



European Commission

Global assessment

**Europe's environment:
what directions for the future?**



Global assessment

**Europe's environment:
what directions for the future?**



Sources:

Spectrum colour library
Cover

Composiciones Rali
5

Eureka
10, 11, 16, 35, 36, 40, 47

Benelux Press
27, 48

European Council
32

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2000

ISBN 92-828-8543-7

© European Communities, 2000
Reproduction is authorised provided the source is acknowledged.

Printed in Spain

PRINTED ON WHITE CHLORINE-FREE PAPER

CONTENTS

COMMUNICATION FROM THE COMMISSION	7
Preface	7
1. Introduction	9
2. Overall assessment of the fifth programme	9
3. Evaluation of the seven environmental priorities and of risk management	10
3.1. Climate change	10
3.2. Acidification and air quality	11
3.3. Nature protection and biodiversity	12
3.4. Water	12
3.5. Urban environment	13
3.6. Coastal zones	14
3.7. Waste	14
3.8. Risk management: industrial accidents	15
3.9. Risk management: nuclear safety and radiation protection	15
3.10. Risk management: civil protection and environmental emergencies	16
4. Emerging concerns	16
4.1. Chemicals	17
4.2. Genetically modified organisms (GMOs)	17
4.3. Soil	17
4.4. Efficient use and management of resources	17
5. Improvement and implementation of environmental legislation	18
5.1. Improved legislation	18
5.2. Implementation and enforcement	18
6. Progress in broadening the range of instruments	19
6.1. Market-based instruments	19
6.2. Financial instruments	20
6.3. Research and development	20
6.4. Spatial instruments	20
7. International issues	21
8. Overall progress towards sustainable development	21
9. Building on the principles of the fifth programme	23
9.1. Integration — addressing the environmental implications of sector policies	23
9.2. Involvement of citizens and stakeholders	24
10. Conclusions: from environment to sustainable development, the next steps	25
COMMISSION WORKING DOCUMENT	27
1. Introduction	29
2. The Cardiff process	29
3. Council reports on integration	30

4. Integration in Commission policy proposals	32
5. Conclusions	32
ANNEX I — MORE DETAILED ANALYSIS OF THE VARIOUS INTEGRATION STRATEGIES AND REPORTS BY THE COUNCIL	34
ANNEX II — MAIN SHORT- AND MEDIUM-TERM ACTIONS FOR INDIVIDUAL SECTORS	40
1. Agenda 2000: more opportunities for Member States	40
1.1. The Structural Funds reform: support and respect for the environment	40
1.2. The agriculture reform: scope for environmental integration	41
2. Transport	42
3. Industry	44
4. Energy	45
5. Tourism	45
6. Other policies	46
6.1. Internal market	46
6.2. Fisheries	47
7. Synergy environment/employment: Ecofin and Employment and Social Affairs Council	47
8. Economic development and cooperation policies	48
9. Trade — preparing the Millennium Round	49

EUROPE'S ENVIRONMENT: WHAT DIRECTIONS FOR THE FUTURE?

Communication from the Commission

The global assessment of the European Community programme of policy and action in relation to the environment and sustainable development, 'Towards sustainability'



The fifth environmental action programme was produced as the Community's main response to the 1992 Rio Earth Summit which called on the international community to develop new policies as outlined in Agenda 21, to take our society towards a sustainable pattern of development. The programme was to start this process within the Community, identifying objectives which required action at Community, national and local levels. Central to the programme was the recognition that environmental legislation in itself is not sufficient to improve the environment. Developments in areas that create environmental pressures, such as transport, energy or agriculture often outweigh the benefits of new regulations. Economic activities therefore have to take better account of environmental objectives in addition to a strengthening of environmental policy. This requires commitment by societal stakeholders and citizens as well as by the Member States and regional and local authorities. A broader range of instruments should provide information, incentives and support with a view to influencing decisions which affect the environment. In order to focus action, the fifth programme identified a number of environmental priority themes and objectives up to the year 2000, and pointed to five key sectors with an important impact on the environment and to which particular attention should be given in terms of integrating environmental concerns.

As the period covered by the fifth action programme is coming to an end, the Commission is now presenting a global assessment on the implementation and success of this programme in response to a request from the Council and the European Parliament (¹). It does so also with the intention to launch a debate with the other institutions, stakeholders and citizens on the priorities for a sixth programme to be put forward in 2000.

The main results of this global assessment

This global assessment shows that the Community has made progress in putting into place new and improved instruments to protect the environment and ensure the safety and quality of life of European citizens. This includes the better targeting of measures through scientific and economic studies and stakeholder dialogue as well as new market-based and financial instruments. Community policies have brought about, for example, a reduction in trans-boundary air pollution, a better water quality and the phase-out of ozone-depleting substances, and will lead to further improvements over the next few years. At the same time, the implementation of EC environmental law in the Member States is not as good as it should be and the Commission will have to continue exercising its powers in this respect.

Despite some improvements, however, the state of the environment overall remains a cause for concern and pressures on the environment are predicted to grow even further in some areas, as highlighted in the European Environment Agency's recent state-of-the-environment report.

Although the fifth programme raised awareness of the need for stakeholders, citizens and decision-makers in other sectors to actively pursue environmental objectives, less progress has been made overall in changing economic and societal trends which are harmful to the environment. The commitment by other sectors and by Member States to the programme is partial, and the patterns of production and consumption in our countries prevent us from achieving a clean and safe environment and protecting the world's natural resources. The outlook is that new environmental standards will not keep pace with the growing demand, for example, for transport, consumer goods or tourism. The perspectives are particularly bleak for climate change if trends in the main energy-consuming sectors cannot be reversed. At the same time, it is increasingly clear that damages to the environment have costs to society as a whole, and conversely that environmental action can generate benefits in the form of economic growth, employment and competitiveness.

(¹) Article 1 of Decision No 2179/98/EC of the European Parliament and of the Council of 24 September 1998 on the review of the European Community programme of policy and action in relation to the environment and sustainable development 'Towards sustainability'.

In the last decade, along with economic globalisation, the international nature of environmental problems has become clear. The EU has taken the leadership in the quest for common international action, for instance on reducing emissions of greenhouse gases, combating ozone depletion or protecting the planet's biodiversity.

The way forward

The future of environmental policy has therefore to be seen in this wider context, where environmental, social and economic objectives are pursued in a coordinated and mutually compatible way. Sustainable development, now enshrined as an objective in the Treaty on European Union, should aim at the welfare of present and future generations both in Europe and worldwide in terms of economic prosperity, social justice and security, and high environmental standards and the sound management of our natural resource base. The fifth environmental action programme first sign-posted the way to a policy approach based on this concept. Its principles are still valid, but the analysis in this communication indicates that they have to be put into practice more fully.

A sixth environment action programme should in the first place address the shortcomings in the implementation of the fifth programme as well as new issues which have emerged since then. Based on its analysis, this global assessment suggests a number of orientations for future environmental policy in order to provide a basis for a debate. The sixth programme will also need to be seen in the broader context of an enlarged European Union, taking account of the specific issues in the candidate countries. The full implementation of the environmental *acquis* remains another urgent priority.

However, without a reinforced integration of environmental concerns into economic sectors to address the origins of environmental problems and without a stronger involvement and commitment by citizens and stakeholders, our development will remain environmentally unsustainable overall despite new environmental measures. The current momentum for integration following the mandates of the Cardiff and subsequent European Councils therefore needs to be maintained and translated into concrete decisions and new instruments to promote integration should be put into place. Better information and citizens' involvement in environmental decisions as well as more accountability for actions which might harm the environment should be pursued as other priority objectives. The effective application of the 'polluter pays' principle and the full internalisation of environmental costs onto polluters remain a critical process. A sixth environmental action programme should be one pillar in an overall Community strategy for sustainable development addressing environmental, economic and social objectives in a mutually reinforcing way.

Opinions and contributions to the debate on the sixth action programme will be welcome.

Send them to:

European Commission, Directorate-General for the Environment (B1-6EAP), rue de la Loi/Wetstraat 200, B-1049 Brussels by 14 April 2000.

Or by e-mail to: new-env-prg@cec.eu.int

Or via the Directorate-General for the Environment's website at <http://europa.eu.int/comm/environment/newprg/index.htm>.

1. Introduction

The fifth environmental action programme was prepared in parallel to the 1992 Rio Conference and the launch of Agenda 21. It constituted the Community's first commitment to sustainable development. It can be seen in terms of five objectives:

- (1) strategies for seven environmental priority issues (climate change, acidification, biodiversity, water, urban environment, coastal zones and waste) and for the management of risks and accidents;
- (2) target sectors into which environmental concerns should be integrated (industry, energy, transport, agriculture and tourism);
- (3) broadening the range of instruments;
- (4) information, transparency of approach and development of the concept of shared responsibility;
- (5) the international dimension reflecting global issues and the Rio Conference.

Some environmental targets were set ⁽²⁾, but in general there was a lack of quantifiable targets and monitoring mechanisms. The Commission, in its review of the plan in 1996, confirmed these priorities and proposed a new priority on implementation of existing measures.

In 1998 the European Parliament and the Council adopted a decision on the review of the fifth environment action programme. It reiterated the commitment of the Community to its general approach and strategy and called for increased efforts in their implementation. The decision also committed the Commission to submit a global assessment of the implementation of the programme, giving special attention to any revision and updating of objectives and priorities which may be required, and accompanied, where appropriate, by proposals for the priority objectives and measures that will be necessary beyond the year 2000. This communication is the first step in the Commission's response to this request. It will be followed by a proposal for a sixth environmental action programme next year. Besides evaluating the success of the fifth programme, it seeks to launch a debate on the overall approach for our policy on the environment and sustainable development with a view to preparing the new programme.

The recent Eurobarometer study of the opinions and attitudes of European citizens shows that the degradation of the environment is a high concern along with violence, poverty, health and unemployment. Some 70 % believe that urgent action is needed. This echoes the analysis in this report that further efforts are needed for a clean and safe environment ensuring a high quality of life and for a sustainable management of our global resources.

2. Overall assessment of the fifth programme

The programme sets out an ambitious vision for sustainable development, leading to its incorporation in the Treaty of Amsterdam and to the process of integration, which was highlighted by the Cardiff European Council in 1998. However, practical progress towards sustainable development has been rather limited, mainly because there was no clear recognition of commitment from Member States and stakeholders and little ownership by other sectors of the programme. Nevertheless, the fifth programme has stimulated action at EU level that has led to environmental improvements.

⁽²⁾ See Commission staff working paper (reference) 'Key developments in the implementation of the fifth environmental action programme'. It includes the key objectives and targets established in the fifth environmental action programme and its review; data from the European Environment Agency's report on the state of the environment; and examples of EU environmental legislation or actions.

3. Evaluation of the seven environmental priorities and of risk management

Overall, the lack of targets, indicators and monitoring mechanisms makes it difficult to make a full evaluation of the fifth programme. It is also clear that it will take time for many of the actions initiated by the fifth programme to yield results. Even so, on the basis of the European Environment Agency's comprehensive evaluation of the state and outlook of the environment, it is possible to identify the main trends that are emerging and the driving forces behind them. The Agency's recent report, 'Environment in the European Union at the turn of the century' illustrates that the quality of Europe's environment has improved in some areas, notably in the phasing out of ozone-depleting substances, acidification, trans-boundary air pollution and water quality. But it points out that serious problems remain and looking beyond the year 2000, the environment faces a number of major and, in some case, new challenges. This situation calls for a reflection on which new measures should be taken at Community level over the next few years. Against this background, this communication identifies a number of possible avenues for further action in order to provide the platform for a debate, without necessarily being exhaustive and without prejudging future Commission proposals.

3.1. Climate change

Current situation and trends

There is a broad consensus on the need to take urgent action on climate change. Climate change is potentially the most serious environmental problem we are facing with far-reaching ecological, health and economic consequences (e.g. flooding of low-lying areas due to rise of sea levels, changes in weather patterns with implications for agriculture, extreme weather events, etc.). Estimates are that CO₂ emissions need to fall by at least 35 % by 2010 if long-term temperature increases are to be limited to 1.5° by 2100. The Kyoto Protocol commits the Community to decrease its greenhouse gas emissions by 8 % between 1990 and 2008/2012. However, without further measures, forecasts are that the Community will not achieve this objective. While emissions fell in the UK and Germany between 1990 and 1996, this was due to one-off structural changes, and the current underlying trends are of growing emissions of CO₂.

Measures taken

While a number of Community measures have been agreed to promote energy efficiency and conservation and renewable energy sources (e.g. Altener and SAVE programmes), these have received less funding than originally proposed and have had little impact faced with the scale of the problem. Progress has not been achieved with the proposed directive introducing a tax on CO₂ emissions or the amended proposal for an energy products tax.

The recent voluntary agreement reached with the European car industry should contribute to curbing CO₂ emissions from individual cars over the next decade.

The trends in sectors such as industry indicate a growing uptake of energy-efficient technologies with a predicted 15 % fall in industrial CO₂ emissions by 2010. The projections for transport, however, are for continuing strong growth in emissions which are likely to prejudice the achievement of the Kyoto targets.

