Choices for a greener future

The European Union and the environment



Published in all the official languages of the European Union: Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish and Swedish.

European Commission
Directorate-General for Press and Communication
Publications
B-1049 Bruxelles/Brussel

Manuscript completed in February 2002.

Cover illustration: Nicholas Banfield Cover layout: EC-EAC

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

Luxembourg: Office for Official Publications of the European Communities, 2002

ISBN 92-894-3119-9

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Printed in Belgium

PRINTED ON WHITE CHLORINE-FREE PAPER

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Introduction

'Environment' used to be thought of as a minority interest for well-meaning nature-lovers – but nothing could be further from today's reality. In fact, the environment concerns all of us, because it relates to every aspect of the world we share and depend on for our survival. It influences everything we do: how we live, work and play, our health, our safety and the quality of our lives.

As European citizens, we all share an interest in protecting and improving the environment around us, because it will make our lives better. So many of the issues that play a major part in our day-to-day lives stem from environmental factors — whether it be dealing with asthma among children, protecting homes from flooding, avoiding traffic congestion, or finding a clean beach for holidays.

Over recent decades, it became clear that our global environment is under serious threat as a result of human activities - leading to the pollution of air and water, the over-use of natural resources such as timber and fish stocks, the destruction of animal and bird species and their habitats. and the growing menace of climate change, among other problems. But people have the knowledge and technological skills to do something about these trends, given the political will and vision. The way we in Europe respond to these challenges influences our own happiness and well-being, as well as dictating what sort of world our children live in.

So what can the European Union, in particular, do to protect and nurture the environment? Well, the answer is. a lot. Over the last 30 years, the EU has become more and more effective in this area: agreeing policies, passing laws and introducing measures to implement them, providing help to clean up pollution, carrying out groundbreaking research into environmental innovations, and making people more aware of the issues. On a worldwide level, the Union continues to play a decisive role, for example taking the lead in pressing for countries to implement effective measures to combat climate change. The EU can get results because the joint negotiating strength of 15 Member States carries more weight than if they negotiated separately.

We are entering a new era, in which countries will have to work together in order to safeguard our environment, for the air we breathe and the waters we drink are not restricted by national frontiers. The Union has the resources and capacity to become a major player in promoting a better world in the new century, and to break the old link between economic growth and environmental damage. European Commission President Romano Prodi has pointed out that Europe is at a turning point in its history, as globalisation offers not only new challenges but also new opportunities. As European citizens, we know the sort of world we want to live in, and the EU is playing a dynamic role in pursing that vision with energy and determination.



Recycling of waste products in Europe is rising.

In 1992, when they adopted the Treaty on European Union in Maastricht, EU leaders recognised that the environment is not an isolated issue – decisions taken in other areas, ranging from transport and agriculture to enlargement and international trade and development, affect it for better or worse. They declared that all Union policies and activities must in future take account of the environment, and this 'integrated' approach remains the guiding principle for the years ahead.

Evidence of significant progress already exists. Europe-wide initiatives have, for example, produced cleaner air, removed harmful lead from petrol, and reduced pollution in drinking and bathing waters. But there is still a very long way to go, and with the forthcoming enlargement of the EU, a range of new challenges will emerge.

In 2001, the EU launched its sixth environment action programme, setting out priorities for action, practical objectives and means to achieve them until 2010.

Above all, in every sphere, the Union is committed to the principle of 'sustainable development': finding that elusive balance between protecting the environment, ensuring economic progress and social development. Its overall aim is to improve the quality of life and at the same time to protect the environment so that future generations, in all parts of the world, can develop and prosper.

The EU recognises that, since we all share the environment, we have a right to be informed and consulted. Protecting this common natural heritage calls for partnership - at European, national and local level between public authorities, business, lobby groups and non-governmental organisations (NGOs), as well as among EU citizens themselves. whether as workers, managers, policy-makers, consumers, parents or students. We can all help to achieve a society that is both environmentally aware and increasingly prosperous.

European results

Over the last 30 years, EU environmental controls have helped to achieve measurable improvements in a number of areas.

- Industrial emissions of toxic substances such as lead and mercury have declined significantly.
- The use of many dangerous pesticides and chemicals has been banned or restricted, including those which damage the earth's protective ozone layer.
- Acidification of lakes and forests due to harmful emissions of sulphur dioxide (SO₂) has decreased dramatically.
- Recycling of waste products, both industrial and domestic, is up and set to rise further.
- Better wastewater and sewage treatment has cleaned up rivers and lakes, allowing fish to return to their old spawning grounds in rivers like the Rhine and the Thames.

Our environment today

When major environmental disasters take place in Europe, such as the wreck of the oil tanker *Erika* off the shores of Brittany in 1999, polluting 400 kilometres of beach and killing more than 60 000 seabirds, or just months later the leak of 120 tonnes of cyanide into river waters in Romania, they remind everyone how vulnerable the natural environment is. The EU is making a greater effort to monitor what is happening, and use that information to guide its policies.

The European Commission collects data through its statistical office Eurostat, and from the European Environment Agency. They reveal a picture of isolated improvements, but growing pressure in many areas where more action is needed. For example:

Climate change is demonstrated by a preponderance of evidence, backed by the weight of scientific opinion. The last decade of the 20th century was the warmest on record in Europe, and global temperatures are predicted to rise by 1–6°C by 2100. Parts of northern Europe now face unprecedented rainfall and flooding each winter, while the south is getting dryer.

Nature and biodiversity are threatened, with wildlife still on the decline. In Europe, half our native mammals and one third of reptile, bird and fish species are endangered. Farming, industry and tourism are destroying wilderness and natural habitats. Many wetlands and river ecosystems have been lost, as have 75 % of dunes in France, Italy and Spain. Europe's heathland steppes and bogs have shrunk by up to 90 % over the last century.

