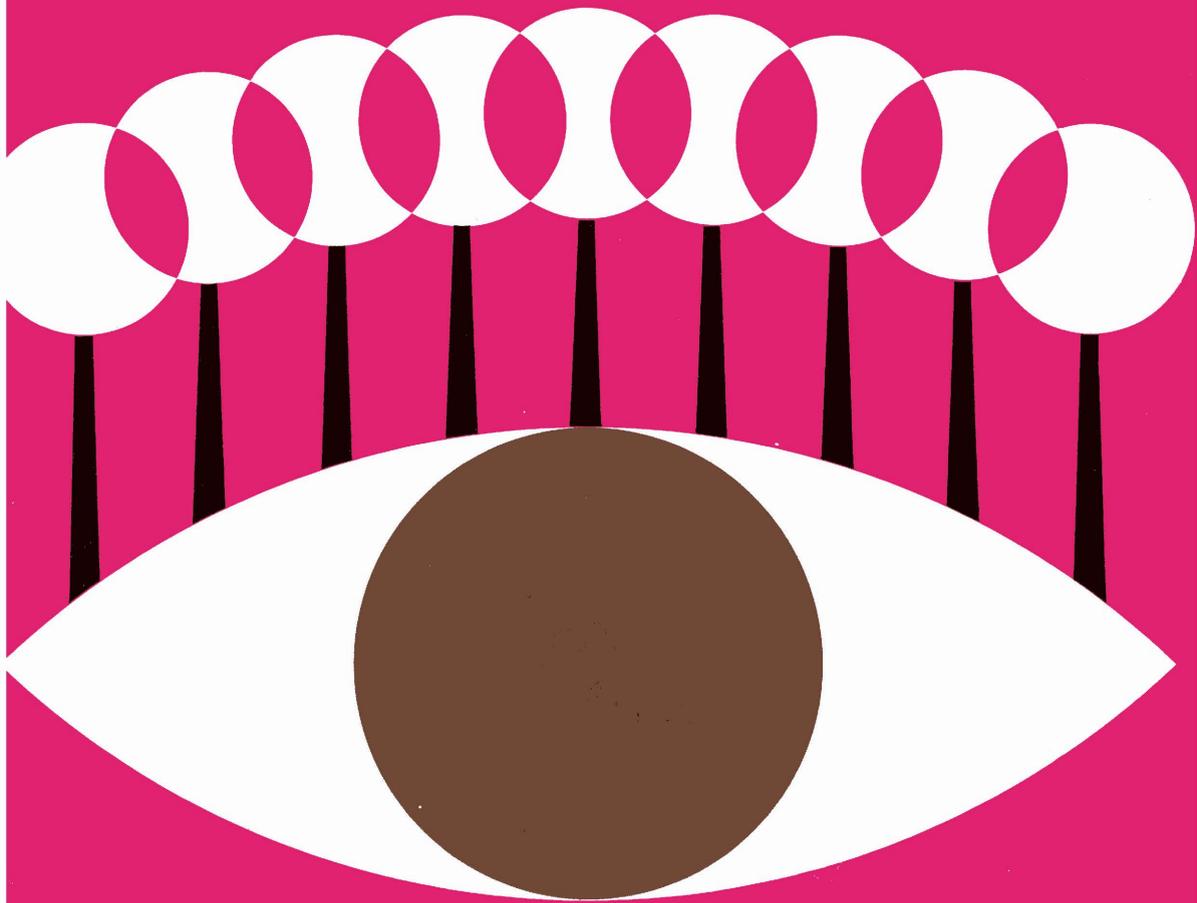


Europe and its environment



Programme for a better
quality of life

EUROPE AND ITS ENVIRONMENT

**PROGRAMME FOR
A BETTER QUALITY OF LIFE**

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EUROPE AND ITS ENVIRONMENT

Western Europe has been inhabited for a million years. There is no virgin land left in the region. Although human beings are linked by their own cellular structure to their environment, their survival has depended on their mastery of natural phenomena: their aggressiveness against anything that stood in their way — a tree, an animal, other human beings — has been the touchstone of their development.

Living in a favourable environment where the struggle for existence did not take up all their time, the people of Europe, however, learned to maintain a balance between themselves and nature. They created around themselves an inhabited landscape where cities, villages and farmlands could blend harmoniously.

This harmony has been disrupted, particularly by the industrial revolution and the population explosion. In the past half-century, our European civilization has consumed more goods and resources than the entire human race throughout all recorded history. Now, through lack of foresight during those two generations of triumphant technology, we find ourselves using up our resources so dangerously fast that we may have to ration them.

Man has recently become conscious of an imperative need to manage more wisely the environment in which he lives. This implies control of common resources — air, water, land and all that they produce. These capital assets are limited. The greater the number of people, the smaller their individual share becomes, the more restricted their freedom of action. Human

ingenuity can make up for part of this, provided that production becomes part of a logical cycle: each object made would have to be destroyed after use and recycled into a 'new' raw material — as the American astronauts did in their space module. (But recycling does not necessarily reduce pollution.)

Many major cities continue to expand without paying attention to the smoke of domestic heating and industrial plants. The motor car has added its carbon monoxide and carbon dioxide fumes to an already polluted atmosphere. The need for building land has provoked the destruction of wooded areas in and around the cities. Elsewhere, in numerous places, the forest is thrust back to make space for agriculture or vacation homes. Pollution has thus been scattered and multiplied. It is no longer a question of protecting a particular species of flora or of fauna, but of preserving the balance of life as a whole; only mankind can master its own progress.

