Environment

A healthy and sustainable environment for future generations

Business as usual is not an option
By its very nature, the environment transcends political, legal and man-made boundaries. As a result, cooperation between EU Member States and between the EU and the rest of the world is essential if we are to tackle challenges which impact on us all. These range from droughts and floods to pollution and threats to Europe’s rich natural capital and biodiversity.

The underlying aim of EU environmental policy is to enhance natural capital, promote a resource-efficient economy and safeguard people’s health. A coordinated environmental strategy across the Union ensures synergies and coherence between EU policies and, given the relevance of environmental legislation for many business sectors, will ensure a level playing field for their activities.

Many take the environment for granted, but pressure on the Earth’s finite resources is growing at an unprecedented rate. If this continues, future generations will be deprived of their legitimate inheritance. Addressing the challenge requires collective action involving the EU, national, regional and local governments, businesses, NGOs and ordinary individuals. This has to include outreach to our international partners so that action is taken on a global scale.

This brochure intends to provide an outline of EU policy in the area of environment, explaining how it has developed, what it consists of and how it might change in the future.

Pressure of rising demand

Our behaviour makes huge demands on the planet. During the 20th century, the world increased its use of fossil fuels by a factor of 12 and extracted 34 times more material resources. Demand for food, animal feed and fibre may increase by 70 % by 2050. If we carry on using resources at the current rate, we will need more than two planets to sustain us.

Evolving strategy

The major environmental challenges facing Europe have evolved since the early days of European environmental policymaking. In the 1970s and 1980s the focus was on traditional environmental themes such as protecting species and improving the quality of the air we breathe or the water we drink by reducing emissions of pollutants. Now, emphasis is on a more systematic approach that takes account of links between various themes and their global dimension. This means moving from remediation to prevention of environmental degradation.

It involves ensuring that other areas such as agriculture, energy, transport, fisheries, regional development, research, innovation and external aid take fully into account the environmental consequences of their policy
and funding decisions. This mainstreaming will ensure a more coherent approach towards environmental challenges and maximise synergies.

After more than four decades of policymaking at EU level, much of our environment is protected by a body of European legislation. But the implementation of these policies remains problematic. This is a key challenge that needs to be tackled for the full benefits of these laws to be enjoyed by all. The new EU environment action programme (see the ‘The road ahead’ chapter) will address this.

Environment and economy in harmony

In short, environmental and economic considerations are complementary, like two sides of the same coin. Greening the economy reduces environmental costs through more efficient use of resources, while new environmentally friendly technologies and techniques create employment, give a boost to the economy and strengthen the competitiveness of European industry.

The European Union’s growth strategy for the coming decade (called Europe 2020) firmly embeds the efficient use of natural resources among its key approaches. It recognises that environmental policy can help transform Europe into a knowledge-based, resource-efficient economy.

For instance, strengthening the resilience of our ecosystems, which provide food, fresh water, raw materials and many other benefits, contributes to productivity and quality of life, while reducing public health bills.

Working across borders

The environment does not stop at the Union’s borders. Air, water, seas and wildlife know no boundaries. The more the EU can encourage neighbouring countries — and ideally the whole world — to adopt high standards, the better will be the quality of our own environment. The Union is careful to ensure that countries wishing to join the EU bring their own environmental legislation up to these requirements.

It works closely with its neighbours to encourage them to do the same and plays an active role in international negotiations on sustainable development, biodiversity and climate change. The EU’s longer-term objective of environmental sustainability is one of the United Nations’ millennium development goals.

Public support

There is broad public support for EU measures to improve the environment. A pan-European opinion survey in mid-2011 revealed that over 90 % of respondents consider the environment to be an important personal concern. Almost 9 out of 10 support EU funding for environmentally friendly activities and over 8 out of 10 agree that EU legislation is necessary to protect the environment in their country. The most widely voiced environmental concerns were water pollution, depletion of natural resources and the increase in waste.
While some might think of it as a marginal concern, the environment is actually at the heart of EU policy. When Member States sign up to the Treaty on European Union, one of their obligations is to work towards ‘a high level of protection and improvement of the quality of the environment’ (Article 3(3)), as the architects of the European Union recognised the importance of a clean and healthy environment. This is also an agenda to be pursued on an international scale, as the EU strives to foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty.