Despite falls in some harmful emissions, air quality continues to cause concern.

Summer smog – originating in potentially harmful ground-level ozone – exceeded safe limits somewhere in Europe on two out of three days during summer 2001. Ground-level ozone damages human health, as well as ecosystems and agriculture. Rising average concentrations of ozone since 1994 are increasing the public's long-term exposure to this hazard. Air pollution has been linked to the dramatic increase in lung conditions such as asthma.

Transport emissions inflict growing environmental damage. Car and aeroplane use is increasing, especially for tourist travel, cancelling out the benefits of reductions in emissions from individual vehicles. While rail and water transport create less pollution, their share of the market is falling.

The amount of waste we create in Europe is likely to go on increasing. Waste disposal by landfilling and incineration – the most common methods – is associated with water pollution and soil contamination, health problems due to emissions of dust and gases, and climate change.



The wreck of the Erika demonstrated how vulnerable our environment is.



Parts of southern Europe are getting dryer.

The use of pesticides in agriculture, which began to fall in the mid-1990s, has started creeping up again. There are well over 30 000 man-made chemicals in use in Europe, and too little is known about their long-term health impact.

Natural resources, such as fresh water, soil and minerals, cannot be replaced once they are used up. Land is also a fixed resource – we cannot create more of it. During the last two decades of the 20th century, urban development ate up 12–18 % of territory in some Member States, with even more intensive building along coastlines. We are also consuming fish stocks too fast. In the Celtic Sea, 12 out of 16 species of fish are classified as fully exploited, overfished or in danger of depletion.

The terror events of 11 September 2001 illustrated the need for a common EU civil protection strategy, with networks to counter the threat of bioterrorism as well as chemical accidents or natural disasters.



A stunning planet

The view of Earth is quite spectacular and always changing. Since my first flight in 1990, I've seen changes in what comes out of some rivers, in land usage, and in areas of Earth that are being burned for clearing the land, losing lots and lots of trees. Yes, it causes concern. We have to be careful how we treat this good Earth that we're living on.'

Astronaut Frank Culbertson, on the view from outer space (2001).

Action by the European Union

The European Union has been setting environmental standards for more than 30 years. In 1972, the European summit in Paris called for the first environment action programme to be drawn up, and early directives focused on hazardous chemicals, water quality and air pollution. EU environmental legislation respects the important principle of 'subsidiarity': that wherever possible, national and local authorities should decide on their priorities – including environmental ones – and manage their responses.

But individual countries acting alone cannot always safeguard the environment. Migratory birds and animals do not stop at borders. Rivers flow from one State to another, while unique landscapes, such as mountain ranges, ancient forests, deserts and rugged coastlines span national frontiers. Waste discharged into the sea in one country washes up on the shoreline of another, while pollution or radiation from one nation's power plant can cause infant deformities or poison livestock thousands of kilometres away.

Above all, the worldwide impact of climate change and abnormalities in weather systems like *El Niño* demonstrate that this is a global challenge that requires a global response. No single country, however big, can claim to be exempt.

The Union's role is to support and coordinate the efforts of Member States, and check that governments



are living up to the commitments they have made.

Indeed, good intentions are not enough. Ensuring that laws are implemented by the Member States is a priority of the sixth environment action programme, and the European Commission can take legal action against countries that fail to comply.

According to Article 174 of the EU Treaty, Union policy on the environment has to be based on the 'precautionary principle'. This means that in cases where scientific uncertainty exists but a preliminary scientific evaluation 'gives reasonable grounds for concern about potential adverse effects on the environment or health, even if the risk is not proved, action to avert it should be considered.

The candidate countries joining the Union must adopt and apply EU environmental laws as a pre-condi-

Sustainable development means a long-term vision of a better quality of life.

Some FU environment landmarks

1967	First Environmental Directive, on classification,
	packaging and labelling of dangerous substances
	(67/548)
1970	Directive establishing framework for measures to
	combat air pollution from motor vehicles
	(70/220)
1973	Launch of first European environment action
	programme 1973–76
1979	Birds Directive, on the protection of birds and their
1000	habitats (79/409)
1980	Directive laying down minimum standards for
1985	drinking water (80/778)
1985	Directive on Environmental Impact Assessment (85/337)
1990	Directives to limit the use and release of
1990	genetically modified organisms (GMOs)
	(90/219 and 90/220)
1991	Maastricht Treaty Article 6 lays down that all EU
1001	policies and activities must integrate
	environmental protection
1992	Habitats Directive, on the conservation of natural
	habitats and wild flora and fauna (92/43)
1994	European Environment Agency established
1999	Start of the Green Week, the annual EU
	environmental conferences
2000	Framework directive for European policy on water
	(2000/60)
2001	Launch of the sixth environment action
	programme 2001–10: Environment 2010, our

Ratification of the Kyoto Protocol on Climate

future, our choice

Change

2002

tion of membership. For many of them, especially the countries of central and eastern Europe where heavy industry developed over decades with little regard for environmental considerations, this represents an unprecedented challenge.

Integrating environmental issues

The EU's integration strategy (sometimes known as 'mainstreaming') means recognising that practically all EU policies have an effect on the environment, and planning in advance to ensure their impact is beneficial rather than harmful. In agriculture, for example, reforms to the EU's common agricultural policy in 1992 helped to reduce the use of nitrogen and phosphorus fertilisers by 25 and 30 % respectively.

However, the principle is not always easy to apply in practice. So in 1998, EU leaders initiated the 'Cardiff Process', and asked different sectors to prepare strategies and programmes for promoting environmental protection in their own areas of work. Starting with transport, energy and agriculture, this approach will eventually cover all sectors.