Member States' policies

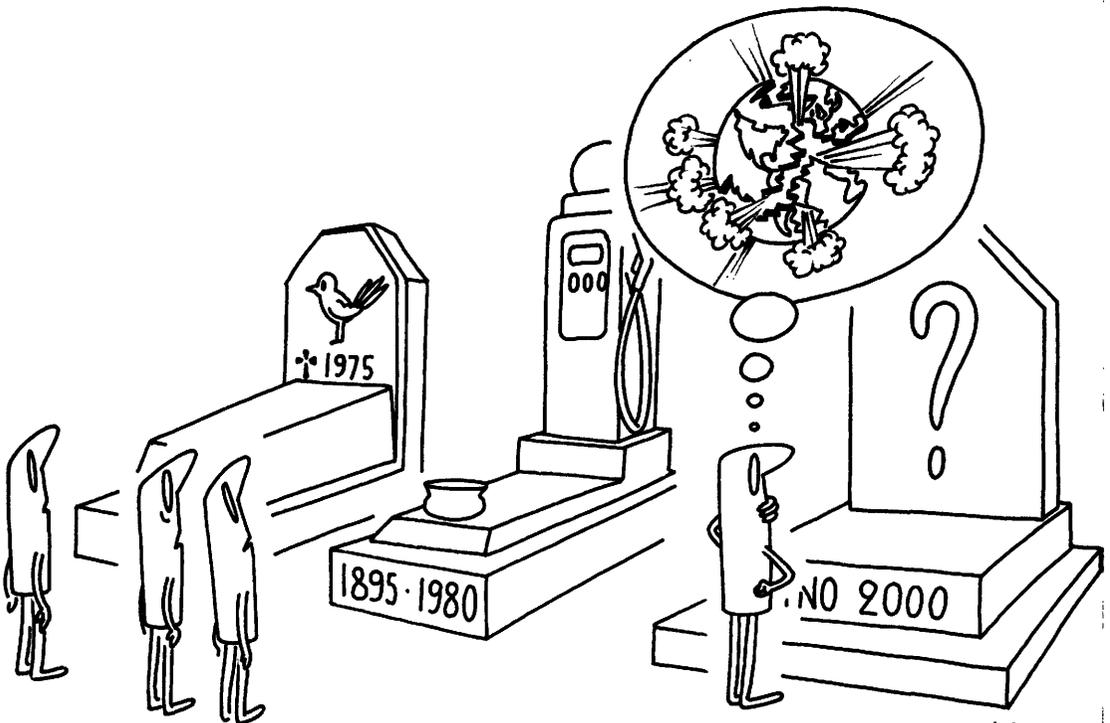
Each European Community Member State uses its limited powers to tackle these problems in a different way.

In Germany, the Federal Department of the Interior shares responsibility with the provincial governments — the Länder. Other powers to control pollution belong to the Departments of Agriculture, Science

and Education, Transport, and Public Health. An interministerial committee has been created under the Chancellor. In France, coordinating environmental protection plans in a single ministry dates from 1971. Formerly, plans were scattered among five ministries — Industrial and Scientific Development, Agriculture, Transport, Cultural Affairs, Planning. The government formed after the May 1974 presidential elections set up a Ministry for the Quality of Life to deal with protection of the environment, youth questions, sport and leisure, and tourism.

The Ministry draws on an Intervention and Action Fund for Nature and the Environment, which can deal with emergencies.

In Italy, 10 ministries share environmental control — Public Works, Agriculture, Merchant Marine, Health, Scientific Research, Foreign Affairs, Interior, Treasury, Education, and Industry. Many regional services also are involved. There is a 19-member Environmental Committee in the Chamber of Deputies. The Senate has a similar committee composed of 10



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senators and 6 experts. The Senate committee corresponds with its equivalents in the other countries.

Britain has a Department of the Environment, headed by a minister, which oversees urban and rural planning, conservation, recreational land, road-building, transport infrastructure — including harbours and the proposed Channel Tunnel — housing, historical monuments, and government buildings, as well as control of air, water and noise pollution. The DOE supervises and coordinates the work of local authorities, notably for water, sewage, and housing.

In the Netherlands, a Ministry of Public Health and Environment and a National Committee for County Planning are responsible for environmental control. The National Committee contains representatives of 11 ministries. Another committee coordinates activities at the level of the 11 Dutch provinces.

Denmark set up a Ministry for Anti-Pollution in 1971; in 1973 it was changed to a Ministry of Environment after it became clear that protection of the environment called for more than anti-pollution measures. Anti-pollution, food legislation, town and country planning and forestry were brought under one administrative authority.

A principle of the laws that have emerged from this ministry's proposals is that regional and municipal authorities are mainly responsible for applying the measures, and that local inhabitants should have a considerable influence on steps to improve their environment. Danish authorities query the general application of the 'polluter pays' principle and are considering the merits of tax reliefs for certain investments that restrict pollution.

In Ireland the main ministries involved are those of Local Government, which deals with air and water pollution and the preservation of nature, and the Ministry for Lands, which is concerned with

wild life and forests. A comprehensive physical planning system applies throughout the country and planning permission is required for major development outside the agricultural sector. Subject to a central system of appeals, planning permission for a project may be granted or refused by the local planning authority. Conditions may be attached to the grant of permission, designed to secure environmental protection. These conditions may relate to such matters as control over discharges into rivers, the sea and the atmosphere and waste disposal, as well as to consideration of siting, design and layout.

In Belgium a secretary of state, supported by an interministerial commission, is responsible for coordinating the work of the different departments concerned with protection of the environment. He also stimulates the various departments to find solutions to the country's environment problems.

Through education and other means he seeks to make the population more aware of environmental issues.

In Luxembourg responsibility for the environment is shared between the Administration for Water and Forests and the Ministry of the Interior.

