placed on all the users of fossil fuels proved too controversial to win the necessary political support (see section on energy conservation below), so the European Commission instead focused in the late 1990s on an Auto-Oil programme aimed at bringing together the Commission and the oil and motor industries to investigate ways of reducing vehicle emissions and promoting cleaner fuels in the most cost-effective manner. The programme spawned proposals for directives on vehicle emissions and fuel quality, and resulted in agreements on the phasing out of leaded fuels, and the cutting of emissions of key pollutants such as nitrogen

oxides and carbon monoxide. The Auto-Oil programme was also reflective of growing agreement on the need for an overall EU air quality strategy based around a five-year cycle of reviews of the threats posed to air quality, and of the progress being made in improving it.

4 *Fisheries conservation.* This is an issue that is rarely described as 'environmental' either by the EU – which normally considers it a part of fisheries policy – or by commentators on EU policy. However, the EU's activities in regard to the conservation of fisheries are very much a part of the idea of managing natural resources (see Coffey, 1996), and a substantial body of law has been agreed aimed at managing and conserving European fisheries. It is time that these were seen as a central element of EU environmental policy.

The need to balance the demands of the fishing industry with diminishing fish stocks is at the core of the Common Fisheries Policy (CFP), finally fully developed in 1983 after several years of discussion. The first two regulations on fisheries were passed in 1983, setting up a Community system for the management of fishery resources, and establishing the necessary technical measures. A directive was also passed establishing the rules for recording information on fish catches. Conservation is now promoted through a permit system, the establishment of protected areas where fishing is restricted or banned, and the use of technical measures such as controls on the mesh size of nets and minimum sizes or weights for fish that are landed. Total allowable catches are fixed annually on the basis of studies of fish populations, and agreements have also been reached with third countries and international organizations on catches outside EU territorial waters.

The EU has also approved the terms of several international treaties on fisheries, such as the 1982 Reykjavik convention on north Atlantic salmon and the 1986 protocol to the Atlantic tuna convention. Furthermore, it has become a member of the Northwest Atlantic Fisheries Organization (a Canadian-based body set up in 1979 to promote the conservation of fisheries resources in the northwest Atlantic), and has developed plans for fisheries conservation in the Baltic, the Mediterranean and the Antarctic. In 1999, the Commission suggested to the Council of Ministers and Parliament that interactions between fisheries and marine ecosystems should be integrated into the

CFP, suggesting a trend towards closer identification of fisheries policy with environmental management policies.

5 *General provisions.* Not all EU environmental laws are focused on particular issues or problems; instead, nearly 30 have been passed to deal with broader organizational matters, including the following:

- projects to improve the quality of information, statistics, financial monitoring and reporting;
- the eco-management and audit scheme (EMAS), a voluntary programme aimed at promoting the use of environmental management systems and auditing by industry, and providing information on environmental performance to the public;
- institutional developments, such as the creation of the European Foundation for the improvement of living and working conditions in 1975, of the European Environment Agency in 1990, and of the European Green Forum in 1993;
- a 1985 directive on environmental impact assessment, aimed at encouraging evaluation of the environmental impact of public and private projects;
- programmes of action on the environment in the Mediterranean (MEDSPA) and the coastal waters of northern Europe (NORSPA);
- environmental funding projects, such as Actions by the Community Relating to the Environment (ACE), Actions by the Community for Nature (ACNAT), the financial instrument for the environment (LIFE), and the Cohesion Fund.

6 *Radiation.* Often ignored in most studies of EU environmental policy have been its activities – mainly under the aegis of the European Atomic Energy Community, or Euratom – in the field of protection from radiation and radioactivity. The first law passed by the Community on an environmental problem was a 1959 directive on ionizing radiation, which obliged Euratom to lay down standards for protecting the health of workers and the public from ionizing radiation, monitoring radioactivity in the air, water and soil, and keeping the Commission informed about plans for the disposal of radioactive waste. A 1975 directive launched a programme on the management and storage of radioactive waste, and the Community subsequently addressed issues such as the reprocessing of irradiated nuclear fuels, established conditions on imports from

third countries following the Chernobyl disaster, decided actions to be taken in the event of radiological emergencies or nuclear accidents, and set up procedures to be followed with shipments of radioactive wastes.