Sustainable development strategy

The term 'sustainable development' refers to the effort to ensure that economic growth takes place in a way that can continue in the future, without exhausting resources or harming any section of society. This principle first seized the public imagination at the United Nations Earth Summit in Rio in 1992, setting the twin challenges of changing wasteful patterns of consumption in indus-

trialised countries, and combating poverty. Poverty itself can be a huge source of environmental damage. because very poor people have no option but to exploit natural resources (forests, river waters, wild animals, etc.) in order to survive, and are excluded from systems for managing waste. The FU has been active in implementing Agenda 21, the international 'blueprint' for moving towards sustainable development, and has reported progress every year UN Commission the Sustainable Development (UNCSD).

Sustainable development is now a central principle of EU policy. At their summit in Gothenburg, in June 2001, EU leaders adopted a European sustainable development strategy (SDS). This put forward a positive, long-term vision of a more prosperous and more just society, and a cleaner, healthier environment; a society offering a better quality of life for us, our children and grandchildren.

Above all, it recognised that economic growth, social cohesion and environmental protection must go hand in hand.

In the past, some people assumed that safequarding the environment meant cutting living standards, slowing economic growth and limiting individual freedom. But we have moved a long way since then. Future progress depends on reconciling economic, social and environmental considerations, and ensuring that policies in different areas foster the same objectives. The EU acts on the principle that people and their environment can work in partnership, to each other's mutual benefit. For example, reducing environmentally damaging subsidies can be good for the economy; well-managed forests

can generate income as well as sustaining biodiversity; less intensive, organic farming methods create more jobs in the countryside, and greater prosperity allows people the leisure time to enjoy and care for their natural surroundings.

New, clean technologies also aid progress towards sustainable development. The EU gives help to industry and research institutions developing green products and technologies. Growing public demand creates an expanding market for environmentally friendly goods and services, generating jobs and growth, and in turn providing the incentive for further technological innovation and investment.

The EU recognises that there will also be some difficult political choices and trade-offs between conflicting interests. But these can be resolved through intelligent, transparent policy-making and full, fair consultation with the parties involved.

Sixth environment action programme

Since 1973, a series of comprehensive environment action plans have guided EU environment policy. In 2001, the Union launched its sixth environment action programme, identifying the four areas where more action is urgently needed:

- climate change;
- protecting nature and biodiversity;
- · health and quality of life;
- managing natural resources and tackling waste.



EU policy is founded on a partnership between people and the environment.

Seven key areas of concern

The EU action programme 2001–10 says that more actions should be taken on these issues:

- Air pollution: clean air for Europe (CAFE) is a new programme developed in partnership with interest groups, to sustain progress in improving air quality;
- Waste recycling: action should include setting targets and identifying markets;
- Management of resources: rational resource use should encourage new technologies and shift the tax burden onto the use of natural resources;
- Soil protection: this is a priority. Soil erosion and pollution, and land development, are particular problems;
- Urban environment: improving the quality of life for city dwellers means action on a number of fronts, including urban planning, mobility and waste management;
- Sustainable use of pesticides: phasing out the most dangerous pesticides and controlling others, in candidate and developing countries as well as in the EU;
- Marine environment: Europe's coasts and marine environment are under threat from inter alia over-development, pollution and over-fishing. In 2001, the EU approved a strategy for integrated coastal zone management, outlining a coherent, sustainable approach to protecting Europe's estimated 89 000 km of coastline. Some 50 % of the population lives within 50 km of the sea, sharing these areas with some of the Union's most valuable and fragile ecosystems.

The action programme does not focus merely on legislation. More and more, the EU finds that rather than setting the domestic agenda on environment, it is responding to the concerns of a public that is increasingly well informed about the issues. This has brought a change of approach. prioritising partnership and joint action with different stakeholders Voluntary agreements with industry on environmental protection, for example, can be more effective than laws imposed from above. Local communities are better placed to understand the steps needed to safeguard their specific environment than distant policy-makers. Framework approaches, focusing on achieving realistic objectives, for example by sharing best practices, will be among future policy instruments to improve the environment.

The programme also calls for action in seven key areas: soil protection, marine environment, use of pesticides, air pollution, urban environment, management of resources, and waste recycling.

Climate change

Evidence of climate change is all around us. World snow cover has fallen by 10 % since the late 1960s. Mountain glaciers are retreating and sea ice is melting, leading to a 10-20 cm rise in sea levels over the last 50 years. At the same time, concentrations of carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), the main greenhouse gases that trap heat in the atmosphere, have increased dramatically.

The effects are also becoming clear: extreme weather events mean more storms and floods in the north, and droughts and forest fires in southern countries. If unchecked, the pace of climate change will be too fast for some plant and animal species to adapt or migrate, and the impact on wildlife could be devastating. Tropical diseases will spread more widely in warmer, wetter climates, and while some crops may flourish, food production in some parts of the world will be threatened.

Scientists, including the Intergovernmental Panel on Climate Change (IPCC), are convinced that human activities are to blame. The burning of fossil fuels in power plants, road and air transport, landfill sites and manufacturing processes all generate harmful emissions. Between 1990 and 1999, EU greenhouse gas output fell by 4 %, but more action is needed to fulfil the promises made at an international conference in Kyoto, Japan, in 1997, to implement the 1992 UN Framework Convention on Climate Change (UNFCCC).