The European Community's governing Council of Ministers and its policy-proposing, executive Commission feel strongly that national measures adopted to improve the quality of life in Europe should be coordinated: anti-pollution control measures and the recycling of residues raise production prices — often, as yet, without adequately solving the problem. For example, the protection of migratory birds in the Netherlands and Germany serves little purpose if they are killed in France or Belgium. The pollution of the Rhine by one upstream factory, for instance, constitutes a danger for all Rhine Valley countries.

Pollution knows no frontiers.

A EUROPEAN PLAN OF ACTION

The major environmental goal of the European Community is to ensure a 'constant improvement of the conditions of life and employment' and the 'harmonious development' of the economy.

However, as the Heads of State or Government of the Community noted, at the Paris Summit meeting of 19-20 October 1972, 'economic expansion, which cannot be an end in itself, should, by priority, lessen disparity in living conditions'.

Attainment of this goal, it was implied, should involve the participation of all members of society. The result should be not only an improvement in living standards but in the quality of life. Particular attention should also be given to non-material values and to environmental protection.

To translate this concept into action, the Community adopted, in July 1973, an initial environment programme with the following objectives:

- (i) to anticipate, reduce, and, as far as possible, prevent pollution. Prevention was seen as better and cheaper than cure;
- (ii) to manage the use of natural resources properly, control ecological balance and protect the biosphere: any exploitation of natural resources which would seriously damage ecological balance should be avoided. The environment, with its limited capacity to absorb wastes and neutralize their ill effects, should be considered as a reserve, to be used

but not misused;

- (iii) to control economic growth, taking into account the requirements of quality, while improving working and living conditions;
- (iv) to consider the environmental aspects of building and land development;
- (v) to find joint solutions to environmental problems common to Member and non-Member States.

The Community has adopted the principle that the 'polluter pays', and is working out ways of applying it. Where pollution results from a production process or the supply of a service, the producer or person providing the service should in principle pay for the anti-pollution measures. Where pollution results from the use of certain products, the user should in principle pay for the anti-pollution measures.

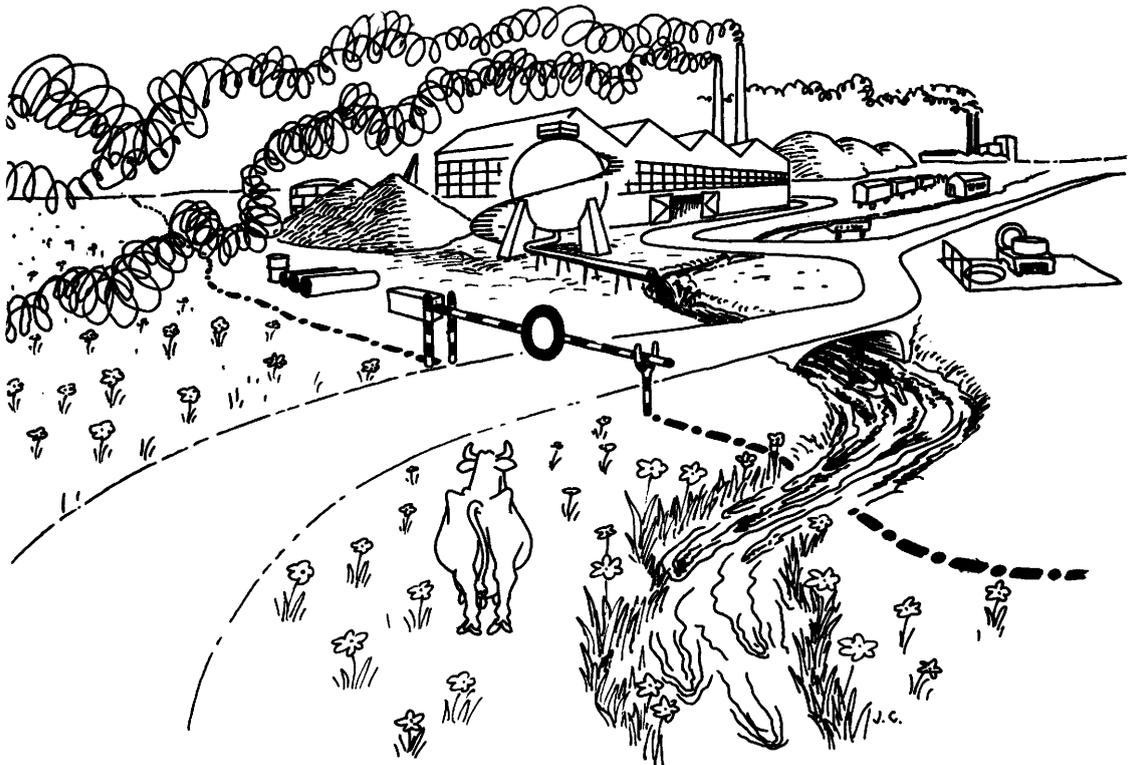
If it proves impossible or too difficult (and hence arbitrary) to identify the polluter — especially when there are 'pollution chains' or 'cumulative pollution' — the cost of pollution control should be charged at points along the chain or during the cumulative pollution, by the most suitable economic and administrative means.

Exceptions to the principle could be justified by difficulties in adapting to environmental quality standards, particularly for economic, technological and social reasons. In this case, it might prove necessary to allow some producers

time to adapt their products or output to the new standards. Transitional aids might be granted to the industrial sectors or regions concerned.

Another principle is that activities in one state should not harm the environment of other states. The Community should also consider the interests of developing countries, it was decided.

Finally, it was accepted that a successful environment policy should be based on every segment of the population taking part in the protection and improvement of the environment. A continuing and thoroughly educative movement should be developed at all levels, to awaken the entire Community's consciousness of the problem and of present responsibilities towards future generations.



THE RIGHT TO CLEAN AIR

The conditions of our planet have proved favourable to infinite forms of life for five billion (thousand million) years. The composition of the primitive atmosphere, however, was not one that would permit human beings to live today. It was principally composed of methane, carbon dioxide, and nitrogen, resulting from volcanic activity.