Possible orientations for the future

The Member States have yet to present convincing plans for the achievement of their individual targets agreed within the framework of the Community strategy for meeting the Kyoto commitment. Consideration will be needed for the development and implementation of new emission reduction measures, including by integrating climate objectives into other policies.

The development of an emissions trading system within the EU may be advisable to promote cost-efficient emission reduction measures.

3.2. Acidification and air quality

Current situation and trends

The fifth programme period has seen improvements in reducing acidification and the levels of some air pollutants, particularly SO₂ and lead. The levels of NO₂ and particulates remain high and the levels of ground level ozone continue to be regularly exceeded in and around major cities during the summer.

The improvements which have taken place are largely a result of a steady decline in emissions over the last decade. By 1995, emissions of SO₂, NO_x and non-methane VOCs were down by about 39 %, 9 % and 12 % respectively on 1990 levels. Further substantial improvements in air quality and reductions of acid deposition are expected to take place in the period up until 2010.

The importance of transport emissions of NO_x and VOCs which were dominant in the past has started to decline since 1990. Thus, by 1999, non-methane VOC and NO_x emissions are projected to be down by over 20 % on 1990 levels and in 2010 by as much as 70–80 % in spite of the continued growth in traffic.

Measures taken

The air quality framework directive, approved in 1996, provides a basis for tackling remaining air quality problems. A first daughter directive defining limit values for SO₂, NO₂, particulates and lead was adopted in April 1999. Proposals on CO and benzene and on ozone are under discussion in the Council and Parliament.

Measures adopted so far to reduce emissions include vehicle emission and fuel quality directives within the 'Auto-Oil I' exercise, directives on solvent emissions from industry, sulphur emissions from heavy fuel oil and the integrated pollution prevention and control (IPPC) directive for industrial emissions. The implementation of these measures will lead to further progressive improvement of air quality over the next decade. It is, however, likely that particulates will remain a problem over much of the Union and that there will continue to be widespread exceedances of WHO guidelines for ozone.

A proposal to set national emission ceilings which compared with 1990 would reduce acid deposition everywhere in the Community by at least 50 % and simultaneously reduce exposure to ozone, and a proposal to revise the large combustion plant directive, are currently under discussion in the European Parliament and Council. Implementation of this joint acidification and ozone strategy will be a priority in the next period. The strategy will also reduce ammonia emissions and hence reduce soil eutrophication.

Possible orientations for the future

The priority for the next period will be the implementation of already approved measures and those currently under discussion. The complexity of air quality issues and range of polluting sources means that a more integrated strategy should be developed to review air quality standards and ensure they are met in the most cost-effective way.

The main remaining challenges appear to be meeting standards for particulate matter in many cities and ensuring coherence between Community targets on ozone, acidification and soil eutrophication and the emissions of the pollutants concerned, and to develop cost-effective measures to permit further improvements, including flexible instruments. These policy areas will require further review.

3.3. Nature protection and biodiversity

Current situation and trends

The nature and biodiversity of the Community continues to be under threat from loss of land to urban development and road building and the ongoing intensification of agriculture. Threats also arise from the marginalisation or abandonment of farming activities, pollution and the introduction of alien species.

Measures taken

Attention during the fifth programme period has mainly been on the implementation of the previously approved birds and habitats directives, this latter directive providing the framework for the creation of the Natura 2000 network. Implementation of this directive should ensure the protection of the best of the remaining natural habitats in Europe. While progress has been made in most Member States towards the identification of sites, this is far behind the original deadlines agreed. The long-term protection of these sites requires the adoption of management regimes and considerable efforts are still required for their establishment and implementation.

The adoption of the Community's biodiversity strategy in 1998 has been important in recognising the need for sensitivity to biodiversity issues in other policy areas. This strategy foresees action plans for biodiversity in a number of key policy areas.

Agricultural policy is particularly important to nature and biodiversity. The agri-environment measures introduced in the 1992 CAP reform and the broadening of measures resulting in environmental gain included in the 1999 reform of the common agricultural policy (CAP) have and will in future provide the potentiality for contributing positively to nature protection, both within the Natura 2000 network and in the wider countryside.

Possible orientations for the future

The priority for the future will be the full implementation of the birds and habitats directives and to achieve significant progress with the integration of biodiversity concerns into other policies. The preparation of ambitious action plans under the biodiversity strategy should be an important element of the approach.

Full exploitation at the national level of the opportunities created by the new CAP regime and Structural Funds will be of importance. In order to ensure the preservation of high nature value landscapes, the continuation of farming in areas at risk of marginalisation and abandonment, and the increased uptake of agricultural practices more compatible with environmental protection and enhancement, is desirable.

3.4. Water

Current situation and trends

The period of the fifth programme has seen improvement in water quality due to progress in implementation of the urban wastewater directive (1991). In particular, there has been a significant decrease in the number of heavily polluted rivers due to reductions in point source discharges such as phosphorous, with emissions showing reductions of typically 30–60 % since the mid-1980s; organic matter discharges fell by 50–80 % over the last 15 years.

However, nitrate concentrations in EU rivers have shown little change since 1980. EU maximum admissible concentrations of nitrate in groundwater are frequently exceeded. This is contributing to the eutrophication of coastal waters. Nitrate input from agriculture is still high due to poor application of the nitrate directive. Groundwater concentrations of certain pesticides also frequently exceed EU maximum admissible concentrations.

In addition, there remains a problem in the use and allocation of water. This is generally attributable to inappropriate pricing, which often amounts to subsidy to some users.

Measures taken

The key achievements in the fifth programme in respect to water management have been:

- (a) the passing of the integrated pollution prevention and control (IPPC) directive in 1996, which provides a more comprehensive framework for the control of polluting emissions of all kinds from large industrial plants;
- (b) the proposal, currently being discussed in Council and Parliament, for a water framework directive. This directive seeks to achieve good status for all waters, groundwaters and surface waters, within a set deadline, and to apply an integrated planning approach to protecting all waters, addressing both quantity and quality issues. It brings together elements from a range of individual measures based on a combined approach of emission controls and quality objectives. It also aims at the reduction of pollutants, listing priority substances. The measure is complemented by a number of existing directives aimed at controlling specific sources of polluting substances — the urban wastewater directive, the IPPC directive or limits for specific substances, e.g. the nitrates directive. Sustainable levels of water abstraction and use will need to be assured by developing a range of instruments, such as water pricing.

Possible orientations for the future

The approval of this proposal will provide the basis for achieving substantial future improvements in the full range of water quality problems that the Community continues to experience.

The priority now is implementation. This imposes a responsibility on national, regional and local authorities in the Member States to take the necessary steps to ensure policies are carried out.

3.5. Urban environment

Current situation and trends

Some 70 % of our population live in urban areas, which take up some 25 % of land in the EU. This inevitably means both that urban populations face a concentration of environmental problems and that the decisions of urban authorities and inhabitants are significant driving forces behind environmental pressures. This can be illustrated by the following trends:

- 32 % of our population are exposed to high levels of traffic noise;
- air pollution remains a significant source of health problems and WHO thresholds are frequently exceeded;
- population of urban areas is expected to increase by more than 4 % between 1995 and 2010 and urban sprawl continues;
- urban waste has increased in volume;
- seasonal water shortages are common in southern European cities;
- energy consumption by transport and energy has risen steadily over the last 20 years and further increases are anticipated.

Measures taken

The fifth action programme recognised that in addition to the indirect effects of specific environmental legislation, the role of Community policy in this area is to encourage local authorities to tackle the problems and to assist them in working towards sustainability. However, no specific targets or monitoring mechanisms were defined. The European 'Sustainable cities and towns' campaign was established in 1994 to support local authorities and it has operated constructively since. In 1998 the Commission published the communication entitled 'Sustainable urban development in the European Union — a framework for action'. The adoption of this Communication, which includes concrete commitments on the part of the European Commission, represents important progress towards a more integrated and strategic approach to urban issues.

Possible orientations for the future

The Commission is now in the process of implementing the Communication. The Commission could continue to support and facilitate in particular awareness-raising initiatives and activities relating to local sustainability and Agenda 21.

3.6. Coastal zones

Many coastal zones are densely populated and under intense pressure from urban development, industry, transport and tourism. These activities also impact heavily on the quality of the marine environment. At the same time, coastal areas contain an important part of Europe's natural and cultural heritage.

The Community has during the fifth programme period undertaken an integrated coastal zone management demonstration programme to show ways to address coastal zone issues. The question is how this programme should be followed up.

There continues to be an urgency in action in this area since 85 % of coasts are at risk from different pressures, and in particular they are suffering from increasing urbanisation.

3.7. Waste

Current situation and trends

The problems of waste in the EU are still growing faster, due to consumption patterns, than the implementation of measures to control and prevent them.

Waste prevention measures have not stabilised production of waste nor its hazardousness. Reported municipal waste produced in OECD Europe was 1 305 million tonnes in 1995, or 420 kg/year per person. The EU average per capita is 370 kg/year.

The recycling of certain waste fractions has been successful in a number of EU Member States. In the EU and Norway, recycling of paper and paperboard increased from 40 % in 1990 to 49 % in 1996. Recycling of glass increased from 43 % in 1990 to 55 % in 1996.

However, recycling of glass and paper have not increased sufficiently quickly to reduce overall generation for these waste streams, so that total glass disposal, for example, rose by 12 %. Furthermore, the amount of plastic waste has considerably increased (about 4 % per year) but there has been no corresponding increase in plastic recycling.

Total waste, incinerated or landfilled, has risen. Landfilling is still the most common treatment method, despite progress in recovery and recycling. 66 % of municipal waste went to landfill in 1995, compared to 65 % in 1990.

Measures taken

During the period of the fifth programme the implementation of the packaging directive has helped in making progress in recycling of packaging waste, but progress in waste prevention clearly remains to be achieved. The adoption of the landfill directive when implemented will contribute to both reducing the environmental impact of landfilling and encourage waste prevention and recycling options.

The Commission has also advanced work on priority waste streams seeking to apply the principles of prevention, material recycling and producer responsibility, which are recognised as priority approaches in the Community strategy for waste management. Progress has, however, been slower than expected, particularly due to the opposition of product manufacturers to producer responsibility schemes. The proposal on end-of-life vehicles is expected to be adopted in 2000.

Possible orientations for the future

Priority in the future will need to be given to promoting an active product policy in order to make products recyclable from their design phase as well as further preventing waste generation. For major waste streams specific measures will continue to be required (e.g. durable goods, biodegradable waste, packaging waste, hazardous waste such as batteries, etc.). The implementation and enforcement at the local level of waste management strategies will remain a priority. The reduction of the hazard involved and in particular the toxicity of the material sent for waste disposal also remain priorities.

3.8. Risk management: industrial accidents

Current situation and trends

From 1984 to 1999 over 300 accidents were reported. In 1997, 37 major industrial hazard accidents were reported in the EU, the highest annual total since records began. More positively, despite incidents like the *Sea Empress*, oil spills from tankers are declining.

Measures taken

During the period of the fifth action programme, the 'Seveso II directive' was completed, requiring industrial operators to show that they have taken full precautions against major accidents. As part of the directive, the MARS and SPIRS databases were introduced to assist decision-making related to risk management.

Possible orientations for the future

For the future, full implementation of Seveso II remains a challenge. However, this legislation only applies to high-risk establishments. Our society and the environment as a whole are sensitive to the threat of accidents and, in the longer term, an integrated approach to assuring protection of persons, environment and property, including cultural heritage, would be desirable.

3.9. Risk management: nuclear safety and radiation protection

Current situation and trends

Nuclear generation accounts for some 34 % of electricity production in the EU. In general, the risk of nuclear accidents has declined, but concerns remain about the safety of some reactors in central and eastern Europe and the ex-Soviet Union.

Human health is at the centre of the integrated approach on which radiation protection is based. EU standards are regularly updated according to scientific progress.

Actions taken

In the period of the fifth programme, legislation on safety standards for the health protection from ionising radiation and movements of radioactive substances have been approved. The most important acts relate to a revision of the directive on basic safety standards for the protection of exposed workers and the public from the dangers of ionising radiation and the revision of the directive on health protection of individuals in relation to medical exposure to ionising radiation. In addition, a number of regulations have been adopted relating to the conditions of radioactive contamination governing imports into the EU of agricultural products originating in third countries following the accident at Chernobyl nuclear power station. A regulation on the administrative arrangements for the movement of radioactive substances has been adopted as has a directive on the administrative arrangements for the shipment of radioactive waste. A number of technical guides, communications and recommendations on implementation of legislation have been issued.

Possible orientations for the future

The Community has no competence in the safety of nuclear installations but supports cooperation between Member States. Ageing nuclear installations, the economic effects of liberalisation of the electricity industry and a steadily increasing number of decommissioning projects require intensifying this cooperation. The unresolved issue of long-term storage or disposal of high-level radioactive waste will require continued special attention.

In central and eastern Europe and the newly independent States, priority should be given to encouraging improvements in the safety regimes. With the former Soviet Union, especially in north-west Russia, cooperation is essential to help solve the major environmental problems arising from previously poor management practices for spent nuclear fuel and radioactive waste.

3.10. Risk management: civil protection and environmental emergencies

Natural disasters such as earthquakes or landslides have potentially large-scale effects both in terms of fatalities and economic impact. The European Environment Agency quotes studies that suggest economic losses from floods and landslides in the period 1990–96 were 400 % greater than during the preceding decade.