7 *Chemicals*. The control of dangerous chemicals and other substances has been at the heart of the single biggest body of EU environmental law – by the end of 1999, 109 laws (more than one in eight of all EU environmental laws) had the control of chemicals as their focus. Only 19 of these were new laws, however; the focus of Commission efforts has been on developing and amending about half a dozen key pieces of early legislation. EU chemicals policy has so far focused on four main areas of activity: the handling of new chemicals, accidents at chemical plants, the use of pesticides, and trade in dangerous chemicals.

Directive 67/548 on the classification, packaging and labelling of dangerous chemicals is often described (wrongly) as the first piece of Community environmental law, even though it was passed in order to clear the way for trade in chemicals rather than to protect the environment. Since amended nearly 40 times, the original directive was based on Article 100 of the Treaty of Rome (now Article 94), and was driven by concerns about barriers to free trade and by threats to human health, particularly the health of workers. There was no mention of environmental concerns in the early chemicals legislation, and the word ‘environment’ was only added to 67/548 with the sixth amendment in 1979 (79/831). This amendment also introduced a preventive element by requiring that producers or importers of more than one tonne per year of a new substance register the substance with the competent national authority, and that the registration must be recognized by all other member states. The list of substances covered by 67/548 has grown, and additional directives have been adopted dealing with specific substances, such as solvents, paints, varnishes and pesticides.

Restrictions have also been placed on the marketing and use of dangerous substances, such as PCBs, PCTs, benzene in toys and asbestos, and on pollution caused by asbestos and cadmium. Prompted by a number of headline-making industrial accidents in the 1970s – notably those at Flixborough in England and at Seveso in Italy – the Community adopted a 1982 directive on industries in fields related to chemicals or energy, obliging them

to take every possible measure to prevent accidents, and requiring them to notify competent authorities if their activities involve dangerous substances. In the late 1980s and early 1990s a number of regulations were adopted aimed at controlling the import and export of dangerous chemicals.

In 1998, the Commission launched a thorough review of EU chemicals policy, prompted in part by pressure from several member states for a more proactive approach to controlling the risks and phasing out the use of hazardous chemicals, and in part by dissatisfaction among member states regarding the lack of progress in various areas of chemicals policy, such as the programme for assessing and managing the risks posed by existing chemicals (*ENDS Report 279*, April 1998, p. 39)

8 *Energy conservation.* EU energy policy is concerned mainly with managing sources and supplies, but since the late 1980s it has also included attention to the environmental consequences of energy exploitation and use. Measures to limit emissions from vehicles and industrial plants and to reduce the sulphur content of fuel have been driven by concerns over air quality, but can also be seen as early attempts to integrate environmental factors into energy policy. The Community began dabbling in 1978–80 with measures to reduce the energy consumption of household appliances and road vehicles, adopted a 1985 directive on reductions in oil consumption, and launched a programme in 1989 to promote efficient electricity use. However, it was only in the 1990s that more work was done on measures to promote energy conservation, partly under the SAVE and SAVE II programmes. The Commission and Parliament also began making calls in 1997–98 for increased use of renewable energy, to meet as much as 12–15 per cent of EU primary energy needs by 2010 (up from just under 7 per cent then), but the idea met with lukewarm responses from energy ministers and energy producers.

Undoubtedly the most controversial policy suggestion in the field of energy policy has been the carbon tax, which has first mooted in 1990. The idea was to impose a penalty on energy use, with the amount of tax varying according to the thermal content of the fuel; the income would then be used to promote the use of environmentally friendly energy sources. The tax was accepted in principle by energy and environment ministers in 1991, but there was strong opposition from the coal and oil

industries, concerns that it would undermine competitiveness, and a veto from Britain which was opposed in principle to the idea of the EU being able to levy taxes (Matlary, 1997, pp. 68–70). The proposal had still not been formally withdrawn by the Commission as of mid-1999, but there were few prospects of it going through without – at a minimum – the Americans and the Japanese adopting the idea as well.

9 *Biodiversity*. The protection of biodiversity (wildlife and natural habitats) is one of the core issues of environmental policy at the national level, but has been a relatively recent addition to the EU agenda. Its late arrival was due in part to the early focus of the Community on problems related to industry, and in part to questions raised in the Council of Ministers about the legal basis of Community action given that it was moving away from the economic activities that were at the foundation of the Treaty of Rome. There was almost no mention of the issue in the First Environmental Action programme (EAP), and – according to Johnson and Corcelle (1995, p. 298) – it appeared in the Second EAP in large part because of pressure from the European Parliament. It is now regarded as a permanent part of the EU environmental agenda, but most of the laws adopted by the EU on the protection of wildlife and natural habitats have come in response to the terms of international treaties.