Three billion years ago, molecules — the basis of all living material — appeared. They formed the first unicellular marine organisms by a process which biochemists still seek to unravel. Then, in the course of the next few million years, the marine and terrestrial vegetation which developed in the earth's humid heat produced oxygen in increasing amounts.

In other words, it was these primitive forms of life, which transformed the atmosphere, in which more advanced organisms gradually acquired gills and then lungs; with these, they could grow and multiply. The world today is the result of this long process.

Without an atmosphere, life is not possible. The air, composed of 21% oxygen and 78% nitrogen, is not only used for respiration; it also protects the earth's surface against ultra-violet rays, conserves heat radiated by the sun and stores water vapour. The atmosphere constantly interacts with plants and other living organisms (including ourselves).

Frantic modern activities — manufacturing, building, waging wars — abuse this medium which is essential to life. As many examples show, air pollution can

have lethal effects. Other insidious results are due to major pollutants such as sulphur dioxide and trioxide, carbon monoxide, hydrocarbons, nitric oxide, fluorine, chlorine, lead, metal and asbestos dust, and radioactive elements. All of these elements are harmful to life; air pollution can and should be reduced before a wholesale poisoning of the world develops.

Gaps in knowledge

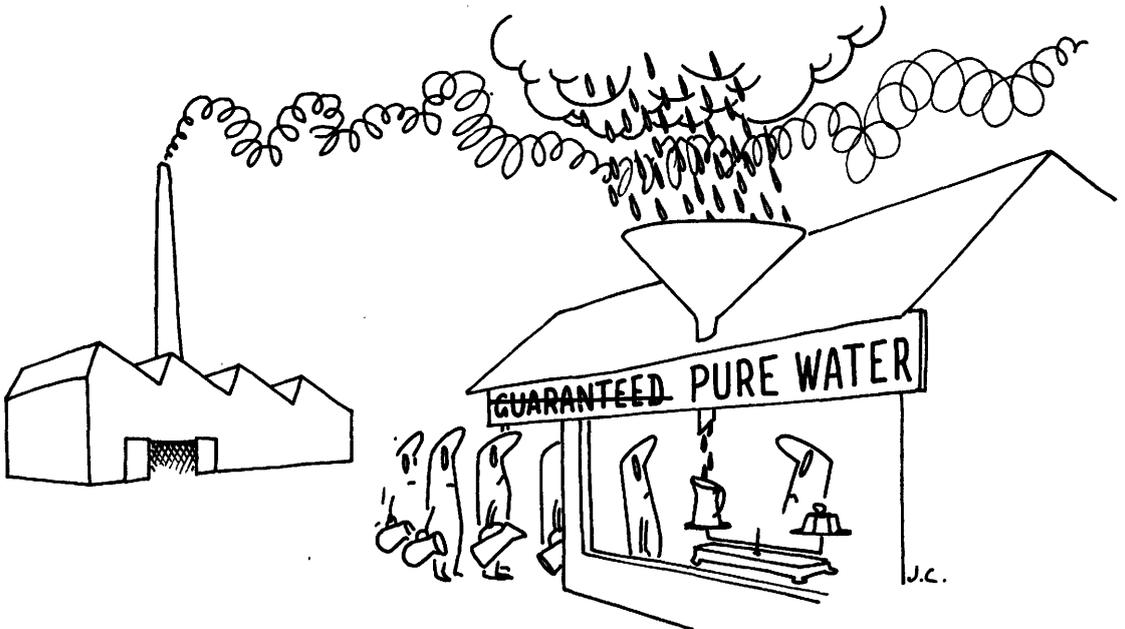
Pollution has been reduced where remedial measures have been adopted and rules strictly enforced; the problems are not insoluble. At present, measures are centred on large cities and industrial zones, where the problems are often related to geographical conditions not fully understood when the cities and industries were built.

At the Community level, the goal is to establish a common body of norms and methods: the study of pollution problems reveals many gaps in scientific knowledge and in methods of analysis and measurement. In most cases neither the costs of pollution nor of anti-pollution measures can yet, it seems, be evaluated accurately. To fill the gap, the European Community programme includes several steps to establish scientific criteria for evaluating the harmfulness of major air, water, and noise pollutants.

In air pollution, priority is given to the study of the following toxic substances:

sulphur compounds and chemical dust, nitrogen oxides, carbon monoxide, photochemical oxidants, asbestos and vanadium. Commonly agreed methods should be worked out to define, for various areas of the Community, criteria for air quality. Then, action will be taken to ensure that the quality standards are respected.

Finally, the organization and development of technical exchanges between the national and local networks of surveillance and pollution control will permit the establishment of a common information system, to be subsequently included in a world surveillance system organized by the United Nations.



THE RIGHT TO CLEAN WATER

Current water shortages in countries north of the equator in Africa, Asia, and America tragically emphasize how vital water is: a slight climatic variation occurs, and trees wither and cattle are decimated; human populations may perish.

Without water, our earth would be as barren as the moon. Thanks to solar energy, water evaporates, passes through the atmosphere, and falls as rain. This cycle is essential to support life, but could be endangered by the constant growth in consumption of industrial civilizations.

A large part of the wastes and pollutants scattered on the ground gather in streams, then in rivers, and finally settle in lakes or in the sea. A fraction of the fertilizers, pesticides, and weedkillers we use is also washed away, by rain, into rivers; but most pollution of fresh water is direct.

The sewage of the cities, containing pathogenic micro-organisms as well as organic or chemical matter such as detergent residues, is the main culprit. The volume of these 'waste waters' is tremendous and keeps increasing. Often this sewage water is not completely treated; some untreated sewage increases the flow of rivers by as much as half. To this we must add thermal pollution: nuclear and conventional installations need cooling water; after use, this water raises the temperature of rivers. The causes of deterioration of ecological systems are thus all found in fresh waters.