Human activity, such as unsuitable land use that causes flooding and landslides, is both increasing risk and making people more vulnerable to natural disasters. The Community's role in preparing for such events is largely subsidiary to that of the Member States. However, the Community supports the cooperation between national bodies on civil protection and marine pollution.

For the future, priority in this area should be given to the implementation of the recently adopted legal basis for civil protection to allow for long-term planning and management.

4. Emerging concerns

Since the fifth environmental action programme was adopted, certain issues have increased in urgency and new problems have emerged which at the time received less attention but are now a cause for concern to citizens or have been identified as requiring special action in the light of the state of the environment. The Community should consider whether and/or how to respond to these concerns, where necessary applying the precautionary principle.

4.1. Chemicals

Despite some success of control measures in reducing some emissions and concentrations of persistent organic pollutants and heavy metals, there remain some 75 % of large-volume chemicals about which there is insufficient knowledge of potential impact on nature and on human health. At the same time, the chemical industry is expected to increase its output significantly over the next years.

The Commission intends to present a strategy to speed up the system for reviewing the ever-growing quantities of chemicals, and to look at whether and how there could be control over the volumes and toxicity of chemicals, particularly where there are recognised harmful effects.

4.2. Genetically modified organisms (GMOs)

GMO technology has the potential for providing significant benefit to our society. However, there has been growing concern in recent years as to the impact of this new technology on both the environment and human health.

The control of both experimental and commercial deliberate release of GMOs is covered by legislation that provides a common approval system for the whole EU. Preparations are underway to strengthen the legislation in response to the concerns of citizens. This will provide for more substantial monitoring of potential impacts.

4.3. Soil

Degradation and loss of soil in particular through erosion, contamination, sealing (building, roads, etc.) and changes in its structure is worryingly high. Soil loss through human activity is some 10 to 50 times higher than through natural erosion.

There is a need to identify the relationship between Community policies and intervention and soil problems to enable a decision on the development of a coherent approach at Community level. It is also necessary to integrate soil management objectives, in particular objectives of the UN Convention to Combat Desertification into our policies.

4.4. Efficient use and management of resources

Natural resources need to be used and managed more efficiently both to conserve non-renewable resources and to reduce the amount of waste. The concept of 'factor ten' expresses the longer-term goal of a ten-fold reduction in absolute resource use in the industrialised countries and a more equitable sharing of resources across the world. Should the Community take up this target as a focus for orienting policy in this area? How could the Community promote more eco-efficient production and consumption patterns, reducing material use, energy consumption and emissions whilst maintaining levels of products and services?

In this context, an integrated product policy should address the entire life-cycle of production and consumption, and be based on a mix of instruments — such as labelling and eco-design, links to the Community's environmental management and audit scheme (EMAS), greening of public procurement and product standards, and product-related taxes — thus addressing the whole product chain including the production, use, distribution, consumption and waste phase of products. An integrated product policy should provide a framework that incorporates all relevant stakeholders in the development of a specific strategy in an individual product area.

5. Improvement and implementation of environmental legislation

5.1. Improved legislation

Under the fifth programme, legislation has been reinforced in several key areas, for example with the air quality framework directive, the integrated pollution prevention and control (IPPC) directive and the habitats directive.

The way in which legislative proposals are developed has also improved. Firstly, with better analysis of the environmental issues and the economic and cost-benefit implications. This has helped us to identify the costs to society of environmental damage and to ensure we commit adequate time and resources to tackling environmental problems. At the same time, we have improved the cost-effectiveness of our policies. Several recent initiatives (the acidification strategy, 'Auto-Oil' and the current elaboration of national emission ceiling for certain air pollutants) were subject to such a process. Further efforts will be needed in areas like waste and water and in strengthening the methodology and data aspects, as well as in translating R & D results into policies. Areas of uncertainty need to be properly identified and measures taken to remedy the deficiency of data. The analysis of environmental proposals should also identify the 'winner' and 'loser' of the initiative in question.

Secondly, legislative proposals now aim at better consultation and involvement of stakeholders. Initiatives such as the water framework directive, the IPPC directive and 'Auto-Oil' show that it is possible and positive to involve the relevant actors and sectors in finding solutions to environmental problems. The 'Auto-Oil' programme in particular has identified important win-win actions required at national and local level to improve air quality in cooperation with the industries concerned.

Thirdly, the Community has increasingly responded to the call for greater subsidiarity, by developing more framework directives that set objectives, but give Member States the flexibility to implement the measures as they require. But, in the implementation phase, it will be important to ensure that this flexibility is not used in ways that prejudice the achievement of the objectives set.

5.2. Implementation and enforcement

Under the fifth action programme, increased attention has been given to implementation and enforcement of environmental legislation. The communication on the state of implementation, published by the Commission in 1996, showed, however, that implementation of Community law on the environment was often unsatisfactory. In 1998 the Commission registered some 600 suspected breaches of EC environmental law, based on complaints from the public, parliamentary questions and petitions and cases detected by the Commission. Of the 123 cases for which an application was lodged with the Court of Justice of the European Communities in 1998, 49 concerned the environment.

The main reasons for this currently unsatisfactory situation are to be found in the legal and technical complexity of the legislation and the difficulty in balancing the interests of the stakeholders concerned. In some cases, environmental legislation relates to general interests in which there is not always a proprietary interest. There is also a shortage of qualified staff and resources for the complex function of inspection and enforcement at national and local levels. Finally, there is a lack of dissuasive, effective and proportionate sanctions in Member States when measures are not properly implemented.

Efforts have been made to ensure that all relevant actors and sectors are involved in the legislative process, including the IMPEL network of environmental law inspectors. The Commission has proposed the development of Community-wide minimum criteria for the carrying out of environmental inspection tasks by Member State authorities.

In considering future policy we have to remind ourselves that the first step for improving the environment on the ground is the full implementation of what has been adopted already. This will require even reinforced efforts. Implementing the *acquis* will require even more effort from the candidate countries for the enlargement of the European Union. Realising the objectives of the measures adopted already, therefore remains one task in any future environmental strategy and a firm commitment to it by all (present and future) Member States is necessary. It is critical not least for the credibility of Community environmental policy as a whole.

The Commission for its part will continue to exercise its powers in ensuring the correct and timely implementation of Community law, and to improve the information provided to the public on Community policies and their implementation through, for example, the annual report on monitoring the application of Community law and the annual survey on the implementation and enforcement of Community environmental law. The effectiveness of environment policy should be regularly assessed and remedial measures taken if required. This requires an efficient monitoring system to ensure that the legislation is properly implemented and the reporting Directive 91/692/EEC needs revising and strengthening to allow this.

6. Progress in broadening the range of instruments

6.1. Market-based instruments

Widening the portfolio of policy instruments for achieving our environmental objectives was a main pillar of the fifth programme. Market-based instruments include taxes, charges, environmental incentive payments, refundable deposit schemes, permit trading systems, eco-labelling schemes and environmental agreements, etc. They aim at encouraging producers and consumers, via price and information signals in the market place, to adopt practices or make choices that take into account the environmental cost of the production and consumption of goods. The important practical issue is to identify when such instruments are likely to be more efficient and effective than other types of policy measures or, alternatively, to identify when they can be an effective supplement to other instruments.

Environmental taxes will, for instance, often be the most efficient way of applying the 'polluter pays' principle, through the direct internalisation of the environmental costs.

At the Member State level, the last five years have seen the implementation of many new measures although some Member States are clearly more active than others. Most importantly, there is growing evidence that these measures do yield the desired effects (for instance the link between the fall in lead emissions and the introduction of a tax differential between leaded and non-leaded petrol).

At the Community level, many of the directives issued by the Commission allow for tax incentives to encourage early implementation (such as those on vehicle emissions and fuel quality). However, the adoption of EU-wide measures, such as a CO₂ tax or an energy products tax, on the other hand has been disappointing. The institutional set-up (need for unanimous agreement in the Ecofin Council) has prevented any real progress.

The introduction of the EU eco-labelling scheme together with the EMAS were also new initiatives aimed at influencing producer and consumer behaviour through market mechanisms. The uptake of EMAS by EU manufacturing industry has been encouraging and, although difficult to quantify in precise terms, has almost certainly contributed to reduced emissions and risks for the environment. The EMAS regulation is now being revised and extended to other sectors of business such as the service and retail sectors.

regions and local authorities providing a reference framework on issues such as urban and rural development, the management of sensitive areas or in sectors like transport policy.

7. International issues

Approximately one third of Community environmental policy aims to implement legally binding international commitments. The EU plays a major role at the negotiating table, and in pushing the implementation of agreements on global issues (e.g. ozone layer, climate change, biodiversity), regional issues, (acidification, waste and water), and all issues relating to hazardous products, such as chemicals or radio-active substances. Research action, supported under the fourth and fifth framework programmes, provides an important support to these international activities. The EU has also been instrumental in developing many of the international processes that provide guidance to governments on how to develop their environmental policy. This includes an active follow-up to the Rio Declaration and Agenda 21 and supporting activities through the United Nations environmental programme.

However, the EU could be more visible and should more systematically use its full economic and political weight and strengthen the coherence between different policies. Trade remains an area of concern, where progress must be made on reconciling the objective of growth in trade with environmental objectives. This is the general approach already adopted by the Community in view of the next WTO round. Climate change is a global problem that can only be solved through concerted efforts at international level. The EU should maintain its leadership in the international negotiations over the next years.

8. Overall progress towards sustainable development

The fifth environmental action programme sought to initiate the Community's path towards sustainable development. As this global assessment confirms, however, many environmental trends are not sustainable and the quality of life of citizens continues to be affected, despite progress made in environmental legislation and (although to a lesser extent) in broadening the range of instruments. On the one hand, economic growth, better communications and transport contribute to an improved quality of life. On the other, however, the growth and nature of human activities, expressed through growing consumption of products and services, also means increased use of natural resources and increasing pressures on the environment. Environmental policy has had some success in combating the effects of these pressures, for example in encouraging cleaner fuel or in reducing or preventing industrial discharges into rivers, the air and ultimately the sea. However, according to current predictions, it will not be able to keep pace with or account for the increasing aggregate demand for road transport, electricity, house or road building, etc. Growth in these areas simply outweighs the improvements attained by better technology and stricter environmental controls. An analysis of the causes of environmental problems confirms the areas of particular concern that were highlighted by the fifth programme: road transport, energy production and use, tourism, the production and consumption of consumer goods, and intensive agriculture.

There are a number of issues which highlight in a particular way the need for addressing the environment together with the economic and social dimensions.

Climate change

The 'business-as-usual' scenario predicts that the European Union will fail to reach its Kyoto commitment to cut greenhouse gas emissions by 8 % by 2008–12 and instead increase its emissions over the coming

years. The problem is being aggravated by the fact that the Kyoto targets are only a first step towards achieving the ultimate goal of stabilising concentrations of these gases.

In this light, current trends for example in the transport sector are clearly not in line with the Community's climate change commitments. For transport, which accounts for about a quarter of total CO₂ emissions, the Commission has forecast an increase in CO₂ by close to 40 % between 1990 and 2010 under current conditions ⁽³⁾. More fuel-efficient cars as a result of the Community's strategy to reduce CO₂ emissions from cars will not be sufficient to outweigh the effect of traffic growth.

Except in industry, where CO₂ emissions are projected to decline by 15 % between 1990 and 2010, no sector is expected to actually contribute to the EU's Kyoto target under business-as-usual as emissions remain stable.

Besides focusing on promising individual emission reduction measures, a strategy to prevent climate change, therefore, has to make climate change considerations part of the decisions in a broad range of other sectors — besides energy and transport particularly industry, agriculture and households. Higher energy efficiency, the increased use of renewable energy sources and ultimately a decrease in demand for energy and transport will have to be achieved. This can only be done in a framework going far beyond environmental policy and changing societal development patterns, taking into account the environmental, economic and social impacts. At the same time, the potential costs of climate change to our economy are enormous and actions to improve the energy efficiency of our society will yield immediate economic benefits in terms of reduced wastage and technological progress.

Globalisation and increased pressure on limited natural resources

Globalisation offers opportunities for higher environmental standards worldwide but at the same time is likely to increase the consumption of resources. Increased trade and higher levels of wealth of developing countries should lead to an improvement of environmental standards in those countries as emerging urbanised middle classes raise awareness and demand for sustainable development and a better environment. The more rapid transfer of information between countries and the transfer of better and less-polluting technologies should reduce pressures on the environment.

On the negative side, increased levels of trade are likely to put further pressure on the environment through the increased level of transport and the increased demand for cheaper raw materials and goods supplied by developing countries as trade barriers come down. Final consumption by society as a whole is expected to rise by 50 % by 2010 as the high-level consumption patterns of the west spread to large sections of the global population. Increasing population and forecasts of rising GDP per capita (a 40 % increase between 1990 and 2010 and a 140 % increase by 2050) may also have an impact on global CO₂ emissions, which are forecast to rise by a factor of three by 2050.

This sharpens the need for developed countries to reduce the use of resources to more sustainable levels to allow the developing world a fair share in global resources.