Worldwide effort

The Kvoto Protocol was the first multilateral agreement to set specific emission reduction targets for the developed world. When, after George W. Bush's election as president, the USA announced in March 2001 that it was withdrawing, it looked at first as if many years of intensive negotiations had been in vain. But the EU, including Environment Commissioner Margot Wallström, stepped in to save the protocol. The Union took the leadership in persuading other parties that the protocol represented the only international framework for combating climate change. At the Conferences of the Parties to the Convention in Bonn in July (COP6 bis) and in Marrakech in November 2001 (COP7), the EU played a pivotal role in securing the Kyoto Protocol and settling a number of outstanding issues. This agreement paves the way for its ratification and implementation.

The EU is now pursuing its commitment to bring the protocol into force in time for the UN World Summit on Sustainable Development (Rio+10) in Johannesburg in 2002, with proposals for ratification and for an EU-wide 'trading scheme' to reduce greenhouse gas emissions. The first phase of the scheme will cover 4 000–5 000 large power stations and similar installations, which are expected to produce about 46 % of EU $\rm CO_2$ emissions by 2010. Member States will grant allowances that



World snow cover has fallen by 10 % since the 1960s.

Less greenhouse gas

The EU aims to cut emissions

- by 8 % on 1990 levels by 2008–12 (decided in the worldwide agreement of Kyoto);
- by a further 1 % per year from 2012 to 2020;
- by 70 % in the long term.



Climate change brings storms and floods.

limit the carbon dioxide emissions from these companies. Those that manage to stay below their limit will be allowed to sell their remaining emission allowances to other companies not able to meet their targets. Those that want to emit more must buy additional allowances from companies that have some spare and are willing to sell them. The EU believes that by turning CO_2 into a tradable commodity, the system will encourage firms to reduce their emissions in the most cost-effective way.

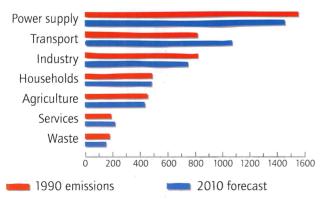
The European Climate Change Programme (ECCP), launched in June 2000, is also designed to help the EU meet its Kyoto targets. It was set up in consultation with a wide range of stakeholders, including seven technical working groups covering energy, transport, agriculture, industry and other sectors. It has identified more than 40 measures that could cut emissions by twice the level required by the Kyoto Protocol. Those already in the pipeline include directives on EU emissions trading, the

energy performance of buildings, biofuels, energy-efficient public procurement, and fluorinated gases. A further 11 initiatives cover proposals such as strengthening research on climate change; and 22 measures for longer-term development include promoting heat production from renewable energy sources and technological improvements to vehicles and fuels. The ECCP is the framework for future EU efforts to introduce innovative strategies to tackle climate change.

The EU has also set targets for replacing fossil fuels with renewable energy in various sectors including heat and power generation and transport.

EU research funding has been crucial to understanding and reacting to climate change and its effects. In 2000, for instance, a report by 30 scientific experts alerted policy-makers and the public to the differing impact of climate change in southern and northern Europe. One of the EU fifth framework programme for research and development's four thematic programmes focuses on environment, energy and sustainable development. This has co-funded pioneering projects on atmospheric pollution and the impact of carbon sinks, for example.

Contribution of key sectors to greenhouse gas emissions



Figures in million tons CO₂ equivalents. Covers the 15 European Union Member States.

Source: European Commission.

Nature and biodiversity

The EU's 15 Member States extend from the Arctic Circle in the north to the warm Mediterranean waters in the south. From the wave-lashed Atlantic coasts to the Alpine peaks, the Union covers a vast range of natural habitats and a stunning diversity of flora and fauna. But almost everywhere, this 'biodiversity' is in danger.

Birds such as the slender-billed curlew are so rare that they risk extinction, while even numbers of once relatively common species like the skylark and garden warbler have fallen dramatically. This trend extends from mammals to insects: 45 % of European butterflies are threatened today. Around our coasts, fishing methods and water pollution harm marine life such as small whales, turtles and monk seals, Bad planning, wasteful land-use and intensive farming have contributed to a loss of natural habitats like wetlands and extensive grasslands. which many wild species depend on for their survival.

As the candidate countries join the EU, they bring with them a 58 % increase in the Union's land area, covering many unspoiled landscapes, forests and wetlands. Their conservation is a major challenge for the years to come, and adopting the Union's environmental laws will be an important step in this process.

EU policy aims to halt the loss of biodiversity, both in Europe and globally. Within Europe, two directives deal with the conservation of European wildlife, with the focus on protecting sites as well as species: the 1979 Birds Directive identified 181 endangered species and subspecies for which Member States are required to designate special protection areas. Similar measures have to be taken for migrant birds – a shared asset for all Europeans.

Humans and wildlife in harmony

The 1992 Habitats Directive required each of the EU countries to identify sites of European importance and draw up management measures for them, combining wildlife preservation with economic and social activities, as part of a sustainable development strategy. Together, these sites form the Natura 2000 network – the cornerstone of EU nature protection policy.

Besides these directives, the EU has also played its part in a series of important international conventions, such as the Berne Convention on European wildlife and natural habitats (1979) and the Bonn

Fishing methods can harm turtles and other marine life.





Traditional farming practices cared for the countryside.

Convention on migratory species (1979).

The Natura 2000 network already comprises around 15 000 sites, covering some 15 % of the EU territory, and is due to be completed by 2004. The EU also co-finances measures to establish the network, mainly via the LIFE-Nature Programme. More than 415 million euro has gone to over 300 projects throughout Europe, ranging from regenerating oakwoods on the Atlantic coast to protecting brown bears in Austria. Recently, some candidate countries have also joined the programme.

However, it is also crucial to integrate nature conservation into other policy areas. Farming is one example: for centuries, traditional farming practices combined food production with care for the countryside. Intensive methods often broke that link, damaging wildlife, consuming resources and contributing to chemical pollution. The future reforms of the EU common agricultural policy must move towards environmentally friendly techniques and, especially in central and eastern Europe, focus on low-input farming that preserves the better aspects of traditional methods.