Toxic products directly affect organisms. The harmful results of a rise in temperature or the presence of fertilizers —

phosphates, nitrates, or organic matter — are harder to determine; but they are the main cause of oxygen reduction in water, impeding the respiration of aquatic life. This is how rivers and lakes 'die'. Not long ago, rivers could 'resolve' wastes dumped into them. Today, the quantity is too great. Europe must cope with the various sanitary, ecological, and economic needs and uses of water resources. The same river, flowing through two or more countries, must satisfy divergent and numerous requirements.

River studies compared

In addition to considering technical measures likely to reduce water consumption, increase re-use, or fight pollution, well coordinated plans must be adopted to protect the supply of this unique and vital resource, which no other substance, natural or artificial, can replace.

To provide for fair distribution in sufficient quantity and quality among all present and future users, the Community will define the characteristics to be considered for specific uses of water — drinking, swimming, agricultural or industrial usage, spawning grounds — from the physical, chemical, and biological viewpoint.

The Commission has proposed that limiting thresholds be fixed uniformly for the entire Community, defining the quality required for surface waters used to pro-

duce drinking water. These thresholds concern the concentration of various toxic products (for example, mercury, lead, and pesticides) and various parameters that may have harmful effects (such as conductivity, coloration, and temperature). Certain thresholds would have to be respected; others could be considered as guidelines. Some could be waived, particularly in exceptional meteorological or geographical circumstances.

Thresholds could have different values, depending on the degree of purification applied.

The Community will also:

- (i) establish common criteria of quality, expressed as a concentration of pollutant or as an intensity of nuisance;
- (ii) define a common method to achieve and maintain quality goals, both present and future;
- (iii) gather data to establish the most appropriate levels of decision to define quality goals, taking into consideration local requirements and limitations.

River studies conducted by Member States will be compared. France will report on the purification of drinking water. The United Kingdom will give information on water used for irrigation and cattle raising. To help define quality goals, Belgium will provide data on the Sambre River, Italy on the Tiber, France on the Vilaine, and Britain on the Trent. The problem of underground waters will

be studied. Underground water constitutes a precious reserve whose volume and renewal remain unknown. Special care will be taken not to contaminate underground water reserves through surface pollution.

Lakes will also be studied as they are threatened by eutrophication. This is a phenomenon in which water becomes loaded with organic matter and other fertile substances on which algae thrive. Bacterial action and the decomposition of vegetable matter diminish the content of dissolved oxygen, killing off animal life.

Protection of the Rhine

The Rhine, a European river *par excellence*, could be the symbol of Community action in the struggle against pollution. The growing pollution of the Rhine and its tributaries has caused growing concern among the people using it or living near it. In 1971, the European Parliament adopted a resolution strongly calling on the Commission to do everything in its power to develop and coordinate Member States' action to protect the Rhine.

In March 1972, the Commission recommended an emergency programme for cleaning up the Rhine waters, along with the creation of a European agency for the Rhine basin. The Commission also undertook a preliminary study which showed that the Rhine basin had suffered

a marked pollution increase.

The states which signed the Berne Convention, creating an international commission for the Rhine's protection against pollution, participated in a ministerial conference in The Hague in 1972, sponsored by the Netherlands Government. Some of the decisions they took show how countries can act together in this area. Thus Member States of the International Commission decided to share the cost of curbing pollution by salt, by building up stocks in Alsace, and to control the dis-

charge of chlorine ions. They are drawing up a list of chemical substances whose dumping must be banned or restricted. To reduce thermal pollution, all future electricity-generating stations that use the waters of the Rhine will be equipped with closed-circuit cooling systems.

The Council and the Commission, disturbed by the river's alarming condition, are following the situation closely, and the Commission is participating, as an observer, in plenary sessions of the International Commission.



THE PLANET SEA

The 93 million square miles of salt water, which cover over 71% of the world's surface, play a still more important role than we used to think.

The waters around our shores gave birth to life some 3 billion years ago. Because it covers such a large area, the sea is an essential source of animal matter. Its annual output of organic matter is estimated to be 30 billion tons. A large part of this living matter is made up of tiny algae — phytoplankton. Through photosynthesis, these algae produce two-thirds of the oxygen released into the air. This complex process, which is the basis of the whole aquatic food chain, takes place in a shallow layer no deeper than 300 feet. Phytoplankton serves as food for microscopic creatures, the zooplankton. Fish in turn feed on these and are then eaten by predators, including man — who takes an ever increasing share.

Oceans also play an essential role as thermal regulators, storing the sun's heat and then slowly releasing it. This 'buffering' role also exists in interactions with the atmosphere. The proportion of carbon dioxide in the atmosphere is controlled by the volume of water in which the excess gas is dissolved. Recent but still incomplete observations reveal that carbon dioxide passes from the atmosphere into the ocean in certain regions of the globe and is later released in others.

Vegetation is involved in the process; to grow, plants must assimilate large quantities of carbon (from 0.05 to 3 grams per cubic metre per day).

Despite their size, oceans are threatened by human activities. They receive waste matter dumped in rivers. Dusts thrown into the atmosphere constantly fall in the sea. Ever larger quantities of modern pollutants are intentionally dumped in oceans.

Sources of sea pollution

Of all forms of pollution, sea pollution is certainly now — and will be even more — one of the most dangerous because of its influence on the biological and ecological balances which govern life on our planet. The danger results, also, from the pollution level already attained, from the diversity of pollution sources, and from the difficulty of enforcing the remedial measures taken.