Citizens' health and quality of life

While progress has been made in improving ambient quality, the state of Europe's environment continues to affect public health and the quality of life of citizens. Air pollution is associated with hospitalisations and extra deaths in the EU every year. Noise exposure disturbs sleep, affects children's cognitive development and may lead to psychosomatic illnesses. The Commission has estimated that the external costs of air pollution and noise from traffic amount to 0.6 % of GDP ⁽⁴⁾. These effects deprive Europeans of the safe and clean environment which they deserve. In addition, they represent an economic cost to

⁽³⁾ Communication on transport and CO₂ — Developing a Community Approach (COM(1998) 204 final).

⁽⁴⁾ Green Paper 'Towards fair and efficient pricing in transport' (COM(95) 691 final).

society in the form of health care and reduced productivity. The BSE crisis illustrates the potential social costs of unsustainable agricultural practices.

The external economic costs caused by a lack of environmental controls and unsustainable patterns of production and consumption demonstrate the inefficiency of an unsustainable development path and how it affects European citizens. They underline the case for an overall strategy bringing together the environmental, economic and social dimensions and the promotion of the 'polluter pays' principle, wherever possible.

Climate change, the legitimate expectations of developing countries in a fair share of the world's limited resources and the costs to citizens and society of 'non-environment' all call for an environmentally more sustainable development path for the EU while meeting our economic and social aspirations. They illustrate the need for addressing environmental problems through changes in different economic sectors and the broader economic and social benefits which would accrue from such a broader approach. The trends highlighted in this communication however show that we are not on track in ensuring sustainable development. Further environmental policy measures under a sixth environmental action programme can be expected to go some way in remedying environmental problems. However, given the societal trends underlying environmental pressures, more environmental legislation alone will not be sufficient.

9. Building on the principles of the fifth programme

This global assessment of the fifth environment action programme confirms that the Community has made progress in developing its environmental policy and that this is starting to lead to improvements in the environment in certain areas. Progress towards sustainability has clearly been limited and the fifth programme has not achieved its objectives. While there is growing awareness of the importance of integrating environmental objectives into other policies, often in response to the search for more flexible and cost-effective ways of achieving solutions, this approach and the new range of instruments it relies upon, is still poorly developed in many sectors. The underlying trends in many economic sectors and their continuing link with environmental impacts gives cause for concern.

Against this background, the Commission believes that the main principles of the fifth environmental programme remain valid and that we should build on them with further action. The starting point for progressing the Community's policy for protecting and improving the environment is the need to learn from the successes and address the shortcomings in putting the fifth programme into practice. Besides the implementation, and where needed the strengthening of existing measures and the development of new measures to address emerging problems under a sixth environmental action programme, reinforced integration of environmental concerns into other policies and the stronger involvement of citizens and stakeholders in the process aiming at commitment and responsibility are the keys towards sustainable development.

In essence, what we have to achieve is a decoupling of the negative impacts on the environment and the consumption of natural resources from economic growth. Decoupling means economic growth while keeping the environment intact by a more efficient use of resources and higher environmental standards. By enhancing the eco-efficiency of our patterns of production and consumption, we will reduce the footprint of our society on this planet, thereby safeguarding the aspirations of developing countries and both the present and future generations.

9.1. Integration — addressing the environmental implications of sector policies

The fifth action programme recognised the key role of the economic sectors in driving environmental change. Since June 1998, the European Council has given new impetus to the process of integrating the environment into other policies by requesting different formations of the Council to report on

environmental integration and prepare environmental strategies. The reports and strategies by six Council formations will be examined by the Helsinki European Council at the end of 1999. They are seen as critical to achieving a more structured approach to sectoral contributions to solving environmental problems. The Commission's working paper to the Helsinki Summit contributes to this review and suggests further actions for the future. At the same time, they are steps in an ongoing process which necessitates:

- a strong political commitment to integration;
- strengthening of the institutional arrangements;
- sound management of the overall quality of the process.

More specifically, the likelihood that integration strategies succeed increases if they include:

- objectives, that are quantified as far as possible, and measures;
- European, national, regional and local components;
- indicators for monitoring progress and evaluating the effectiveness of policies.

Integration is a process of better understanding the links and the different interests and trade-offs involved in trying to reach a consensus among actors. It is therefore a challenge of modernisation of administrations as it implies a new and open management culture and practices, and more dialogue and transparency. A number of tools and skills promote such a new culture:

- Research and development, via the fifth framework programme and the exploitation of results of previous programmes, can contribute to improved knowledge. Research can provide decision-makers with information on the impact of socioeconomic activities on the environment and on the best alternatives for the adaptation of policies.
- Strategic environmental assessment (SEA) is a tool to ensure that relevant and timely information is available to the decision-makers and that the stakeholders and the general public are informed and consulted in the decision-making process, and improves the quality of decision-making at all levels.
- Economic evaluation helps to understand the hidden environmental costs of actions as well as identify the most cost-effective options for achieving the different objectives.
- Indicators, both in the form of environmental headline indicators measuring environmental pressures and in the form of integration indicators for individual sectors help policy-makers by providing factual information that show trends over time. They aim to provide the information basis for more integrated policy decisions within particular sectors and across sectors, ensuring that main environmental concerns are covered by a coordinated policy.
- Tools such as EMAS, once extended to all economic sectors and public authorities, will be an incentive for adapting administrative structures and management.

Agenda 2000 was a positive step that shows how environmental, economic and social goals can be put into practice in the framework of agriculture, enlargement and regional policy. It will now depend on the Member States to take up the opportunities offered by Agenda 2000.

The Community will have to push ahead in its efforts in making the environment part of decisions in all policy areas and at European, Member States', regional and local levels if it is to meet its environmental objectives and live up to citizens' expectations.

9.2. Involvement of citizens and stakeholders

An important element of the fifth programme, with its emphasis on integration and working in partnership with the economic sectors, was the concept of shared responsibility. Integration will not work without stakeholders taking ownership and citizens being enabled by sound information to participate. While the European citizens' concern about the degradation of the environment is high, many people

have a restricted view of what they can do to protect the environment and few have confidence in the public information and in the efficiency of public policy. Insufficient ownership on the part of stakeholders is one of the sources of the limited success of the fifth action programme.

The Community has provided itself already with instruments setting incentives for stakeholders to take their responsibilities. These include the EMAS, eco-labelling, environmental agreements satisfying a clear set of criteria, the LIFE instrument and support for activities to promote the exchange of experience and best practice (e.g. 'Sustainable cities and towns' campaign). An effort has to be undertaken to ensure that full use is made of these instruments. A system of liability for environmental damage would complement this toolbox and promote a higher level of accountability. A liability regime would help ensure that polluters pay for environmental damage. It would contribute to a better implementation of the precautionary principle and the prevention of environmental problems. Factoring the environmental costs of human and economic activities into market prices in line with the 'polluter pays' principle through fiscal and other economic instruments would be a critical step forward.

Experience shows us that when citizens act, policies start to change for the better. If we want to change behaviour, citizens should be well informed and empowered.

Information needs to be recognised — more than ever before — as a tool enabling citizens to make sound choices, on the basis of their own ethical considerations and corresponding to their overall high level of environmental concern. Providing up-to-date information on the state of the environment and on alternative behavioural options must be central components of future policy.

Better access to information, citizens' participation in the political process and access to justice in environmental matters will give citizens an increased stake in their environment and promote a sound environmental policy. The Treaty of Amsterdam (Article 255) grants citizens the right of access to the documents of the European institutions. This now has to be translated into the rules of the institutions by May 2001. The 1998 Aarhus Convention (UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) will, once ratified, play an important role in 'democratising' environmental management. This, in turn, will lead to a more informed and open debate between all the stakeholders on the possible solutions to environmental problems. Finally, indicators that measure the performance of policies and progress are a practical tool for ensuring transparency and critical public review.

Relatedly, education and training on environment should be supported more through Community programmes such as Socrates and Leonardo da Vinci.

10. Conclusions: from environment to sustainable development, the next steps

The assessment of the fifth environmental action programme shows that we have made progress on environmental legislation but only modest successes in the integration of the environment into other policy areas. The general approach of the programme remains valid, though, and forms the starting point for future policy. The main challenges we face are linked to unsustainable patterns of consumption and production, which:

- erode the quality of the environment;
- generate health and safety concerns;
- waste resources;
- give rise to new and potentially damaging climatic conditions.

Today, the Union is far from achieving its broader objective of sustainable development as reflected in the Treaty of Amsterdam. The task now facing us is how we can give substance to this commitment. In essence it requires a change in the way we define economic, social and environmental objectives so that they become complementary and jointly contribute to sustainability. Progress will depend not alone on action at Community level but to a large extent on the willingness of Member States to take up their responsibilities.

A strategic approach to sustainable development could consist of a set of guiding principles and objectives backed up by action plans that address the different economic, social and environmental aspects. A sixth environmental action programme would be one of the pillars of the strategy, addressing key environmental priorities alongside the strategies of the main economic sectors and delivering the environmental policy measures which are essential for sustainability. The new programme would set general objectives that will need to be translated into quantifiable targets to steer the development of both environmental measures and the strategies in the economic sectors. The environmental priorities for the sixth action programme have to be seen in the broader context of an enlarged EU and one challenge will be for the EU to develop an environmental strategy for the enlargement process.

A broad-ranging debate involving all interests will be a critical element of the preparation of the sixth programme. This document aims at providing a platform for that debate on the overall approach and the priorities to be included in the new programme.

FROM CARDIFF TO HELSINKI AND BEYOND

Commission working document

Report to the European Council on integrating environmental concerns and sustainable development into Community policies



1. Introduction

This report is the Commission's contribution to the review by the Helsinki European Council of overall progress on the integration of environmental concerns and sustainable development into Community policies, and will suggest further action on the basis of the Council integration strategies, the Commission's global assessment of the fifth environmental action programme and the Commission's coordinated report on indicators.

This report mainly focuses on progress in the Council formations which have been invited by the European Council to prepare strategies for environmental integration. Integration does, however, also concern a wider range of policy areas some of which are covered by Annex II.

Current perspectives for the Community's environment show that there is a need to improve environmental performance across all sectors of activity. While in some areas progress has been achieved, a number of worrying trends still exist. This situation is confirmed in the recent State of the Environment report by the European Environment Agency ⁽¹⁾. Future progress towards an improved environment and more generally sustainable development, including social and economic concerns, will require a more integrated approach to policy-making. Climate change is a key area where integration of environmental aspects and sustainable development is essential to achieve progress. The predicted implications of climate change on agriculture, industry, land and property represent a severe threat to sustained economic growth. Over the past years we have seen some positive developments in greenhouse gas emissions. This positive trend is not likely to continue in all sectors. The only way to reverse the current growth trend particularly in CO₂ emissions is through integrating real changes into the economic policies, which determine our use of energy.

Beyond the EC Treaty and Kyoto Protocol commitments, by endorsing the programme for the further implementation of Agenda 21 as agreed in the 19th special session of the United Nations General Assembly, the Community committed itself to developing a strategy on sustainable development by 2002. Sustainable development cannot be achieved without environment measures but these measures on their own will not be enough. It is necessary to strengthen the integration of environmental requirements into sectoral policies, which can contribute to addressing them at their origins in the economic forces which shape our society.

2. The Cardiff process

In order to give substance to the Treaty commitments and to contribute to the solution of the climate change problem, the Cardiff European Council (June 1998) asked the Commission and the Council to focus more on integration and develop indicators to help monitor progress and make the issues more understandable for citizens. All relevant formations of the Council were invited to develop integration strategies with the Energy, Transport and Agriculture Councils starting the process. Building on this, the Vienna Summit (December 1998) invited these councils to continue their work with a view to submitting comprehensive strategies, including timetables for further measures and a set of indicators, to the Helsinki Summit. It also invited other formations of the Council — Industry, Internal Market and Development — to further develop this work and drew attention to the environmental dimension of employment and enlargement.

Although the Vienna European Council did not expressly invite the Industry, Internal Market and Development Councils to report to the Helsinki European Council, these three formations of the Council

⁽¹⁾ 'Environment in the European Union at the turn of the century', European Environment Agency, 1999.

have decided to join the other three in submitting such a report, including elements for further development of an integration strategy.

At the Cologne Summit (June 1999), the Councils, especially the Energy, Transport and Ecofin Councils, were requested to give particular attention to the climate problem. Moreover, the General Affairs, Ecofin and Fisheries Councils were requested to report back in 2000 on progress. In Cologne, the European Council also received a progress report on environmental integration and on mainstreaming of environmental policy from the Commission ⁽²⁾.

3. Council reports on integration

The integration reports and strategies prepared by the different Council formations for submission to the Helsinki European Council reflect the different starting points in terms of existing policies and orientations for future action. All recognise the need to further develop and implement environmental integration strategies. In the evaluation of the reports and strategies, the following criteria set by the European Council have been kept in mind:

- (1) the need for timetables for further measures and indicators to monitor progress in integration;
- (2) the emphasis on cross-sectoral issues such as climate change and the environmental dimension of employment and enlargement where they are relevant to individual policy sectors.