At the core of EU policy on biodiversity are two pieces of law: the 1979 directive on the conservation of wild birds, and the 1992 habitats directive. Using Article 235 (now 307) of the treaties as its legal justification, the former was based on the argument that many species of Europe’s wild birds were declining, and that since most of them were migratory species, they were part of the common heritage of the Community, and an effective response demanded transboundary cooperation. Stretching a point, the directive also argued that the conservation of wild birds was a necessary part of the Community objectives of improving living conditions, and ensuring harmonious development of economic activities and a continuous and balanced expansion. The directive places a general duty on member states to maintain the populations of wild birds by creating protected areas, managing habitats, and prohibiting the killing or capture of vulnerable species, or damage to nests and eggs.

For its part, the 1992 habitats directive is aimed at encouraging the development of a comprehensive network of protected areas under the label Natura 2000, designed to promote the maintenance of threatened species and habitat types. Member states were asked to carry out an assessment of the listed types within their borders, then to submit a list to be considered as Sites of Community Importance.

Rather than being EU initiatives, most of the remaining laws and amendments dealing with biodiversity approve the terms of selected international treaties, notably the 1973 Convention on Trade in Endangered Species (3626/82 and multiple amendments), the 1979 Berne Convention on European Wildlife and Habitats (82/72), the 1979 Bonn Convention on Migratory Species (82/461), and the 1980 Canberra Convention on Antarctic Marine Living Resources (81/691).

10 *Pesticides*. Although they arguably come under chemicals policy, an entire sub-family of laws has been adopted on pesticides and their residues in foodstuffs. The first came in 1974, with a directive establishing maximum levels of pesticide residues in animal feed, and a second in 1976 did the same for fruit and vegetables. A 1978 directive introduced the same kinds of requirements on the classification, packaging and labelling of pesticides as were contained in directive 67/548 on dangerous chemicals, but the Community went a step further in 1979 by banning the use of certain pesticides and related products, including DDT and compounds of mercury (79/117). Human health was again at the heart of the directive, but environmental damage – particularly harm to birds and wildlife – was quoted as another motivation.

Relatively few pesticides were covered by the 1978 directive, and member states were allowed to ban other pesticides in their own territories and to establish maximum levels for pesticide residues in food, creating a messy situation in which inconsistent national laws and limits were allowed to coexist (Lister, 1996, p. 245). The result was the adoption of directive 91/414, which imposed standardized scientific reviews on all pesticides and their ingredients marketed in the Community, the goal being to create an EU-wide list of permitted products by 2003. The review process moved very slowly, however, prompting suggestions for a review of pesticides policy.

11 *Noise pollution.* It is debatable whether or not noise is really an environmental issue. It is only in exceptional circumstances that noise can cause any harm to humans or nature, thus it is arguably more a matter of public nuisance, in the same vein as offensive sights and smells. However, it is always described as an environmental issue by the Commission, and the EDG has a substantial number of staff working on making the EU a quieter place in which to live. The laws so far adopted have focused mainly on reducing the noise produced by motor vehicles, construction plant, aircraft and domestic appliances. In several cases, these laws were prompted by standards developed by international organizations such as the International Labour Organization (ILO) and the International Civil Aviation Organization (ICAO).

The first directive on noise came in 1970 and was aimed at motor vehicle exhausts. Its benefits were quickly cancelled out by the increase in the volume of urban road traffic, so later amendments – beginning in 1976 – imposed tighter controls. The target noise levels remained optional until 1992, when directive 92/97 made them mandatory. Meanwhile, directives were also adopted aimed at motorcycles and tractors, and a 1984 directive on construction plant led to a string of daughter directives on compressors, tower cranes, welding generators, power generators and concrete breakers. Encouraged by standards developed by the ICAO in the early 1970s, the Commission developed a directive on noise from subsonic aircraft (80/51), but failed to win agreement on limiting noise from helicopters or trains (Johnson and Corcelle, 1995, pp. 293–5). Following the adoption of a 1992 directive on aircraft, noise policy entered something of a state of limbo; in an attempt to give it new life, a draft directive on 55 types of outdoor equipment was published by the Commission in early 1998, and a framework directive on environmental noise measurement, mapping and control in late 1998.