Four main sources of sea pollution can be distinguished:

- (i) transport and navigation;
- (ii) intentional dumping of sewage;
- (iii) exploitation of marine and submarine resources, especially on the sea floor;
- (iv) effluents from the land.

To prevent or reduce the first three types of pollution, which involve particularly difficult problems of monitoring and control, we need an international programme at the world or regional level. The struggle against sea pollution is



closely related to the struggle against the pollution of fresh waters flowing into oceans.

Community action will consist of coordinating Member States' legislation and taking steps against sea pollution from the Community's coastal regions. To evaluate the situation, it is necessary to work out how dangerous the concentration of certain pollutants (heavy metals and organohalogenous compounds) is to the sea. Fish and plants will be collected for sampling. Sanitary and ecological standards will be set to control the dumping of these pollutants into the sea. By joint methods, quality standards will be set for use of the sea (such as for swimming, or for oyster and mussel farming). Special emphasis will be given to estuary zones where pollution is particularly bad.

The final act of a Convention to prevent pollution of the seas from land-based sources was signed in Paris on 22 February 1974 by states with North-East Atlantic and North Sea seabords, states with rivers flowing into these seas, and the European Commission, acting on the Community's behalf. The contracting parties undertook to enact measures needed to end this type of marine pollution, which is by far the most serious.

An administrative body will draw up specific programmes to carry out the agreement. Through its authority under the Community Treaties and the Community environment programme, the Community will exercise voting rights in this body equivalent to the number of votes held by Member States that are parties to the Convention.

THE RISING TIDE OF WASTE

Human activity in an expanding population means more refuse every year, and too much to be 'digested' by nature. Residual wastes — some toxic or radioactive — from manufacturing are becoming more difficult to destroy.

Man must now recycle — produce primary materials, manufacture and consume goods, and then transform discarded products into their natural state. Formerly, the cycle stopped at consumption; final deterioration was left to nature.

Action by the Community should begin with an inventory of wastes that are particularly damaging to the environment because of their toxicity, their non-biodegradability (inability to decompose naturally), or their bulk. A complete study will be made of the problems of collecting, transporting, stockpiling, and recycling waste material, classified by this order of priority:

- (i) harmful substances causing marine pollution — for example, organohalogen and organosilicon compounds, mercury, cadmium and plastics;
- (ii) waste oils;
- (iii) wastes from the manufacture of titanium dioxide (used as a pigment);
- (iv) metal waste (cars, household appliances);
- (v) non-biodegradable packaging materials;
- (vi) animal waste from industrial processing or from slaughterhouses.

Industrial discharge

Industrial processes that pollute need special attention. For each polluting type of industry (the most pollutant industries number about 15), the Community seeks ways of suppressing or lessening harmful results. The Commission is studying ways of setting acceptable pollution discharge levels for highly pollutive industries, bearing in mind the social and economic costs of such limits.

The Commission in March 1974 urged Member States to ensure the disposal of waste oils by re-use — that is, through regeneration or incineration. These two methods harm the environment least. The Commission's draft directive says it is important to make the greatest possible use of these waste oils. It believes that mere destruction of waste oils can no longer be condoned.

As a short-term step to reduce pollution by motor vehicles, the Commission has proposed that from 1 January 1976 a general limit of 0.4 g/l (grams per litre) be placed on the lead content of all grades of petrol sold in the European Community.

The Commission has also proposed a limit of 0.15 g/l from 1 January 1978 on the lead content of 'regular grade' petrol, which at present accounts for about a fifth of total petrol consumption in the Community and already has a lower lead content than 'super grade'.

This second measure would give the oil

industry a longer-term guideline for planning future types of petrol. The subsequent reduction of other pollutants in car exhaust gases — e.g., carbon monoxide and unburnt hydrocarbons, which are already limited by a Council of Ministers directive of 20 March 1970 (now being revised by the Commission to take account of technical progress) — might require the use of catalytic afterburners. Current information suggests that lead in petrol shortens the life of the catalysts which it is proposed to use.

For gas oils the Commission has proposed that the Council of Ministers adopt Community measures to reduce gradually the sulphur content of the two grades that will be marketed in the Community from 1 October 1976. To reduce the present pollution level or, in certain areas, to maintain the existing levels, which are considered to be acceptable, the sulphur content of the two grades of gas oil will be cut in two stages:

- (i) from 1 October 1976, the maximum permissible sulphur content in the first grade of gas oil will be 0.5%, and this will then be lowered to 0.3% from 1 October 1980;
- (ii) from 1 October 1976, the maximum permissible sulphur content in the second grade will be 0.8%, and this will then be lowered to 0.5% from 1 October 1980.

Use of the second grade of gas oil will be restricted to areas where atmospheric pollution is low or where the sulphur in

gas oil has little effect on atmospheric pollution. Member States delimit these areas, informing the Commission of the criteria governing their decisions. This enables the Commission to assess how far the criteria and their application protect public health and the environment. This flexibility particularly benefits Member States with handicapped industrial regions but where atmospheric pollution is not yet a problem.

In the first phase of its campaign to deal with industrial wastes, the Commission is analysing the paper and pulp, iron and steel, and sulphuric acid industries to determine:

- (i) the exact nature of the pollution problems;
- (ii) the techniques to use in the light of national measures in force, and the economic consequences of these measures.

In the second phase, the pollution problems of the following industries will be tackled: fertilizers, petrochemicals, leather, food, wool, and agriculture. Later, other industries will be studied.

Energy pollutes

Energy production in almost every form pollutes the atmosphere — carbon and sulphur oxides, and dust produced by power stations, refineries, domestic heat-

ing, internal combustion engines, as well as the pollution of lakes and rivers by water used for in-plant cooling and by other polluting substances.

Particular attention will be given to the production of electrical energy, since the Community will probably need 1 300 000 megawatts of power in the year 2000 — five times the present figure of 260 000 megawatts.