Transport: The transport strategy (adopted by the Council on 6 October) is a good basis for short-term action (1999–2001). Relevant ongoing activities have been included to a great extent. At the same time, some specific new important areas such as issues related to underlying causes of transport demand will receive more focus in the future. The strategy also recognises that the short-term objective is to flesh out the operational parts of the strategy for the period of 2000–04. A set of 27 indicators has been developed to help measure progress on an annual basis. In future, it will be necessary to define more clearly what sustainable transport actually means and to develop long-term environmental targets for the sector. The Commission recognises that this is a well-advanced strategy and looks forward to see its intentions being realised by Council decisions in the near future. That said, there are proposals on the Council table of particular relevance to climate change and sustainable transport which have not yet been adopted.

Energy: The draft report (adoption 2 December 1999) in preparation for the Energy Council largely confirms the existing energy policy commitments for the period 1999–2002 and suggests further general policy orientations many of which, however, come under the responsibility of other Council formations or are requests to the Commission. As far as the time beyond 2002 is concerned, the Council requests the Commission to assess the situation with a view to preparing new initiatives. A preliminary set of indicators are included. The Energy Council conclusions thereby essentially reflect existing commitments.

Agriculture: The Agriculture Council strategy adoption 16 November 1999 responds to the request of the Vienna Council to address the integration of environmental requirements into the common agricultural policy (CAP) through the reforms under Agenda 2000. The measures set out encompass environmental requirements and incentives integrated into the market policy as well as targeted environmental measures forming part of the rural development programmes. As a general principle, farmers have to bear the compliance costs of observing ‘good agricultural practice’ including the respect of mandatory

⁽²⁾ Commission working paper addressed to the European Council ‘The Cologne report on environmental integration — Mainstreaming of environmental policy’ (SEC(99) 777 final, 26.5.1999).

environmental legislation. More ambitious environmental objectives above this reference level can be pursued through payments to farmers for environmental services. The strategy sets objectives for water, agro-chemicals, land use and soil, climate change and air quality, as well as landscape and biodiversity. It is stressed that achieving sustainable agriculture will depend on the implementation of the available measures by Member States. The need for rigorous monitoring and evaluation of integration, based on meaningful environmental indicators is underlined.

Industry: The Industry Council has made the first steps towards preparing the strategy (adoption 9 November 1999) requested by the European Council. It has so far adopted conclusions on the integration of environmental concerns and sustainable development into the industrial policy of the EU and a report on integrating sustainable development and industrial policy. The report emphasises the three pillars of sustainable development and addresses issues such as climate change, employment, enlargement, changing production and consumption patterns, eco-efficiency and integrated product policy. It underlines the need for a broadening of the range of policy instruments, development of policy and performance indicators and improved cooperation and exchange of information between relevant formations of the Council as well as with all stakeholders. The Council commits to continue its work towards the development of the integration strategy. Further work is now needed to operationalise the strategy. This should involve appropriate new actions and measures within policy areas related to business and industry, including an action plan and a timetable. It will then be necessary to establish clear policy targets on the basis of the policy performance indicators against which progress can be monitored.

Internal market: The internal market Council report (adoption 28 October 1999) on the integration of environmental protection and sustainable development into internal market policy submitted to the Helsinki Summit is to a large extent based on the Commission communication on environment and single market from June 1999 (COM(1999) 263). Key elements of a strategy are defined as a balanced approach between free movement and environmental protection. Moreover, the Council has invited the Commission to examine areas which can be monitored on the basis of already available statistical data and to report to the Council in the second half of 2000. The Commission notes that the report is only a first step, part of an ongoing process that needs to be developed in order to build a reinforced strategy that should deliver clear and sustainable results on how environmental protection will be integrated within the single market policies. The focus is, at this stage, on the free movement of goods, standardisation and public procurement, something that shall not prevent the consideration of new fields of action where integration of both policies can be achieved. The Commission would like to emphasise the importance and the consequences of integrating environmental requirements into internal market policies.

Economic and development cooperation: The Development Council's report (adopted by the Council on 11 November) stresses the importance of developing countries' national strategies for sustainable development, EC policy coherence, the efficient use of Commission environmental assessment procedures and adequate staffing and training. Indicators and regular evaluations will be used to monitor progress. The report calls on the Commission to prepare a specific strategy by the next Development Council meeting. The recent Commission communication (COM(1999) 499 final) notes that opportunities to better coordinate the EU objectives in relation to the funds designed to implement multilateral environmental agreements (MEAs) should be fully explored. Thus the Environment and Development Councils and the European Council should consider the case for a more coordinated approach in such international financial discussions.

More detailed comments on these strategies and reports are set out in Annex I to this report.

The Fisheries, General Affairs and Ecofin Councils have yet to produce their integration strategies. As requested by the Cologne European Council, they are to report back to the European Council in 2000 on the integration of environmental issues and sustainable development into each of the policy areas. An agreement on the timetable for developing integration strategies for these sectors is needed.

4. Integration in Commission policy proposals

At Cardiff, the European Council endorsed the principle that major Commission policy proposals should be accompanied by an appraisal of their environmental impact. In its report to the Cologne Summit in May 1999 the Commission acknowledged the weaknesses of the current 'Green star' system.

The Commission is currently reviewing its system.

5. Conclusions

It is encouraging that the various Councils have started to address the issues and are taking the first steps towards preparing the kind of strategies the European Council has called for. Progress is clearly uneven, and further work is required to ensure that they meet the expectations of successive European Councils to contribute positively to achieving the Treaty objectives. The various strategies have referred to climate change, enlargement and the environmental dimension of employment as cross-sectoral issues where relevant, as requested by the European Council. However, clear timetables for individual measures as well as objectives are largely absent which makes the monitoring of progress difficult.

Achieving sustainable development is an ongoing process and it is hard to set a deadline for it. Where indicative targets and timetables have been established, they have helped to focus attention and monitor progress. For example, the Community will have to present progress towards sustainable development in 2002, when the 10-year review of the Rio process takes place. Other important steps on the path towards sustainable development will be compliance with the Kyoto Protocol during 2008–12, and achieving demonstrable progress towards compliance by 2005. As mentioned above, addressing climate change is one of the most important integration challenges that the Community is facing.

The Commission considers that in the further development of strategies in individual areas the following general elements merit consideration:

- The development of the various strategies has been uneven and further work will be required in the coming period to develop them further including the requirement for timetables for action.
- More focus should be put on addressing the origin of problems rather than seeking to abate the effects often with end-of-pipe solutions.
- More reflection is needed on the role of long-term and intermediate-term sector-specific environmental targets taking account of the specific characteristics of the sector. Such sector-specific targets have already been used in some Member States and could also be useful at the Community level.
- Some Member States have good experience in environmental integration both in administration and policies as well as in the development of indicators. Exchanges on best practice already take place, but much more could be done.

Besides these horizontal considerations, specific short and medium-term actions in the individual sectors will in the Commission's view further promote environmental improvements. These actions are contained in Annex II.

The European Council in Cardiff invited the Commission to report to future European Councils on the Community's progress in meeting the Treaty requirement on integration. The Environment Council in its conclusions of 12 October 1999 have stressed the importance of regular monitoring based on Commission reports. The Commission accepts the importance of periodic review of progress.

In preparing the 10-year review of the Rio process, the Commission considers that it would be useful to have an overall review by the European Council in June 2001 on the progress of developing and implementing the various Council strategies.

MORE DETAILED ANALYSIS OF THE VARIOUS INTEGRATION STRATEGIES AND REPORTS BY THE COUNCIL

Transport

The current strategy was developed under a strong time pressure. The stepwise approach and the revision foreseen have reflected this. The strategy has in a well balanced way managed to handle the inevitable complexity of 'transport and environment' and at the same time focused on the main environmental issues — not least climate change. Relevant ongoing activities have been included to a great extent and at the same time some specific new important areas to deal with have been identified giving the Commission a reasonable lead-time and thus speeding up the process. The first review of the strategy is set for June 2001.

In accordance with the strategy a large number of activities have already started or been ongoing for a while within the Commission. Apart from those already identified in the Council strategy document the following should be mentioned:

- The Commission formed in 1997 a joint expert group on transport and environment consisting of one expert from the transport side and one from the environment side from each Member State. The expert group has — by two working groups — concentrated on two main topics: 'A strategy for integration' and specifically 'Transport demand'. Although the reports were finalised slightly after the decision in the Council, the work done and the conclusions of it have been of great importance for the development of the Council strategy.
- At the joint Council in 1998 the Commission was invited to develop 'in conjunction with the European Environment Agency, and taking account of work done in other international organisations and in Member States, ... a comprehensive set of indicators of the sustainability of transport ... and report on them regularly to the Council.' The Commission (Directorate-General for Transport, Directorate-General for the Environment, Eurostat) jointly with the Environment Agency developed the 'Transport and environment reporting mechanism' (TERM), a set of 27 indicators to measure the integration process in the transport sector as well as to monitor deficits and achievements in the implementation of sustainability of transport. A zero-version of the TERM report will be submitted to the Transport Council in December 1999, complemented by a statistical compendium published by Eurostat containing all data that underlie the indicators. TERM is set up as an open system to be adapted if necessary. It has been identified in the Council strategy and will serve as the monitoring process requested for at the Cardiff Summit. Reporting is foreseen on an annual basis.
- The 'Auto-Oil' programme was the first attempt to find cost-effective action programmes to meet certain environmental targets. Its first phase was focusing on road transport and on technical measures. 'Auto-Oil II' provides a working example of the process of integrating the environment into a range of transport-related policy areas, including vehicle and fuel technologies, fiscal instruments, demand management and other 'non-technical' measures. By working closely with stakeholders and expert institutions, the Commission services have aimed to show how a wide variety of transport measures might form part of an integrated strategy to meet air quality objectives at the local and regional levels. A draft report from the programme will be ready before the end of 1999 covering the trends in emissions and urban and regional air quality, potential measures to reduce emissions from road transport and their costs and benefits.

The current Council strategy is well developed concerning different actions but perhaps less so concerning the definition of sustainable transport and the long-term environmental targets that have to be met. A further development in this aspect is necessary to guidance on the design of different tasks carried out in the future to implement the strategy. These kinds of considerations have been addressed more

explicitly in the conclusions of the expert group on transport and environment. In its first revision of the strategy (June 2001) the following topics should be given some further attention:

- As stated in the conclusions from the Joint Council in 1998 the development of an integration strategy should be based on long-term and intermediate-term targets. Such sector-specific targets have been used in some Member States and could be used also on a European level. It is therefore important to study if and how this could be used in the future implementation of the strategy.
- The concept of integration will influence the role of different parts of the administration. Not only will the transport sector have to adapt to the responsibility but the environment sector will also have a new role in assisting, pushing and monitoring the progress. The ongoing work within the expert group has clearly shown that there is a need to look into the consequences of introducing this new concept.
- The variation in progress of implementing the concept of sector integration is big between Member States. This is also the fact concerning the awareness of the problems and on possibilities to tackle those problems. As highlighted in the Council strategy there is a need to develop mechanisms to gather and disseminate information on best available practices. As has been underlined by the expert group this should include examples on how to find solutions of institutional problems on a local as well as on a national level.

Energy

The energy sectoral strategy builds upon earlier Council debates and in particular the Commission's communication entitled 'Strengthening environmental integration within Community energy policy' (COM(1998) 571) and the Energy Council report to the European Council meeting in Vienna in December 1998.

The three priorities of energy policy, security of supply, competitiveness and environment are the main focus in defining sustainable development in operational terms.

The foundations for a comprehensive policy consist of:

- a sustained commitment to energy efficiency and energy saving;
- developing the use of safe energy sources with low or no CO₂ emissions within the framework of Member States energy policy; and
- reducing the environmental impact of the use of energy sources with high carbon content.

A number of priority areas for action have been identified, including developing the internal energy market, promoting renewable energy sources, enhancing energy efficiency and looking towards internalising the external costs/environmental benefits.

The emphasis in the period to 2002 is to implement energetically the different Community programmes, including the Community energy framework programme and fifth research and technological development programme. Within each programme the terms and timetables of the respective directives and programmes are confirmed.

An important development in common actions is the potential for accessing electricity from renewables in the internal market and a proposal from the Commission is expected this autumn.

On the strengthening of coordinated measures the Council, with other forums of the Council, including environment, has confirmed areas where further progress is required and in particular in strengthening cooperation with economic actors and between Member States.

Looking to beyond 2002 the Commission is invited to review the strategy with a view to developing new policy initiatives, taking into account the implications of enlargement. The review should be prepared

after wide consultations with relevant parties and be available for consideration by the Council at the latest by autumn 2000.

The role of monitoring with indicators, progress in achieving the strategy is confirmed as an essential part of the overall approach. As a first step a preliminary set of indicators has been identified and it will be developed in the light of experience gained in monitoring sustainable development including environmental concerns. The focus is at Community level for the moment.

Agriculture

The agreement on CAP reform reached at Berlin in spring 1999 provided a concrete step in the integration process. The environmental elements of this reform had been set out in the communication 'Directions towards sustainable agriculture' (COM(22) 1999).

The Agriculture Council strategy responds to the request of the Vienna Council to address the integration of environmental requirements into the common agricultural policy (CAP) through the reforms under Agenda 2000. The strategy also sets concrete objectives for water, agro-chemicals, land use and soil, climate change and air quality, as well as landscape and biodiversity.

The measures referred to in the strategy encompass environmental requirements and incentives integrated into the market policy as well as environmental measures established under rural development policies. The latter have been reinforced as a second pillar to the CAP.