In the end, practical action to protect biodiversity can only be effective at grass-roots level, where the native wildlife is, and with the support of local people and their communities. The EU believes that activities that bring economic benefits - such as farming or tourism - need not conflict with conservation if they are carried out along sustainable lines. But achieving this harmony means involving all local players in planning change from the outset. EU policy is not designed to put jobs or living standards at risk, but to enhance the quality of life for us all. Environmental protection must grow in partnership with the people.

Health and quality of life

Environmental pollution causes a range of human health problems, from allergies and infertility to cancer and premature death. Children of all ages are especially vulnerable to these dangers, partly because up to the age of five, their vital organs are still developing, and young people also drink more fluids, eat more food, and breathe more air in relation to their body weight.

Pollutants such as pesticides, dioxins and PCBs (polychlorinated biophenyls) can damage the foetus in the womb, causing miscarriage, birth defects or health problems in later life. The mortality rate among children stands at a record low, but despite improvements in air quality, increasing numbers of children are suffering from asthma and chronic respiratory problems. In some Member States, cases of childhood cancer are also on the increase, which may be related to environmental factors.

The European Commission and Member States have together been preparing a comprehensive strategy to combat environmental health risks, focusing in particular on vulnerable groups such as children, pregnant women and older people. This calls for more research and monitoring of environmental hazards, and stepping up the supply of information to the public. Health professionals need to be more aware of the impact of environmental factors, and with young people starting to smoke earlier than ever, for example, educa-

tional initiatives should inform children better about long-term health impacts. The EU is also promoting international cooperation to tackle environmental health risks in developing countries and the detrimental health impact of poverty in general.

The European Commission has been cooperating with the World Health Organisation (WHO) for a number of years, often using WHO guidelines as a basis for EU environmental directives. In September 2000, officials from the two organisations met in Brussels and agreed to work more closely together on researching health risks and setting standards.

Eating healthy food

In recent years, events such as the outbreak of 'mad cow disease' or BSE (bovine spongiform encephalopathy) among cattle in the United Kingdom – and its human consequences in the form of the incurable Creutzfeldt-Jakob Disease – have made consumers more aware than ever of

Consumers are more aware of what they eat since the outbreak of 'mad cow disease'.



what they eat. Union-wide cooperation facilitated rapid action to stop the spread of BSE and to give the public more information about risks. In response to the BSE crisis, the EU set up the scientific steering committee in 1997 to guarantee the future accuracy of advice on food safety.

Consumers also want to know whether what they buy contains genetically modified organisms (GMOs). The EU applies controls on the supply of GMO products on the market and their potential release into the environment, and new rules will ensure that all items containing GMOs must be clearly labelled, sources must be traceable, and their impact on the environment constantly monitored.

Stress in daily life

There are many other environmental factors that affect our well-being. Noise diminishes the quality of life for an estimated 25 % of Europeans. The EU has set limits on noise pollution from machinery, and aims to take further steps to harmonise acceptable levels. Radiation has important uses in medical diagnosis, but can also damage human health. The EU has recently updated its standards – first laid down in 1957 – to protect the public and workers whose jobs bring them into contact with radiation

In 2001, the European Commission's White Paper set out a new strategy for controlling dangerous chemicals. It applies two clear principles: precaution where there is any doubt about safety, and replacing hazardous substances with safer ones whenever possible. EU-wide standards will improve the testing and risk-evaluation of both new and

existing chemicals. At international level, the EU is also committed to implementing the UN Convention on persistent organic pollutants, which aims to take 12 of the world's most dangerous chemicals out of use.

To avoid ever-growing traffic congestion, air pollution and stress and to improve the quality of life in cities, governments and planning authorities need to develop 'sustainable' transport networks. The EU co-funds research on land-use in cities. And it supports the development of trans-European networks (TENs), promoting public transport and the use of rail, waterways and shipping for passenger and freight transportation.

Managing natural resources and tackling waste

Natural resources are not inexhaustible, and yet with careful management we can go on benefiting from these resources without destroying future supplies. It means reducing consumption of the resources that are running out, and finding other ways of maintaining and improving living standards through new policies, technologies and innovations

Forests, rivers and soils are all natural resources that need special attention. Forests are also an economic asset, yet some two thirds of Europe's trees are threatened, and damage from forest fires is growing in the south. The EU wants to see national and regional plans for sustainable forest management and protection, and a scheme to help consumers select wood from these 'green' sources.

Water is a crucial resource for all forms of life. The Union's approach to rivers and water management took a fresh turn in 2000 with the adoption of the Water Framework Directive, drafted through a pioneering, open consultation process. The objective is to set standards for water quality, and ensure people have access to clean drinking water at a reasonable cost.

As European society gets wealthier it produces an increasing amount of waste – some 2 000 million tonnes a year in the EU – and getting rid of it often creates pollution that can damage human health. The EU is

pushing for a 20 % cut in waste 'for final disposal' between 2000 and 2010, increasing to some 50 % by 2050. Waste prevention, through better manufacturing methods and consumer demand for greener products, is the first priority. Recycling and recovery come next. The remaining waste should be safely incinerated where possible, with landfill as the last resort

Forests can be a sustainable asset, if well managed.



What should industry do?



The European eco-label is found on hundreds of daily products that are produced in an environmental friendly way.

The EU recognises that industry's support for environmental protection is crucial. This means consulting business in the drafting of new legislation, co-financing research initiatives, and offering incentives to companies who improve their environmental performance. The European Awards for the Environment, for example, go every two years to four firms with outstanding achievements in this field.