A preliminary report on pollution caused by the production of power, especially the noxious effects of rising water temperatures, oxides of nitrogen, and sulphur dioxide, will be prepared and discussed among national experts. The Commission will then propose counter-measures to the Council of Ministers.

The estimated demand for energy doubles every 10 years, stressing more and more the need for nuclear electricity. This in turn poses the problem of storing radioactive waste.

The management of these highly active, long-life wastes will pose delicate problems in densely populated Community countries. People and the environment must be safeguarded against the risks associated with the treatment, transport, and storage of materials that remain radioactive for hundreds or thousands of years. Problems of this magnitude and cost can be resolved only by common effort.

Various processes of waste solidification will be studied, and the methods chosen will be related to available means of transport and storage sites.

CONSERVING NATURAL RESOURCES

Europe's life and economy are largely based on supplies of non-replaceable raw materials: certain metals, petroleum, and renewable water resources are threatened by rapid increases in demand and by pollution.

Worldwide shortages are inevitable: increased consumption, even with the recycling of certain metals, often exceeds the rate of the world's annual population growth (2%).

Water needs are expected to double between now and the year 2000 in most industrial countries. The rate of increase in yearly ore consumption reaches 7.5% for aluminium, 5.5% for iron, 4.7% for copper. World consumption of hydrocarbons (oil and natural gas) is increasing by 7% a year.

Until now, needs have been met by intensive exploration and by improvements in exploitation and extraction technology. As part of its environment programme the Community will:

- (a) examine, on a worldwide and Community basis, the availability and future needs of nonrenewable resources, such as hydrocarbons, metals of the platinum group, mercury, chromium, tin, and fluorine;
- (b) analyse the effects of shortages of these resources on the Community's environmental and industrial policies;
- (c) examine measures to conserve these resources, with a view to improving utilization by substitution or recycling;

- (d) define the availability and future needs of water for industrial, domestic, and agricultural use.

Environment problems are not confined to pollution. Europe's size, its high population density and economic activity make the planning of open spaces also necessary: the question is how best to distribute human beings and their activities.

Areas of high population density and areas where the natural environment has been relatively well preserved call for Community-level treatment, because Member States face similar problems and because the Common Market has created a single economic zone. The Community will initially concentrate on the search for common solutions to the most urgent problems.

In North Western Europe, both large and small cities and the green spaces in between are gradually growing into a giant urban sprawl of about 100 million inhabitants, covering land in six Community Member States.

Problems have arisen which were formerly unknown even to large cities — problems of administration, infrastructure, transport, social and cultural welfare, recreation, and ecological balance.

The centres of many large cities are run down. Traditional activities have atrophied; businesses replace residences; the small craftsman is disappearing. Disproportionately large office blocks lead to traffic jams during rush hours and

deserted streets by night. Old residential buildings deteriorate and social classes stratify — the more prosperous moving out to new neighbourhoods, the poor moving for a while into old inner city buildings. Likewise, the growth of private car transport can be dealt with only by costly road construction that destroys city centres.

By the nature of their activities, farmers are conserving soil and countryside. But their search for high yields causes peasants to quit difficult regions — those with poor soil, marshes, mountains or semi-desert. To prevent the exodus from rural areas, measures have to be found to promote new activities, such as tourism.

Abuse of land

Since the preservation of rural areas is to the Community's advantage, it should also be its responsibility. This principle has led to Community proposals aimed at ensuring that a minimal number of farmers continues in agriculture in hilly and other areas difficult to farm, if only to help maintain green spaces. Through a special aid programme, Member States will be invited to foster agriculture in these handicapped regions, both as a means of food production and of conservation.

Another Commission proposal seeks to encourage reforestation in areas reserved until now for poor-yield agriculture,

enhance the value of unproductive forests, and stimulate tree planting to counter soil erosion.

This aid programme would involve not only the preparation of soil, the planting of trees, the erection and maintenance of fences and fire-lanes, but also the building of forest roads and hiking, riding and cycling trails.

As the Community assumes a capital role in guiding policies to modernize agriculture, studies will be made of monocultures and other practices that impoverish soil. The intensive use of some fertilizers to obtain high yields, as well as the abusive use of pesticides, will be evaluated. Overgrazing of land presents risks of organic waste and germicidal pollution which have to be considered.

European consumers are more and more quality-conscious about food products. Many producers tend to market 'organic foods', but at present the consumer is not sufficiently protected: the authenticity of 'natural' products is not always guaranteed. There are two ways to tackle the problem: first, the development of biological methods to fight predators and pests; second, the marketing of quality agricultural products, including those labelled 'organic'.

A further problem concerns land 'improvements' that boost yields in the short run but become detrimental in the long run, because they dry up marshes, disturb the watershed system, or destroy hedgerows. Ever increasing urbanization threatens the Community's coastal areas. More and

more people are settling along the coasts for pleasure or work. Industries, notably oil and steel, develop vacant zones because of sea transport's advantages. More nuclear plants are expected to be installed near the sea because of their need for cooling water. If this tendency is overlooked, land and animal life in the coastal zones will be irreversibly damaged.

Protection of birds

Animal species could become extinct; the functions of coastal zones in balancing the ecology would be harmed; spawning grounds and resting areas for migratory birds would be destroyed.

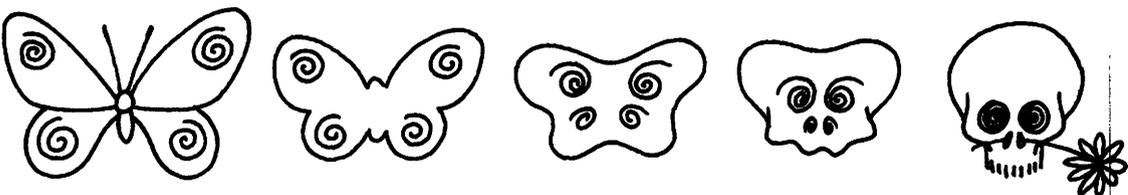
Economically, these ecological changes would harm fishing — and even agriculture. The oil industry may interfere with fishing and oyster culture. Locating heavy industries on coasts is incompatible with the city dweller's recreation needs.