### Democratic decision-making

The process of developing EU legislation is highly democratic. Before tabling a proposal, the European Commission carries out extensive consultations, giving national authorities, non-governmental organisations, environmental experts and the general public an opportunity to express their views. This helps to ensure that draft legislation is based on a broad spectrum of input and a solid platform of scientifically verifiable data. As well as clarifying the different issues involved, this also develops a sense of ownership among key stakeholders of the policy being proposed.

The draft legislation can be amended by national governments through their ministers in the Council or in response to suggestions from citizens at the European Parliament, both of which must agree on the exact wording of the text before it is formally adopted. Other bodies such as the Committee of the Regions and the European Economic and Social Committee make their opinions known, as do businesses, NGOs, researchers and individuals.

Sometimes consultations reveal that legislation is not appropriate, and non-legally binding guidelines and exchanges of best practice are used instead.

### Relying on solid data

Policies must be based on sound evidence that provides an understanding of the causes and impact of environmental change so that appropriate responses and strategies can be devised. Much of this data comes from national sources and is analysed by the European Environment Agency, which provides input into the EU’s environmental policy.

The Union has put in place different programmes to encourage the development of robust and accurate data and to ensure it is widely shared. The global monitoring for environment and security system, for instance, combines data from land, sea and air monitoring stations with input from Earth observation satellites. The aim is to produce a wide range of datasets to help environmental policymaking and support its implementation.

### The European Environment Agency

The European Environment Agency (EEA) collects national data to produce European datasets. It develops and maintains indicators and reports on the state of the environment. Based in Copenhagen, it began work in 1994.

Its mandate is to help the EU and its Member States to make informed decisions about improving the environment, integrating environmental considerations into economic policies to move towards sustainability and to coordinate the European environment information and observation network.
Implementation

Since the 1970s, the EU has agreed over 200 pieces of legislation to protect the environment. But legislation alone counts for little if it is not properly applied and enforced. So, the challenge now is to implement effectively what has been agreed. This is complex since many different tasks are done by diverse groups ranging from national inspectors and courts to NGOs and citizens exercising their participatory rights. Failure to implement legislation has many adverse consequences. It can undermine fundamental environmental objectives, harm human health and present industry with regulatory uncertainty as agreed standards are applied unevenly across the Union. Meanwhile, proper implementation can bring financial benefits. If EU waste legislation is fully applied it would generate 400,000 jobs and reduce annual net costs by EUR 72 billion.

Member States are responsible for implementing EU environmental legislation. So the European Commission can, through the European Court of Justice, take legal action against a Member State which fails to implement legislation correctly. These infringement cases increase pressure to find solutions and can ultimately lead to fines for repeated failure to implement EU rules. But legal action is always a last resort. The European Commission attaches greater importance to helping Member States with effective implementation. Capacity-building and financial support are available, alongside better knowledge of the state of the environment as well as information on the way Member States deliver on their EU commitments in practice. It has recommended that each Member State should establish an independent national review body, such as an ombudsman, to handle environment related complaints from the public.

Using the market

When developing the EU’s environmental policy, great care is taken to find cost-effective ways to protect and improve the environment and ease pressure on scarce resources. This means using existing economic instruments to put in place financial incentives to protect the environment. Where there are no markets, setting targets and establishing cap-and-trade schemes can help set a price on products which reflects their true environmental costs. Taxes and subsidies can also be used to act as incentives or deterrents to facilitate companies and consumers in making more sustainable choices. Many already exist, such as fees for cutting trees or disposing of waste. The European Commission would like to see perverse incentives that encourage the use of polluting or energy-intensive products and processes phased out.
Encouraging eco-innovation

Eco-innovation is any form of innovation aiming at, or resulting in, significant and demonstrable progress towards the goal of sustainable development, by reducing impacts on the environment, enhancing resilience to environmental pressures or achieving a more efficient and responsible use of natural resources.