Environmental care should be as important to business as customer satisfaction, and the growing move towards corporate social responsibility both in Europe and globally is forcing companies to examine their green as well as their social credentials.

The EU regards voluntary action as its first priority. In 1998, for example, European carmakers pledged to develop new engines that would cut CO₂ emissions and improve fuel efficiency by some 25 % between 1995 and 2008. Several thousand companies have joined the EU's environmental management and audit scheme (EMAS), and publish regular environmental performance reports. In 2001, EMAS was extended to all economic sectors including public authorities, and the European Commission itself – practising what it preaches - adopted the EMAS principles and set internal environmental objectives.

The EU's eco-label, launched in 1992, awards the coveted 'flower'

logo to goods or services that meet tough environmental standards. It helps consumers to use their purchasing power to buy from companies that respect the environment.

The flower is the only true eco-label valid throughout the 15 EU Member States plus Iceland, Liechtenstein and Norway. It is already found on hundreds of products in a wide range of categories (19 up to December 2001). The eco-label website (http://europa.eu.int/ecolabel) gives more information.

Also, the EU's new integrated product policy (IPP) aims to help industry to reduce waste through better product design, making goods longer lasting and easier to recycle or recondition, and to expand the market for green products.

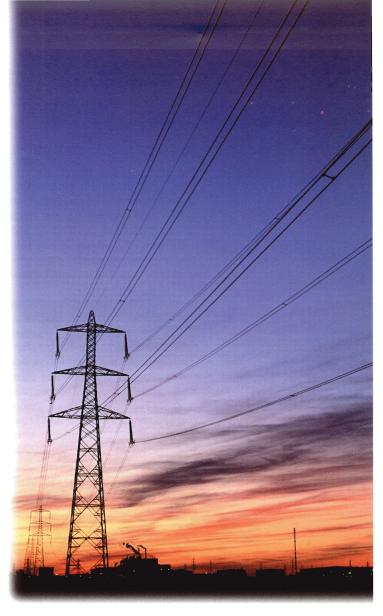
Clean and good business

Companies are realising that adopting cleaner technologies makes sense both in cutting costs, and in promoting a better image and winning customers and clients. The EU's aim is to expand this environmental awareness, so that ultimately all publicly quoted companies with 500 staff or more will publish annually, for their shareholders, a 'triple bottom line' covering not just profits and losses but also their social and environmental results.

Overall, prices must start to reflect more accurately the wider environmental costs of goods and services. This will mean adjusting taxes to pay for measures to offset the effects of energy generation, for example.

Despite its emphasis on voluntary action, the EU favours Europe-wide standards and strong penalties for companies that damage the environment. The 1996 Directive on Integrated Pollution Prevention and Control standardises environmental rules for industry across the EU, and compels companies in specific sectors to obtain operating permits. It will be updated under the European climate change programme.

European law establishes the principle that the 'polluter pays', and Member States are urged to strengthen their environmental liability regimes, to make industry take its share of responsibility.



Taxes will have to cover the environmental costs of energy generation.

EU enlargement and international action

The lifting of the Iron Curtain in 1989 revealed an alarming picture of environmental degradation in central and eastern Europe, with contaminated soil, polluted air and high levels of chemical toxicity coupled with fears surrounding the safety of Soviet-era nuclear installations.

In all, 12 countries are negotiating their adhesion to the European Union. The candidate countries must raise their basic environmental standards in order to join the Union, but this is no mean feat. Some of them have made rapid and impressive progress. Poland, for instance, used a combination of legislation and financial instruments to cut sulphur emissions by 50 % during the 1990s. But in some other places, progress has been slow. The European Commission has insisted that adopting EU laws on the environment (known as the acquis) is not an optional extra, and argues that by building the foundations for sustainable development at this stage, the countries of central and eastern Europe will be able to avoid the west's most damaging and expensive environmental mistakes.

The EU has provided financial help. notably via the instrument for structural policies for pre-accession (ISPA), which will pay out over EUR 500 million each year between 2000 and 2006 to support investment in environmental infrastructure in the candidate countries. However, the vast bulk of the funding must come from national resources. Ultimately the responsibility lies with the candidate countries. The Commission has estimated that they will need to spend around 2-3 % of GDP on environmental improvements over each of the next 15 to 20 years. Public sources of funding will not be enough, and therefore private finance needs to be mobilised as well as funds from foreign and international institutions.

But the picture is not all gloomy. Enlargement brings to the EU a wider range of habitats, animals and plants; and a larger Union will carry even more weight internationally. Complying with environmental laws will in turn bring benefits for the candidate countries. A study carried out on behalf of the EU in 2001 revealed, for example, that better air quality could reduce the number of premature deaths by between 15 000 and 34 000, and cases of chronic bronchitis by up to 180 000. The annual value of all these improvements could amount to an

The coming new members of the EU have large natural resources. Enlargement will for example triple the EU wolf population.



estimated 12–69 000 million euro, or 80–410 euro per capita, and the overall benefits of a cleaner environment will be felt not only in the candidate countries, but also in neighbouring States like Ukraine, Belarus and Russia.

On the international stage

As economic globalisation shrinks the planet, the growing need for environmental problems to be tackled at the international level is evident. As one of the wealthiest areas of the world, the EU takes seriously its responsibility to assist developing countries to pursue environmentally friendly growth, both through extensive direct funding of environmental projects and programmes in the developing world, and through participation in multilateral funds such as the clean development mechanism of the Kyoto Protocol.

The Union has ratified a number of important international treaties, and has taken a leading role in efforts to protect global biodiversity. These include the Rotterdam Convention informed 'prior consent' (strengthening the rights of poorer countries to be protected from hazards), the Basel Convention, which prevents rich countries from dumping their toxic waste in developing ones, and the Bonn Convention on the conservation of migratory species.