Millions of migratory and 'song' birds are trapped and killed in Europe each year.

During their long journey north in spring and their return south in the autumn, these birds find survival more and more difficult. They are protected in some countries, but in others they perish in great numbers, trapped by nets, snares, or gunfire. On their journeys, they no longer find the wildlife refuges they need for rest and food because of intensive urbanization, the drying up of marshes, the cutting down of trees — or afforestation with evergreen trees.

This mass destruction of birds raises protests throughout the world against countries that allow trapping and hunting and thus endanger the ecological balance in Europe. As birds disappear, pests proliferate. As crop-devouring insects multiply, farmers step up their use of insecticides, though these often harm humans as well as the environment.

A policy to protect the environment must include measures to prevent the massive destruction of birds and preserve certain animal species threatened with extinction. Member States will have to act together, coordinating their laws where necessary.



MAKING WORK MORE CONGENIAL

Intensive industrialization and the development of large cities are upsetting traditional ways of life. Professional organizations have emphasized that environment policy should include measures to improve working conditions and prevent accidents.

To achieve these goals, the Community is gathering data on working conditions and the hazards such as noise and dust that workers face. It is also evaluating the social and economic cost to the employer caused by 'deterioration' of manpower.

A strategy to combat work hazards can be worked out by using methods similar to those applied to the struggle against pollution. Subjects include machine safety, product handling, industrial hygiene equipment, and new labour-saving devices.

On the basis of studies and experiments, the European Commission, jointly with national authorities and professional bodies, is drawing up specific projects in the framework of a Community social policy.

In July 1971 and March 1972, the Commission recommended the creation of a European institute for the environment, to develop and study ideas for improving life in future societies.

France in October 1972 subsequently suggested the setting up of a European foundation. For this reason the Commission has proposed to the Council of Ministers that a European foundation for the improvement of living and working conditions be set up.

The foundation, one of the priority proposals in the Community's social action programme, would work with national institutes active in the same sector. It would study the needs of post-industrial European society and the types of social and economic organization likely to meet those needs.

Among the issues such a body could examine are:

- (i) changes in work patterns to eliminate jobs that are physically or psychologically unpleasant, such as assembly-line work;
- (ii) improvements in the work climate, including relations with one's boss, pay scales, promotions, improved skills, job recycling, and education;
- (iii) working hours, including flexible time schedules, part-time jobs, retirement age, and vacations;
- (iv) better housing, the best use of available land, the preservation and renovation of historic district and town centres, new towns, and the optimal size of cities;
- (v) transport, communications and data processing;
- (vi) the social assimilation of immigrants.

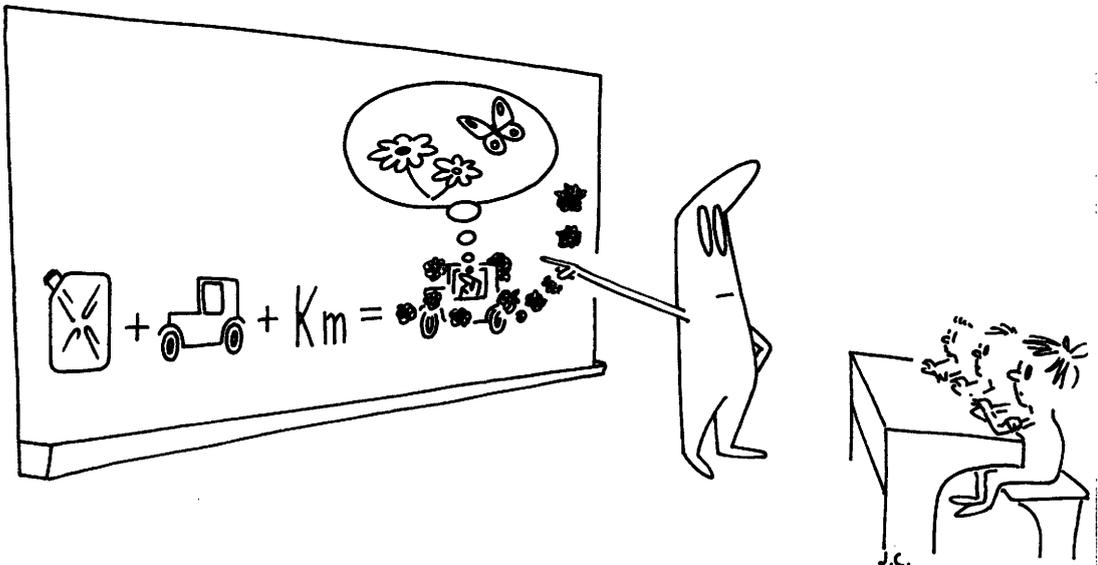
THE ENVIRONMENT, EVERYBODY'S CONCERN

The protection of the environment concerns everyone in the Community. The success of the measures prepared by the European Commission directly depends on public support.

The Commission intends to develop intensive educative action at every level to persuade people to assume fully their responsibilities toward future generations. For this purpose, the Commission will promote coordination of national efforts to introduce environment courses into

educational systems. It will help to prepare a textbook for primary schools. It will seek ways to support universities and colleges that initiate diploma courses in environmental studies.

The Community is using all information media to win public support for the Community programme. It realizes that public awareness, already heightened by national authorities, is essential to carry out joint action to protect our surroundings.



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