Through agri-environmental measures, being a compulsory element of rural development programmes, farmers are remunerated on a contractual basis for services, which preserve or enhance the rural environment and landscape. The less-favoured areas scheme contributes to ensuring the continuation of farming which in many areas is desirable for environmental reasons. It can also support the implementation of policies such as those applied under the habitats directive.

The overall context of integrating environmental requirements into the CAP is given by the common rules regulation. According to this regulation, Member States have to undertake environmental measures. However, there is a high degree of discretion as to how they meet this obligation. The options at the disposal of Member States include the application of agri-environmental measures, mandatory environmental legislation and the definition of specific environmental requirements. The enforcement of the latter two options can be supported by reducing or even cancelling direct support payments given under the market organisations.

While very intensive and frequently non-land-using agriculture is often not supported by direct payments from the EU, it too places increasing strain on the environment. In this regard it is necessary that compliance with environmental legislation such as the nitrates directive be improved as this in turn would provide tangible evidence of a commitment to integration.

The integration strategy is compatible with the 'polluter pays' principle. As a general rule, farmers have to bear the compliance costs of observing 'good agricultural practice' including the respect of mandatory environmental legislation. More ambitious environmental objectives above this reference level can be pursued through payments to farmers for environmental services.

The application of the full range of environment-related measures should enable Member States to improve the balance between agriculture and the environment. It could eliminate damaging features of agriculture and enhance positive ones. In this respect, the Agriculture Council strategy underlines that implementation of the available measures by Member States is essential for ensuring that sustainability becomes the reality of European agriculture. The Commission will follow attentively Member States efforts as evidence of the commitment to integration.

The strategy underlines the need for rigorous monitoring and evaluation of integration, based on meaningful environmental indicators, reflecting site-specific conditions. In this respect the Commission undertook intensive work to provide monitoring and evaluation guidelines and to prepare a framework for agri-environmental indicators. A publication entitled 'Agriculture, environment, rural development — Facts and figures' has been issued recently. Currently, it is finalising a communication to the Council on agri-environmental indicators which includes a long-term strategic approach towards the completion of a set of agri-environmental indicators.

Industry

On 29 April 1999 the Industry Council adopted conclusions on 'integrating environment and sustainable development in the industrial policy of the EU'. This was followed on 9 November 1999 by a report on 'integrating sustainable development and industrial policy'. This report emphasises the three pillars of sustainable development: environmental protection, economic development and social development. They especially address climate change, employment, enlargement, changes in production and consumption patterns and new approaches such as eco-efficiency and integrated product policy.

The report underlines the need to broaden the range of policy instruments for achieving sustainable development. They also address the need to develop policy and performance indicators in order to monitor the implementation of an integration strategy, and commit the Council to develop this strategy in more detail, to be applied by the end of 2004. The need for improving cooperation and exchange of information between the relevant formations of the Council as well as with all stakeholders is particularly emphasised.

The Commission is cooperating closely with the Council in the development of an integration strategy. A Commission staff working paper on 'Sustainable industrial development' has been developed. The Commission has also launched a study on indicators for monitoring integration of environmental concerns and sustainable development in industrial policy as well as a project for the development of an integrated appraisal methodology for the assessment of impacts on environment, competitiveness and innovation of proposals and activities in the policy areas related to industry. The Commission generally welcomes the efforts being made by the Industry Council, but emphasises the need to develop a detailed and concrete action plan as soon as possible that will operationalise the implementation of the strategy.

Internal market

- Future strategies ('priorities') are very often based on the 'key objectives' of the Commission's communication on single market and environment of 8 June 1999 (COM(1998) 263). There is therefore sufficient basis for the development of the lines of action proposed by the Commission and endorsed by the Council. The Commission will continue its work on how to extend the integration requirement (as set in Article 6 of the EC Treaty) to new areas.
- The fact that sustainable development and a high level of environmental protection are now part of the tasks of the Community is underlined in the report. The Commission will strive to produce tangible results in particular in what it considers to be first priority areas which concern public procurement and standardisation. To this effect, proposals will be forwarded from the Commission soon.
- The report only gives a preliminary answer to the question of the mandate given by the Vienna European Council in the conclusions on indicators for the internal market as a whole. However, a timetable has been set for the Commission to report such an assessment to the Council by the second half of 2000. The development of indicators and setting of a clear timetable for action will be essential in view of the future progress of the integration strategy, in line with the Vienna conclusions.

- The actual application of the ‘balanced approach’ is clarified in theory and it is clear, especially from the Commission communication on single market and environment, which principles will have to be taken into account. However, the time has come when theory must be transformed into practice. The Commission, the Member States and the stakeholders involved will have to work intensively on this issue.

Development

The Development Council’s report, adopted by the Council on 11 November 1999, builds on the Development Council conclusions of May 1999, on the Commission information note of 14 April 1999, and the Commission communication ‘Integrating environment and sustainable development into economic and development cooperation — Elements of a comprehensive strategy’ (COM(1999) 499 final).

The Council report recognises that since EC economic and development cooperation is based on continuous dialogue with and ownership by the partner countries, the elements of the strategy presented in the report must be complemented by more detailed solutions identified jointly with the partner countries. The Development Council takes a broad definition of sustainable development to include ‘politically democratic and pluralistic’ and refers to the development cooperation objectives of the EC Treaty and the OECD Development Assistance Committee. The Council report stresses that the Community must increasingly support preparation and implementation of national strategies for sustainable development in order to build the capacity for developing countries to assume ownership for and to give adequate attention to environmental issues.

The Commission communication (COM(1999) 499) underlines the importance of coherence between development policy and other EC policies and sectors, notably agriculture, fisheries, industry and trade. Particular emphasis is given to the links between environment, globalisation and poverty. The Council report, in this respect, emphasises that the Commission, with Member States, shall actively review emerging policy proposals for greater policy coherence when integrating the environment and sustainable development into economic and development cooperation policies and other EU policies affecting developing countries.

The communication also looks upstream to the level of sectoral policy-making and country programming. Support for structural adjustment and for private sector development is seen as two areas in particular need of a more integrated approach. Furthermore, the Council report defines some elements of a strategy which ‘must be taken into account, for example, in the forthcoming Commission communications, work programmes, reports and policies affecting developing countries’.

The Commission communication recognises that efforts should be continued to implement the recommendations of the 1997 evaluation and makes proposals to improve the quality of environmental screening and appraisal as well as to make more effective use of limited staff resources and expertise. Following this argumentation, the Council report cites the main findings of the 1997 evaluation ‘Environmental performance of EC cooperation’ and reports on the progress made at policy and operational levels. The Council urges the Commission to increase its efforts to apply environmental assessment procedures. It also makes reference to the separate Development Council conclusions on climate change and EC economic and development cooperation. The conclusions on climate change call on the Commission to report on progress made as soon as possible after the sixth Conference of the Parties of the UN Framework Convention on Climate Change to be held in The Hague in November 2000.

Sustainable development indicators developed by the OECD Development Assistance Committee, specific actions and related indicators presented in the Commission communication as well as regular evaluations will be used to monitor progress. Finally, the Development Council calls on the Commission

to 'prepare, in consultation with Member States, a specific strategy, including a timetable, for the implementation of the strategic, operational and organisational measures recommended in this report, by the next Council meeting'.

The communication draws attention to the importance of multilateral environmental agreements (MEAs) for developing countries and urges increased Community support for their efforts to implement the conventions, in particular those related to climate, biological diversity and desertification.

MAIN SHORT- AND MEDIUM-TERM ACTIONS FOR INDIVIDUAL SECTORS

The main actions identified below, for the short and medium term, in the key policy areas reflect and update the integration priorities set out in the fifth programme and its review and will complement the Council's integration strategies. Many of them have already been identified in Commission proposals or are under consideration by Commission services, or implement decisions already taken.

1. Agenda 2000: more opportunities for Member States

Agenda 2000 contains a series of positive measures from an environmental point of view which will give Member States an opportunity to reap environmental benefits.

1.1. The Structural Funds reform: support and respect for the environment

The priorities set out in the review of the fifth environment action programme were:

- to monitor closely, at the EU and Member States levels, the impact of the Structural Funds;
- to reinforce links between these financing instruments and respect for environmental policies, putting emphasis on the quality of the investments and on criteria.

These priorities has been incorporated into the new regulations, covering the period until 2006 which introduce or strengthen measures to enhance the integration of environmental concerns into the planning, programming and implementation of the actions undertaken by the Structural Funds in support of economic and social cohesion. Protection and improvement of the environment to achieve sustainable development are among the principal aims of the Structural Funds. First, environmental considerations are to be better integrated into the Structural Funds programming process through the assessment of environmental impacts via *ex ante* evaluation of programmes and the establishment of monitoring indicators which would also allow adjustments to the programmes to be made at mid-term. Second, through a more widely drawn partnership, that includes environmental authorities and NGOs, the environmental dimension can be better taken into account. Interventions in favour of the environment can be also encouraged by a higher rate of Community co-financing.

The Commission should continue to monitor the respect of the environment in the framework of the implementation of the programmes, putting emphasis on the *ex ante* evaluation, partnership with environmental authorities and greater accountability through improved measurability of results and indicators.

Considering that the reform has reinforced the responsibility of Member States to implement and comply with Community legislation and policies, it is crucial that the following priorities are incorporated in their programmes.

Main actions

As far as the environment is concerned, the priorities of the Structural Funds include the following:

- the integration of sustainable development and environmental protection into programming, implementation and assessment;
- compliance with environmental legislation;
- support for regional development measures adapted to circumstances including:
 - environment infrastructure that meets Community environmental standards;

- sustainable transport infrastructures;
- energy efficiency and renewable energy resources;
- productive investment related to the environment;
- environment-related qualification.

1.2. The agriculture reform: scope for environmental integration

The review of the fifth environmental action programme stressed the following priorities:

- integration of market/rural development and environmental policies in Agenda 2000;
- reporting on effects on the environment;
- promotion of sustainable farming;
- comprehensive approach on rural development;
- internalisation of environmental costs in agriculture products and processes.

This has been translated into the Agenda 2000 CAP reform that, in addition to reducing institutional prices in several key sectors, establishes clear links between direct support payments and environmental protection requirements. Progress towards sustainable agriculture now depends on the extent to which Member States take up these opportunities in particular in relation to environmental protection and in the programmes that they have to establish at national and regional level.

The Member States have to undertake appropriate environmental measures, with the following options at their disposal:

- implementation of appropriate agri-environmental measures under the rural development programmes;
- making market payments conditional on the observance of generally applicable mandatory environmental requirements.
- linking direct payments under COMMON MARKET ORGANISATIONS to specific environment requirements.

Agenda 2000 also establishes rural development as a pillar of the CAP with respect for the environment as a key element of the plans to be drawn up at national and regional level. These plans may include measures on forestry and less-favoured areas. The inclusion of agri-environmental measures is compulsory. Environmental gains may also flow from the introduction of 'national envelopes' in beef and eventually the dairy sectors.

Agriculture and forestry also have a role in making progress on climate change, given on the one hand the significant contribution of methane from cattle to greenhouse gases, and on the other the opportunities for forests to act as carbon sinks.

Main actions

At Community and Member States level

- Promote sustainable agriculture practices, including a better balancing of inputs (chemical/pesticides strategy) and outputs, soil protection (future strategy), the protection of biodiversity (Natura 2000 and agri-environment programmes) and landscapes, water quality and quantity (water framework directive, nitrates directive).

- Investigate the suitability of applying environmental taxes to agricultural input.
- Continuous evaluation and improvement of collection of data on the link between agriculture and the environment.
- Develop further agri-environment measures, integrated production methods and organic farming and other forms of sustainable agriculture.

At Member State level

- National programmes and measures should translate environmental protection requirements into practical terms, based on a clear identification of national and regional environmental problems.
- If environmental requirements are not respected, individual subsidy payments could be reduced or taken back and put into the accompanying measures under rural development.
- At regional level, guidelines for good farming practices need to be established in a broad consultative process involving farmers, NGOs and other stakeholders.

At Community level

- Defend the model of multifunctional agriculture in WTO negotiations and ensure further progress towards sustainable farming, including a larger organic sector.

2. Transport

There has been progress in measures taken on car emissions standards and fuel quality, but slow progress on decoupling transport demand and economic growth. Demand-side priority, emphasised already in the review of the fifth programme, still faces the same difficulty. In addition to existing targets on air quality (which fix targets for air pollutants such as sulphur, dioxide, particles and lead) the transport sector should adopt new environmental targets, such as on the reduction of greenhouse gas emissions, noise, and air pollution contributing to acidification, ozone, and eutrophication.

Therefore, the actions that make up strategies to an environmentally sustainable transport system in order to change the way the European transport system works must be oriented towards reversing the unsustainable trends of current transport growth, especially in road freight, private car use and civil aviation.

Main actions

To internalise the environmental costs into prices of transport

- Fair and efficient pricing based on the polluter pays principle including fair taxation of fuels across all modes of transport and a shift towards variable taxation on cars in order to increase people's awareness of the costs of their travel.

To reduce the harmful effects of transport

- Encouraging the use of information and communication technology as a substitute for transport.
- Making transport a top priority in land-use planning and urban development, and making transport impact assessment a part of other sectoral policies.