The EU believes that international governance of the environment must be strengthened, with a higher political profile and more secure funding for the UN Environment Programme (UNEP).

In its preparations for the UN World Summit on Sustainable Development in 2002, the EU agreed to seek a global deal on sustainable development, and to strive to reach the UN development assistance target of 0.7 % of GDP as quickly as possible.

The EU has campaigned hard to integrate the environmental dimension into wider multilateral agreements. Trade and investment policies can play a vital role in promoting environmentally friendly growth in poorer countries, and EU aid has been subject to environmental assessment since 1990. At the ministerial meeting of the World Trade Organisation (WTO) in Doha, Qatar in 2001, where agreement was reached to launch a new trade round, the Union was the driving force in aetting environmental issues included in the final declaration. The members approved a special role for the WTO's Committee on Trade and Environment and reaffirmed their commitment to the objective of sustainable development.

The precautionary principle worldwide

The Biosafety Protocol (to the Biodiversity Convention), adopted by 133 governments on 29 January 2000, sets out minimum standards for cross-horder trade in the sensitive area of living modified organisms (LMOs). including seeds and plants. It means that exporters must notify governments before shipping in LMOs that might be released into their environment, and it enables developing countries to protect their biodiversity.

The EU played a leading role in the 11th-hour negotiations to secure a deal, taking a firm stand against attempts to weaken the rules by making them subsidiary to World Trade Organisation agreements. The protocol's application of the 'precautionary principle' broke new ground in international environmental law.

Funding environmental care



EU funding helps cleaning up rivers and coastlines. Funding to promote sustainable development and care for the environment comes from a range of sources within the EU. The Structural Funds, for example, help to promote more balanced socioeconomic development across the Member States, assisting the poorer regions of the Union. In 1994–99, the Structural Funds amounted to more than 150 000 million euro, with a further

14 000 million euro in the Cohesion Fund. By 2000, the funds totalled one third of the EU budget. National environmental authorities involved in the development and monitoring of all programmes. Funds are increasingly used for environment improvement projects such as cleaning up coasts, harbours and rivers and rehabilitating decayed industrial and urban areas. They also assist small businesses in developing green technologies. Financial support is also available from research and agri-environmental resources.

The LIFE programme was set up in 1992, and its third phase runs until 2004. It is devoted entirely to developing EU environmental policy, and has three strands: LIFE-nature, LIFE-environment and LIFE-third countries.

Bringing the life back to quarried land in Italy

Former industrial sites around towns and cities often become run-down and barren when they fall out of use. The TORRE project in Emilia Romagna, Italy, is restoring an old quarrying area in Oriolo, where flora and fauna typical to the Romagnolo countryside have been destroyed by mining activities.

The project, co-funded by the EU scheme LIFE-Environment until 2004, sets out to restore the natural biodiversity and create an attractive green area for local people and tourists. An innovative environmental education programme raises awareness and helps visitors to value their natural surroundings, with the assistance of conservation experts and scientists.

Restoring Alvar grasslands in Sweden

'Alvar' is the name of a type of habitat comprising hard limestone rock covered with a thin layer of soil, home to highly specialised and rare fauna and flora. Alvar lands are found on the islands of Öland and Gotland, and in parts of Sweden and Estonia. In 1996, a LIFE-Nature-backed project to protect and restore the Stora Alvaret got under way. It involved clearing the invading overgrowth and erecting fences around large areas so that the traditional grazing could be re-established by local farmers. The project not only contributed to the conservation of nature but also to the preservation of traditional agricultural practices, employment and culture.

Under LIFE, the Union co-finances projects to safeguard the environment in all Member States. Almost half of its 640 million euro budget for 2000–04 is dedicated to nature protection, and the programme is also open to candidate countries.

The European Investment Bank (EIB) provides long-term loans for projects designed to safeguard the environment, covering up to 50 % of investment costs. In the 1990s, millions of euro were loaned to water management, waste treatment and urban renewal schemes. Loans are also available for projects in neighbouring areas, such as the Mediterranean basin, as well as the central and eastern European countries.

Consulting people and building partnerships

Agency gets the facts

The European Environment Agency plays a crucial role in gathering information. The EU set up the Copenhagen-based agency in 1990, to support sustainable development by providing timely and relevant data to policy-makers and public alike. It is the hub of the European environment information and observation network (Eionet), which links 660 green organisations across the continent. The agency's membership extends outside the EU to include many neighbouring countries.

Member State governments agree EU laws, so there is no excuse for failing to act on them. The full implementation of existing directives is a strategic priority within the EU's sixth environment action programme. Sadly, many cases of noncompliance - a high proportion of the total covering all legislation concern environmental measures. The Commission has the power to launch infringement procedures against Member States and if necessary take them to the European Court of Justice, although this process can be lengthy.

The number of formal complaints on environmental matters giving rise to infringement proceedings grew from 162 in 1996 to 450 in 1999. And more decisions are taken by the European courts each year. In 1992–94 there were 33 decisions, rising to 56 in 1995–97 and 57 in the two years 1998 and 1999.

But the legal route is not the only option for convincing governments to fulfil their obligations. Greater transparency is a powerful tool, enabling European citizens to put pressure on their leaders. The EU has pledged to publish an up-to-date implementation scoreboard enable the public to measure each government's record. A 'name, shame, and fame' strategy aims to publicise positive examples and encourage States that are successful in implementing laws, while embarrassing administrations that are slow to act.