These technologies and the industries that produce them are already an important part of the EU economy. However, with the exception of renewable energy, eco-innovation has penetrated markets relatively slowly. Bottlenecks include the failure of market prices to accurately reflect environmental costs and benefits, and incentives and subsidies that sustain wasteful practices and rigid economic structures.

Through EU programmes, support is available to finance research, innovation and eco-innovative companies. To encourage greater take-up of green technologies, the EU is promoting green public procurement, costing products over their life-cycle, and eco-labelling.

Financing the environment

Support for environmental objectives is a major part of the EU budget. By linking up environmental policy with other policy areas, it can leverage between EUR 10 billion and EUR 12 billion in expenditure in the EU budget per year, for example through agri-environment measures, support for cohesion policy and research and innovation.

The main specific vehicle for EU support for environmental policy is LIFE, which was established in 1992. The name comes from its French acronym (L’Instrument financier pour l’environnement — the financial instrument for the environment). Over the years it has strengthened its focus on nature conservation and environmental protection. Its finance is now used to support policies which tackle challenges such as biodiversity decline, habitat loss, resource efficiency and climate action.

With an emphasis on practical initiatives, innovation and the spread of best practice at the local level, LIFE projects have helped change the way policymakers, stakeholders and the public think and act towards the environment.
Environmental policy aims to strike a balance between our need to develop and use the planet’s natural resources, and the obligation to leave a healthy legacy for future generations.

This means that environmental policy is a quest for sustainability. Sectors like industry, agriculture, fisheries, transport, energy and urban planning have major effects on the environment, and yet they also depend on healthy ecosystems. Sustainability means ensuring that these sectors continue to deliver the services we need, without compromising the health of the natural world we all depend upon.

Environmental protection is essential for our future prosperity. To live well in the future, we need to take decisive action now to protect the natural world and to allow it the space it needs to regenerate and continue providing the things we depend on, such as clean air and clean waters.

Resource efficiency

Resources are necessary for the economy and environment to function. But the days of plentiful supplies of inexpensive raw materials — a key factor in the major economic progress made during the last two centuries — are over.

Population growth and rising living standards are increasing the demand for and raising the price and scarcity of natural resources like the metals, minerals and foodstuffs we depend upon. By the end of the next decade, an additional 2 billion people in emerging economies may have middle-class incomes with aspirations to achieve lifestyles comparable to those we enjoy.

To address the challenges, the European Commission has made resource efficiency one of its key policy concerns. This means producing more value with less input, using resources in a sustainable way and

Recycling reduces pressure on primary raw materials.
managing them more efficiently throughout their life-cycle. It requires innovation, changes in production and consumption patterns, and the right incentives and price signals.

In late 2011, EU governments endorsed the roadmap to a resource-efficient Europe. This emphasises the need for a sea change in economic, political and personal behaviour. It contains milestones across different policy areas to arrive at a European economy within 40 years that provides a high standard of living with a much reduced impact on the environment.

The need to make efficient use of finite resources is a theme being integrated into all EU policies. To drive the process forward, the Commission has created a high-level panel of national, European and international policymakers, industrialists and experts with extensive economic and environmental expertise.

http://ec.europa.eu/environment/resource_efficiency/re_platform/index_en.htm

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**Resource efficiency**

Resource efficiency aims to decouple economic growth from resource use. It pushes the economy to create more with less, delivering greater value with less input, using resources in a sustainable way and minimising their impact on the environment.
Biodiversity

One of the core aims of European environmental policy is to protect the web of life that surrounds us. The natural world faces many threats around the globe, and biodiversity — the term used to emphasise the richness of the natural world with all its species and genetic variety — is in decline all over the planet. To counter those threats, the EU is committed to halting and reversing the loss of biodiversity and ecosystems by 2020.