To improve existing transport management

- A shift of freight and passenger transport from road to public and less damaging modes of transport, such as rail, short-sea shipping and inland waterways, without disregarding the environmental problems inherent in these modes. Revitalising the EU's rail sector will play a crucial role in this respect and making the rules on public procurement more favourable to this kind of transport.
- Strategic environmental assessment of large-scale transport plans and programmes, notably in the context of the trans-European transport networks but also on the national level.
- Use of regional funds in projects that support a modal shift away from private and road freight transport.
- Public procurement rules to promote environmentally friendly actions at all levels.
- Research and technology: on a short- to medium-time scale, further improvement of vehicles, combustion and catalyst technology, fuels and infrastructure to reduce exhaust emissions and energy consumption as well as noise. Use of telecommunications and navigation systems to link up different modes of transport, providing innovative information services and optimising transport and logistics systems, both in passenger and freight transport. Looking at a long-term perspective, work towards new drive technologies and the associated fuelling infrastructures.
- Development of renewable energy sources.
- Promoting the use of non-motorised transport in urban areas by the exchange of good practice and benchmarking.

To improve data availability

- Take the necessary steps to produce unambiguous and comparable data for the compilation of indicators.

3. Industry

The fifth environment action programme priorities were as follows:

- the development of eco-management schemes;
- the role of small- and medium-sizes enterprises;
- development of the concept of eco-efficiency and a framework for an integrated product policy, including the reduction of the wastes generated;
- cleaner products;
- reduction of hazardous substances, in particular persistent organic pollutants;
- move towards a comprehensive control of industrial installations, including smaller ones;
- the internalisation of environmental costs and of the polluter pays principle;
- the promotion of best available technologies and best practices;
- the development of eco-business.

There has been progress on the development of the environmental management and audit scheme (EMAS), and a proposal on an integrated product policy is planned in 2000, but no progress on the Commission's proposal to extend the IPPC directive to SMEs. There are intense relations with the related industrial sectors in the definition of policy measures on, for example, air quality and climate change. Work on the development and dissemination of eco-efficiency and best practices within industry and on international activities will be continued.

Main actions

The above priorities are still valid, in addition

- Establishment of industrial strategies that take into account the precautionary and prevention principles regarding the possible effects on the environment of their processes and products.
- Definition of guiding principles for industry sectors to achieve a coherent and comprehensive control of pollution from industrial installations.
- Link integrated product policy, chemical strategy, safety of products and processes.
- Closer partnership between the industry and the environment at all levels, for example voluntary agreements and the 'Partnership with business' initiative, taking into account competition rules.
- Concentrate efforts on SMEs such as support measures to improve their environmental management and performance.
- A Green Paper on integrated product policy.
- Development of the methodologies and tools needed to produce unambiguous and comparable data for the compilation of indicators and collection of that data.

4. Energy

The priorities of the fifth environment action programme have been incorporated in the report to the Vienna European Council by the Energy Council apart from the objective to internalise external costs and benefits through economic instruments, which is tackled by the Ecofin.

The energy framework programme (1998–2002) with six specific programmes has been created to ensure transparency, coherence and coordination of all energy actions. In addition, the fifth framework programme for research, technology and development (RTD) for the years 1998–2002 has a direct impact on the energy sector's capacity to contribute to meeting environmental objectives. While Member States have the primary responsibility for energy policies and for integrating the environment within their energy policy, the Community has a valuable complementary role in facilitating cooperation between Member States and in ensuring coherent and cost-effective action at Community level. In particular, the financial support offered by the SAVE and Altener programmes plays mainly a catalytic role for meeting the Kyoto commitments. Addressing new policy measures and instruments such as ambitious environmental agreements and development of joint implementation mechanisms and fiscal incentives is also necessary.

Main actions

- Enhancing energy efficiency and savings to which the liberalisation of the internal market and increased competition should contribute.
- Putting more emphasis on the demand and consumer behaviour.
- Internalising external costs/environmental benefits and adoption by the Council of the energy products tax (Ecofin).
- Research and development and dissemination of new and advanced energy technologies and techniques.
- Increasing cooperation and coordination between Member States, in particular with regard to the commitments of the Kyoto Protocol and the application of the flexible mechanisms.
- Reducing the environmental impact of production and use of traditional fossil, new fuels and nuclear power.
- Use of regional funds in projects that support clean energy and renewable energies.
- Identifying new data needs and improving data availability.

5. Tourism

As the most rapidly growing industrial sector, there should be a strategic approach on how to address this issue in relation to EC policies (internal market, industry, transport, Structural Funds, land use and environmental policy). In addition the Community has developed several measures for disseminating and promoting good practices in the sector. Due to the international nature of the tourism sector, the industry has a special role in ensuring that the same good practices are followed in their activities outside the EU.

Main actions

- Sectoral policies need to consider the trends in tourism.
- Need to develop indicators and to take into account the overall impact of tourism and related infrastructures on the environment (air pollution, CO₂ emissions, water, biodiversity, coastal zones, mountainous region, etc.).
- Promote good practice on impact assessment and carrying capacity of tourist sites.
- More focus should be given to demand side and increased partnership with the tourism professionals.

6. Other policies

6.1. Internal market

The European Union must consolidate and further develop the positive interaction between two legitimate demands of European citizens:

- the smooth operation of the internal market;
- a sufficient degree of environmental protection.

Although internal market is not one of the five target sectors identified in the fifth environmental action programme, it has close links with all of them. The Commission has adopted a communication on internal market and environment which highlights the synergies between these policies. This needs to be reflected in measures promoting a high level of health, safety and environment protection while ensuring that the relevant measures are non-discriminatory, necessary and proportionate.

Public procurement policies can also offer possibilities for environmental protection. The Commission's communication on public procurement ⁽¹⁾ contains a chapter on the environment. A specific interpretative document is under development to further clarify the issue within the current legal framework.

Main actions

- Integration of environmental considerations into standardisation.
- Increased use of environmental taxes and charges.
- Development of reporting criteria for environmental issues in financial accounts.
- Enhancement of synergies with transport and energy sectors and the development of indicators in this respect.
- Further enhancement of synergies between public procurement policies and the environment.
- Enhancement of synergies between integrated product policy and the internal market.

⁽¹⁾ Commission communication entitled 'Public procurement in the European Union' (COM(1998) 143 final, 11.3.1998).

- Review of environmentally-related national technical regulations notified under Directive 98/34/EC in order to determine where harmonised measures may be justified at EU level.
- Environmental requirements for investment and promotion of green financial products.
- Handbook on the application of Articles 28–30 with concrete examples based on previous experience.

6.2. Fisheries

The Community system for fisheries and aquaculture (common fisheries policy, CFP) as revised in 1992 stipulates that exploitation of living marine resources should take account of implications for the marine ecosystem. Despite what has been achieved much has still to be done to attain the objective of sustainable and rational fishing. The Commission has published a communication on fisheries management and nature conservation in the marine environment (COM(1999) 363).

The viability of fisheries and aquaculture is dependent on the quality and availability of marine resources, which in turn depend primarily on good management, but also and to a substantial extent on the quality of the marine environment. One of the main goals of the CFP, now and in the foreseeable future, will be to reduce and ultimately eliminate overexploitation and hence to reach an appropriate equilibrium between fishing activities and targeted stocks.

Main actions

- Increase of contribution from scientific research to fisheries management and to the appraisal of the relationship between fisheries, including aquaculture, and marine ecosystems.
- Increased application of the precautionary approach to fisheries management.
- Control of fisheries pressure including reduction of biological impact, to support the conservation and sustainable use of commercial stocks and marine ecosystems.
- Improvement of training, information and transparency.

These priorities should be pursued at Community and national levels, but also in bilateral and multilateral negotiations in which the Community takes part.

7. Synergy environment/employment: Ecofin and Employment & Social Affairs Council

At the EU level, the Ecofin council has a key responsibility for identifying and promoting effective fiscal reforms that support the integration of environmental objectives into the policies of different sectors such as energy and transport.

Tax reforms, such as a tax on polluting forms of energy production and use, should be fiscally neutral with the underlying aim of shifting taxes from labour to resource use.

This priority is also reflected in the EU employment strategy (Luxembourg process):

- Member States are encouraged to set a target, if appropriate, for reducing the fiscal pressure on labour and non-wage labour costs, particularly for the low skilled. At EU level, further work is desirable on introducing taxes on energy and desirability of taxes on polluting emissions should be investigated. Member States are also encouraged to develop measures to exploit the potential for job creation in environmental services.
- The Commission's joint employment report provides an annual assessment of the progress that Member States are making in implementing the guidelines. However, there is also a need for a process of exchange of experience between policy-makers to promote best practice in exploiting environment/employment synergies.

8. Economic development and cooperation policies

Reversing the worldwide fall in real term development assistance is key to creating the political conditions needed to meet international objectives, first and foremost to reduce poverty.

Community cooperation policies should focus on building capacities in the partner countries to integrate environmental considerations across the development process and to initiate and strengthen their national strategies for sustainable development. Special attention should be given to the support of the public environmental regulatory and monitoring functions, the promotion of market-based environmental policy instruments and the improvement of both public and private sector environmental management capacities. Through an enhanced dialogue with each partner country or region, specific sustainable development and environmental priorities in these areas should be identified.

There is a need to allocate a more significant share of official development finance (ODF) in a strategic way in order to support necessary policy reforms for solving environmental problems in developing countries, which continue to undermine sustainable economic and social development. Better public decision-making will also result in an increased allocation of public funds in developing countries to solving environmental problems. There is also a need to build stronger links — through a strengthened policy dialogue — between the use of ODF and multilateral environmental agreements, in particular on global issues, in order to support the efforts of developing countries to meet their international obligations.

Within the Community, strong political commitment to environment integration process in economic and development cooperation will continue to be needed, as will improved institutional arrangements (e.g. environmental assessment procedures and training) and sound management and evaluation of the quality of the integration process. Impacts of other European policies, such as trade, agriculture and fisheries, on developing countries and their environments should also be analysed.

The roles of the Commission, Community and the Union in international work all need strengthening. The EU must ensure it is effective, notably in its negotiating capabilities, visibility and coherence. The European Union should play an enhanced role in all relevant organisations where issues under areas of mixed or exclusive competence are discussed (e.g. UN bodies, including the Commission on Sustainable Development, the Secretariat of the United Nations Framework Convention on Climate Change, the World Bank, etc.). The EU should have a more coordinated policy towards the role and use of the Global Environment Facility and other multilateral financial mechanisms. It could also be considered, whether the Community should be able to contribute to such financial mechanisms.

There is a need to develop preventive policies for dealing with the links between environmental degradation and security, as well as policies to effectively address, in cooperation with relevant organisations, the serious environmental impacts of conflicts in some critical areas of the Mediterranean.

9. Trade — preparing the Millennium Round

Environmental objectives should be mainstreamed throughout the WTO Millennium Round negotiations to be launched in 2000. This is necessary in order to maximise positive synergies between trade liberalisation and environmental protection (e.g. through the removal of environmentally harmful subsidies) and to prevent the conflicts and tensions that could arise if trade rules unduly constrained the ability of countries to pursue effective environmental policies.

Key issues to clarify include the use of trade measures in international environmental agreements, eco-labelling and the relationship between trade rules and core environmental principles, such as the precautionary principle. It is also necessary to improve transparency in the WTO to make it easier for civil society to express concerns effectively.

The Millennium Round will only be successful if there is a balanced and comprehensive package addressing the special needs and priorities of developing countries.

The Commission is conducting a sustainability assessment of the new WTO Round: an important step towards improving the mutual supportiveness of trade and environmental policies in the EU and at the international level. The assessment aims at identifying potential sustainability impacts and appropriate policy responses. The translation of this into systematic reviews of trade measures and agreements will need to be considered.

European Commission

Global assessment — Europe's environment: what directions for the future?