Transparency through good governance

Over recent years, the EU has made progress in introducing greater transparency and involving citizens more in decision-making. In 2001, the Commission's White Paper on good governance noted that many people were becoming alienated and losing confidence in the EU's complex system of administration, seeing the Union as at once remote and yet too intrusive. The White Paper called for better consultation and dialogue, underpinned by the five principles of openness, participation, accountability, effectiveness and coherence. Not only is open consultation the key to finding the right policy; in environmental fields it is also crucial to putting that policy into practice at the grass-roots level where it makes a difference.

The EU is committed to implementing the Aarhus Convention on access to information and public participation in decision-making and access to justice in environmental matters. A European pollutant emission register, for example, will enable the public to obtain information on environmental pollution from industrial sources via the Internet and media.

The EU partnership with stakeholders

The sixth environment action programme emphasises the need for partnerships, harnessing the support of all interest groups in achieving continuous improvements in the environment and the quality of life.

The European Commission, and its Directorate-General for Environment, recognises the need for innovation in policy-making, focusing on achievable objectives to ensure environmental improvement. New ways of formulating legislative proposals, by consulting a full range of stakeholders including industry, environmental lobby groups, and local authorities, have evolved and shaped initiatives such as the European climate change programme.

Another way for citizens to express their views is through their MEPs in the European Parliament. The Parliament's role in environmental policy has grown greatly in recent years. It has the right to 'co-decision' with the Council of Ministers on most new laws, and on relevant sections of the budget. The Committee on Environment, Public Health and Consumer Policy is the busiest in Parliament.

The Commission also works closely with environmental campaigners – especially the 'Green Group of Eight' major European environmental organisations.

Young people

Actions to reach EU citizens must include young people. Europe's 90 million children should not be seen just as victims of today's environment. The younger generation has a natural concern about the state of the planet and wants to be able to make a difference.

The EU has pledged to listen more to what young people have to say. New initiatives include an environmental website for 12–18-year-olds, and a taskforce entitled EYE (environment, youth and education), to monitor developments and help children to understand the issues.

They have a great and untapped potential for creating a better and healthier environment in the future,' argues the European Commissioner for environment, Margot Wallström. 'By creating a 'child-friendly' environment we are helping the future custodians of our planet to build the path to sustainable development.'



European Commissioner Margot Wallström and Natalia Kyrkopoulou.

We dream and then we do it

At Green Week in Brussels in May 2001, children of all ages received awards for their creative work on the environment In her prize-winning story, 12-vear-old Natalia Kyrkopoulou from Belaium wrote: 'I like to imagine how the world would be today if our ancestors had not created so many environmental problems. I dream of a beautiful world with fresh air and clean water. Dreams are how we decide what we want. We dream of something and then we do it.'

Conclusion

Within the next century the world's population is expected to increase by 50 %, from 6 100 million to 9 300 million. The populations of the 49 poorest nations on Earth will treble. Unless humanity can find the key to sustainable development, the impact on the natural world and resources could be devastating.

EU action on the environment aims to enhance the quality of life for everyone, by focusing on the steps that can be taken more effectively through cooperation. It embraces the principle of inter-generational equity: that people who live in the future have the right to enjoy the same, or a better, quality of environment as we do. Our role should be one of stewardship, safeguarding the capacity of the Earth we have inherited and passing on to our children and grandchildren a sustainable environment in which they and their children can live full and healthy lives.

There are challenges ahead, but our commitment can and will make a difference.

Further reading



More details about the all the issues in this booklet, and about all EU policies and activities on the environment, can be found on the following websites:

European Commission Directorate-General for the Environment: www.europa.eu.int/comm/environment/

European Environment Agency: org.eea.eu.int

European Commission

Choices for a greener future The European Union and the environment

'Europe on the move' series

Luxembourg: Office for Official Publications of the European Communities

2002 - 26 pp. - 16.2 x 22.9 cm

ISBN 92-894-3119-9

Protecting our global environment is not a job for individual governments alone. Effective action is needed to improve the quality of people's lives while at the same time safeguarding nature and combating problems like climate change. This calls for cooperation and partnership throughout society and at the international level.

The European Union has some 30 years' experience of making policy and implementing action to conserve our natural heritage. It has achieved significant results, but much more remains to be done to ensure a cleaner, healthier environment for European citizens, their children, and generations yet to come.

Other information on the European Union

Information in all the official languages of the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

EUROPE *DIRECT* is a freephone service to help you find answers to your questions about the European Union and to provide information about your rights and opportunities as an EU citizen:

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Information and publications in English on the European Union can be obtained from:

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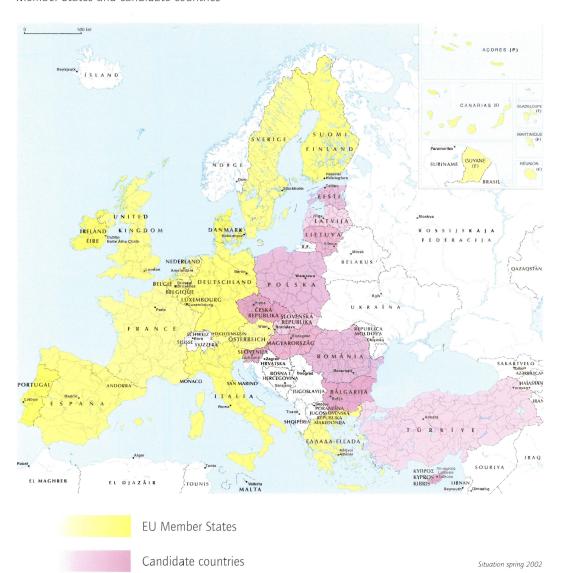
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European Commission and Parliament representations and offices exist in all the countries of the European Union. The European Commission also has delegations in other parts of the world.

The European Union
Member States and candidate countries





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