12 *Genetically modified organisms (GMOs).* Like noise, there is some question whether or not genetic modification is an environmental issue. It can be when modifications made to one species are transferred by accident to another, but most of the public debate about GMOs in the member states has so far focused on public health, and most European consumers have been more worried about GMOs in the food they eat than

about their ecological impact. Furthermore, the Commission has made GMO policy the responsibility of the Health and Consumer Protection DG rather than the Environment DG. Nonetheless, it is still defined by the Commission as one of its environmental priorities.

The genetic modification of plants – for example to improve their productivity and their resistance to disease – only became a mainstream public issue in the mid-1990s, but the EU institutions had already been addressing the matter for several years. The Commission announced plans to develop proposals for the management of GMOs in 1986, and the first two pieces of law were adopted in 1990: a directive on the contained use of GMOs in laboratories and similar situations, and a directive on their deliberate release, both of which have since been amended several times. The first directive focuses on controlling routine releases to the outside environment in wastes, for example, and accidental releases which might affect the health of workers, nearby populations or the environment, while the second covers experimental release and the use of GMOs in products. The second directive in particular has caused delays in the marketing of GMOs, drawing complaints from the European biotechnology industry which argues that it is being placed at a disadvantage to North American and Japanese competitors.

13 *Forestry*. The EU has not been significantly involved in forestry management, limiting itself to the development of programmes to protect forests from pollution and fire. The former began in 1987 and is based on the development of a forest observation network designed to produce inventories of damage and to improve understanding of the effects of pollution and of methods of restoring damaged forests. The latter began in 1992 and is aimed at promoting fire prevention and forest monitoring measures. The EU has also been working since 1989 to set up a European Forestry Information and Communication System to collect data on the forestry industry.

While forestry management is still seen as very much a domestic matter for the member states, except where transboundary pollution has caused forest dieback and the death of trees, this may be about to change. In November 1998 the Commission adopted a communication (Com(98)649) on a forestry strategy for the EU. Based primarily on Agenda 2000 proposals

for Eastern European enlargement, it suggested protecting and restoring the ecological quality of forests and extending the present area of exploitable forest. It also noted the potential of forests as a source of biomass for energy generation. While agriculture ministers endorsed the proposal, however, they emphasized that forestry policy was still the preserve of the member states (*European Policy Analyst*, 1st quarter 1999, pp. 54–5).

14 *Organic agriculture.* The Common Agricultural Policy (CAP) was initially concerned almost exclusively with protecting the economic interests of farmers, and with providing them with a guaranteed minimum income for their produce. Because this also tended to encourage factory farming and the use of chemical fertilizers and pesticides, the CAP was long the focus of criticism from environmental groups, but little was done other than to respond to the impact of intensive agriculture. For example, a 1985 regulation (797/85) introduced the concept of environmentally sensitive farming into the CAP, and a 1991 directive (91/676) imposed controls on nitrates.

By the 1990s, organic agriculture had begun to appear on the EU policy agenda, the core of its programme being regulation 2092/91 which came as a response to the growing consumer demand for organic produce and to the argument by the Commission that rules were needed on production, labelling and inspection in order to promote fair competition. Given the new emphasis on integrating environmental considerations into all the other activities of the EU, issues such as organic farming are likely to continue to move up the policy agenda.

This brief survey of EU environmental policy shows that European activity on environmental issues has been far broader than EU institutions themselves admit, and than most commentators appreciate. While the literature on EU environmental policy has been mainly restricted to issues such as air and water quality, waste management, chemicals and pesticides, the EU has been active in the conservation of fisheries, reducing the impact of radiation on human health, conserving energy, protecting wildlife and promoting organic agriculture. While the EU lacks a comprehensive environmental policy, it has developed an increasingly coherent set of policies in a growing variety of areas that come under the general rubric of the ‘environment’.

At the same time, its activities in this area have drawn increased political and public attention. The next chapter will show that the restricted definition of ‘environmental’ used by the Community – and then by the EU – was a result of the initial focus on developing environmental policies because of concerns about the effect of different environmental standards on the internal market, and as a means to protecting human health. More recently, environmental policies have been driven more by concerns about the state of the environment, and by the argument that many environmental problems are better dealt with by the member states working in concert rather than separately. The result has been a switch in the focus of law and policy towards environmental management in its own right.

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