Luxembourg: Office for Official Publications of the European Communities

2000 — 49 p. — 21 x 29.7 cm

ISBN 92-828-8543-7

Venta • Salg • Verkauf • Πωλήσεις • Sales • Vente • Vendita • Verkoop • Venda • Myynti • Försäljning

BELGIQUE/BELGIË

Jean De Lannoy
Avenue du Roi 202/Koningslaan 202
B-1190 Bruxelles/Brussel
Tél. (32-2) 538 43 08
Fax (32-2) 538 08 41
E-mail: jean.de.lannoy@infoboard.be
URL: <http://www.jean-de-lannoy.be>

La librairie européenne/ De Europese Boekhandel

Rue de la Loi 244/Vetstraat 244
B-1040 Bruxelles/Brussel
Tél. (32-2) 295 26 39
Fax (32-2) 735 08 60
E-mail: mail@libeurop.be
URL: <http://www.libeurop.be>

Moniteur belge/Belgisch Staatsblad

Rue de Louvain 40-42/Leuvenseweg 40-42
B-1000 Bruxelles/Brussel
Tél. (32-2) 552 22 11
Fax (32-2) 511 01 84

DANMARK

J. H. Schultz Information A/S

Herstedvang 12
DK-2620 Albertslund
Tlf. (45) 43 63 23 00
Fax (45) 43 63 19 69
E-mail: schultz@schultz.dk
URL: <http://www.schultz.dk>

DEUTSCHLAND

Bundesanzeiger Verlag GmbH

Vertriebsabteilung
Amsterdamer Straße 192
D-50735 Köln
Tel. (49-221) 97 66 80
Fax (49-221) 97 66 82 78
E-Mail: vertrieb@bundesanzeiger.de
URL: <http://www.bundesanzeiger.de>

ΕΛΛΑΔΑ/GREECE

G. C. Eleftheroudakis SA

International Bookstore
Panepistimiou 17
GR-10564 Athina
Tel. (30-1) 331 41 80/1/2/3/4/5
Fax (30-1) 323 98 21
E-mail: elebooks@netor.gr

ESPAÑA

Boletín Oficial del Estado

Trafalgar, 27
E-28071 Madrid
Tel. (34) 915 38 21 11 (Libros),
913 84 17 15 (Suscrip.)
Fax (34) 915 38 21 21 (Libros),
913 84 17 14 (Suscrip.)
E-mail: clientes@com.boe.es
URL: <http://www.boe.es>

Mundi Prensa Libros, SA

Castelló, 37
E-28001 Madrid
Tel. (34) 914 36 37 00
Fax (34) 915 75 39 98
E-mail: libreria@mundiprensa.es
URL: <http://www.mundiprensa.com>

FRANCE

Journal officiel

Service des publications des CE
26, rue Desaix
F-75727 Paris Cedex 15
Tél. (33) 140 58 77 31
Fax (33) 140 58 77 00
E-mail: europublications@journal-officiel.gouv.fr
URL: <http://www.journal-officiel.gouv.fr>

IRELAND

Government Supplies Agency

Publications Section
4-5 Harcourt Road
Dublin 2
Tel. (353-1) 661 31 11
Fax (353-1) 475 27 60
E-mail: opw@iol.ie

ITALIA

Licosa SpA

Via Duca di Calabria, 1/1
Casella postale 552
I-50125 Firenze
Tel. (39) 055 64 83 1
Fax (39) 055 64 12 57
E-mail: licosa@licosa.com
URL: <http://www.licosa.com>

LUXEMBOURG

Messageries du livre SARL

5, rue Raiffeisen
L-2411 Luxembourg
Tél. (352) 40 10 20
Fax (352) 49 06 61
E-mail: mail@mdl.lu
URL: <http://www.mdl.lu>

NEDERLAND

SDU Servicecentrum Uitgevers

Christoffel Plantijnstraat 2
Postbus 20014
2500 EA Den Haag
Tel. (31-70) 378 98 80
Fax (31-70) 378 97 83
E-mail: sdu@sdu.nl
URL: <http://www.sdu.nl>

ÖSTERREICH

Manz'sche Verlags- und Universitätsbuchhandlung GmbH

Kohlmarkt 16
A-1014 Wien
Tel. (43-1) 53 16 11 00
Fax (43-1) 53 16 11 67
E-Mail: bestellen@manz.co.at
URL: <http://www.manz.at>

PORTUGAL

Distribuidora de Livros Bertrand L.ª

Grupo Bertrand, SA
Rua das Terras dos Vales, 4-A
Apartado 60037
P-2700 Amadora
Tel. (351) 214 95 87 87
Fax (351) 214 96 02 55
E-mail: dlb@ip.pt

Imprensa Nacional-Casa da Moeda, SA

Rua da Escola Politécnica nº 135
P-1250 -100 Lisboa Codex
Tel. (351) 213 94 57 00
Fax (351) 213 94 57 50
E-mail: spoce@incm.pt
URL: <http://www.incm.pt>

SUOMI/FINLAND

Akateeminen Kirjakauppa/ Akademiska Bokhandeln

Keskuskatu 1/Centralgatan 1
PL/PB 128
FIN-00101 Helsinki/Helsingfors
P./tfn (358-9) 121 44 18
F./fax (358-9) 121 44 35
Sähköposti: sps@akateeminen.com
URL: <http://www.akateeminen.com>

SVERIGE

BTJ AB

Traktorvägen 11
S-221 82 Lund
Tlf. (46-46) 18 00 00
Fax (46-46) 30 79 47
E-post: btjeu-pub@btj.se
URL: <http://www.btj.se>

UNITED KINGDOM

The Stationery Office Ltd

Orders Department
PO Box 276
London SW8 5DT
Tel. (44-171) 870 60 05-522
Fax (44-171) 870 60 05-533
E-mail: book.orders@theso.co.uk
URL: <http://www.tsonline.co.uk>

ÍSLAND

Bokabud Larusar Blöndal

Skólavörðustíg, 2
IS-101 Reykjavík
Tel. (354) 552 55 40
Fax (354) 552 55 60
E-mail: bokabud@simnet.is

NORGE

Swets Norge AS

Østenjoveien 18
Boks 6512 Etterstad
N-0606 Oslo
Tel. (47-22) 97 45 00
Fax (47-22) 97 45 45
E-mail: kyttelid@swets.nl

SCHWEIZ/SUISSE/SVIZZERA

Euro Info Center Schweiz

c/o OSEC
Stämpfenbachstraße 85
PF 492
CH-8035 Zürich
Tel. (41-1) 365 53 15
Fax (41-1) 365 54 11
E-mail: eics@osec.ch
URL: <http://www.osec.ch/eics>

BĂLGARIJA

Europress Euromedia Ltd

59, blvd Vitosha
BG-1000 Sofia
Tel. (359-2) 980 37 66
Fax (359-2) 980 42 30
E-mail: Milena@mbox.cit.bg

ČESKÁ REPUBLIKA

ÚSIS

NIS-prodejna
Havelkova 22
CZ-130 00 Praha 3
Tel. (420-2) 24 23 14 86
Fax (420-2) 24 23 11 14
E-mail: voldanovaj@usis.cz
URL: <http://usis.cz>

CYPRUS

Cyprus Chamber of Commerce and Industry

PO Box 1455
CY-1509 Nicosia
Tel. (357-2) 66 95 00
Fax (357-2) 66 10 44
E-mail: demetrap@ccci.org.cy

EESTI

Eesti Kaubandus-Tööstuskoda

(Estonian Chamber of Commerce and Industry)
Toom-Kooli 17
EE-0001 Tallinn
Tel. (372) 646 02 44
Fax (372) 646 02 45
E-mail: einfo@koda.ee
URL: <http://www.koda.ee>

HRVATSKA

Mediatrade Ltd

Pavla Hatza 1
HR-10000 Zagreb
Tel. (385-1) 481 94 11
Fax (385-1) 481 94 11

MAGYARORSZÁG

Euro Info Service

Hungexpo Európa Ház
PO Box 44
H-1441 Budapest
Tel. (36-1) 264 82 70
Fax (36-1) 264 82 75
E-mail: euroinfo@euroinfo.hu
URL: <http://www.euroinfo.hu>

MALTA

Miller Distributors Ltd

Malta International Airport
PO Box 25
Luqa LQA 05
Tel. (356) 66 44 88
Fax (356) 67 67 99
E-mail: gwirth@usa.net

POLSKA

Ars Polona

Krakowskie Przedmiescie 7
Skr. pocztowa 1001
PL-00-950 Warszawa
Tel. (48-22) 826 12 01
Fax (48-22) 826 62 40
E-mail: books119@arspolona.com.pl

ROMÂNIA

Euromedia

Strada Franceza Nr 44 sector 3
RO-70749 Bucuresti
Tel. (40-1) 315 44 03
Fax (40-1) 315 44 03
E-mail: mnedelciu@pcnet.pcnet.ro

ROSSIYA

CCCEC

60-Ietiya Oktyabrya Av. 9
117312 Moscow
Tel. (7-095) 135 52 27
Fax (7-095) 135 52 27

SLOVAKIA

Centrum VTI SR

Nám. Slobody, 19
SK-81223 Bratislava
Tel. (421-7) 54 41 83 64
Fax (421-7) 54 41 83 64
E-mail: europ@tbb1.sltk.stuba.sk
URL: <http://www.sltk.stuba.sk>

SLOVENIJA

Gospodarski Vestnik

Dunajska cesta 5
SLO-1000 Ljubljana
Tel. (386) 613 09 16 40
Fax (386) 613 09 16 45
E-mail: europ@gvestnik.si
URL: <http://www.gvestnik.si>

TÜRKIYE

Dünya Infotel AS

100, Yil Mahallesi 34440
TR-80050 Bagcilar-Istanbul
Tel. (90-212) 629 46 89
Fax (90-212) 629 46 27
E-mail: infotel@dunya-gazete.com.tr

AUSTRALIA

Hunter Publications

PO Box 404
3067 Abbotsford, Victoria
Tel. (61-3) 94 17 53 61
Fax (61-3) 94 19 71 54
E-mail: jpdavies@ozemail.com.au

CANADA

Les éditions La Liberté Inc.

3020, chemin Sainte-Foy
G1X 3V6 Sainte-Foy, Québec
Tel. (1-418) 658 37 63
Fax (1-800) 567 54 49
E-mail: liberte@mediom.qc.ca

Renouf Publishing Co. Ltd

5369 Chemin Canotek, Road Unit 1
K1J 9J3 Ottawa, Ontario
Tel. (1-613) 745 26 65
Fax (1-613) 745 76 60
E-mail: order.dept@renoufbooks.com
URL: <http://www.renoufbooks.com>

EGYPT

The Middle East Observer

41 Sherif Street
Cairo
Tel. (20-2) 392 69 19
Fax (20-2) 393 97 32
E-mail: inquiry@meobserver.com
URL: <http://www.meobserver.com.eg>

INDIA

EBIC India

3rd Floor, Y. B. Chavan Centre
Gen. J. Bhosale Marg.
400 021 Mumbai
Tel. (91-22) 282 60 64
Fax (91-22) 285 45 64
E-mail: ebic@giabsm01.vsnl.net.in
URL: <http://www.ebicindia.com>

JAPAN

PSI-Japan

Asahi Sanbancho Plaza #206
7-1 Sanbancho, Chiyoda-ku
Tokyo 102
Tel. (81-3) 32 34 69 21
Fax (81-3) 32 34 69 15
E-mail: books@psi-japan.co.jp
URL: <http://www.psi-japan.co.jp>

MALAYSIA

EBIC Malaysia

Level 7, Wisma Hong Leong
18 Jalan Perak
50450 Kuala Lumpur
Tel. (60-3) 21 62 62 98
Fax (60-3) 21 62 61 98
E-mail: ebic-kl@mol.net.my

MÉXICO

Mundi Prensa Mexico, SA de CV

Río Pánuco No 141
Colonia Cuauhtémoc
MX-06500 Mexico, DF
Tel. (52-5) 533 56 58
Fax (52-5) 514 67 99
E-mail: 101545.2361@compuserve.com

PHILIPPINES

EBIC Philippines

19th Floor, PS Bank Tower
Sen. Gil J. Puyat Ave. cor. Tindalo St.
Makati City
Metro Manila
Tel. (63-2) 759 66 80
Fax (63-2) 759 66 90
E-mail: eccpcom@globe.com.ph
URL: <http://www.eccp.com>

SOUTH AFRICA

Eurochamber of Commerce in South Africa

PO Box 781738
2146 Sandton
Tel. (27-11) 884 39 52
Fax (27-11) 883 55 73
E-mail: info@eurochamber.co.za

SOUTH KOREA

The European Union Chamber of Commerce in Korea

5th Fl, The Shilla Hotel
202, Jangchung-dong 2 Ga, Chung-ku
100-392 Seoul
Tel. (82-2) 22 53-5631/4
Fax (82-2) 22 53-5635/6
E-mail: eucck@eucck.org
URL: <http://www.eucck.org>

SRI LANKA

EBIC Sri Lanka

Trans Asia Hotel
115 Sir chittampalam
A. Gardiner Mawatha
Colombo 2
Tel. (94-1) 074 71 50 78
Fax (94-1) 44 87 79
E-mail: ebicsl@itmin.com

THAILAND

EBIC Thailand

29 Vanissa Building, 8th Floor
Soi Chidlom
Ploenchit
10330 Bangkok
Tel. (66-2) 655 06 27
Fax (66-2) 655 06 28
E-mail: ebicbkk@ksc15.th.com
URL: <http://www.ebicbkk.org>

UNITED STATES OF AMERICA

Bernan Associates

4611-F Assembly Drive
Lanham MD20706
Tel. (1-800) 274 44 47 (toll free telephone)
Fax (1-800) 865 34 50 (toll free fax)
E-mail: query@bernan.com
URL: <http://www.bernan.com>

ANDERE LÄNDER/OTHER COUNTRIES/ AUTRES PAYS

Bitte wenden Sie sich an ein Büro Ihrer Wahl/ Please contact the sales office of your choice/ Veuillez vous adresser au bureau de vente de votre choix

Office for Official Publications of the European Communities

2, rue Mercier
L-2985 Luxembourg
Tel. (352) 29 29-42455
Fax (352) 29 29-42758
E-mail: info.info@cec.eu.int
URL: <http://eur-op.eu.int>

Environment
themes

General

Water

Land

Air

Industry

Waste

Nature

Urban

Funding

Law

Economics

Assessment

Nuclear

Risks

Education

14 CR-21-99-432-EN-C



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-828-8543-7



9 789282 885437

see our publications catalogue at:
<http://europa.eu.int/comm/environment/pubs/home.htm>