Biodiversity is important in its own right, but it also provides a vital stream of goods such as food, fibre, fuel and medicines, and it performs essential services like climate regulation, flood prevention, water purification, pollination and soil formation. All are necessary for economic prosperity, security, health and quality of life.

The EU first adopted a biodiversity action plan in 2006. Then, just months after the world agreed an ambitious global agenda in Nagoya, Japan, it finalised an updated strategy in early 2011. This has as a headline target to halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, restoring them as far as feasible, and to increase Europe’s contribution towards averting biodiversity loss globally.

Protected areas

Recognising that nature does not respect national borders, the EU has strong nature protection legislation. Starting with measures to protect wild birds and extending this to many threatened plants and animals and their habitats, this has culminated in the creation of Natura 2000, a pan-European network of areas designed to protect species and habitats in their natural environment. Consisting of over 26 000 sites, the network is the largest in the world. Now virtually complete, it covers almost 18% of EU territory — an area equivalent in size to the Czech Republic, Germany and Poland combined.

Natura 2000 recognises that humans are an integral part of nature and that the two work best in partnership with one another. Its aim is not to exclude economic activities, but rather to place certain limits on them so as to safeguard valuable species and habitats. Its financing is integrated into key EU policy sectors. Agriculture, particularly its rural development strand with agri-environment and forest measures, is the most important of these. The EU’s cohesion policy (which encourages economic growth in EU Member States and regions) plays a major role in funding investments, especially in the new Member States.

The Natura 2000 programme nurtures healthy ecosystems which provide valuable services such as fresh water, carbon storage and protection against floods and coastal erosion. Collectively, these services are estimated to be worth EUR 200 to EUR 300 billion a year — significantly more than the annual cost of some EUR 6 billion to manage the network.
Awareness raising

The European Commission promotes awareness of the environment in many ways. An annual highlight is Green Week in Brussels when thousands of participants debate a key environmental issue, such as biodiversity or water.

Competitions are another popular stimulus. The EU’s Green Capital Award showcases the environmental care and imagination that cities across Europe are displaying.

Other awards recognise the contributions which businesses, public authorities and individual projects make to the environment.

Green Capitals

To achieve the title of Green Capital, a city has to have a consistent record of achieving high environmental standards, be committed to further sustainable development goals and serve as a role model for others. Winners:

2010: Stockholm
2011: Hamburg
2012: Vitoria-Gasteiz
2013: Nantes
2014: Copenhagen

http://www.europeangreencapital.eu

The EU’s economy uses 16 tonnes of materials per person per year, of which 6 tonnes becomes waste.
EU Ecolabel

The EU Ecolabel identifies products and services with a reduced environmental impact throughout their life-cycle, from the extraction of raw material through to production, use and disposal. Recognised throughout Europe, the voluntary label promotes environmental excellence based on criteria developed by scientists, NGOs and stakeholders. Over 1,300 companies, making over 18,000 products, have joined. Customers can rely on the logo since every product is checked by independent experts.

Other main EU achievements

In addition to the two cross-cutting policy areas of resource efficiency and biodiversity protection, the Union is highly active on specific environmental issues.

CHEMICALS: Chemicals are an essential component of our daily lives. However, some can severely damage human health and others could be dangerous if not properly used. To ensure chemicals are safe, to protect the environment and to encourage the competitiveness of one of Europe’s major industries, the EU has the most advanced chemicals legislation in the world; it is called REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals).

All chemical substances manufactured or imported into the EU must be registered with the Helsinki-based European Chemicals Agency. By 2018, every chemical used in the EU will have to comply with this requirement. If not, it cannot be sold in the Union. Particularly strict rules apply to the most hazardous products.

Companies are responsible for assessing and managing any risks from the chemicals they use or sell in the Union and for providing customers with the appropriate safety advice on how they should be handled.

WASTE: The EU’s economy uses 16 tonnes of materials per person per year, of which 6 tonnes becomes waste, half of it going to landfill. If waste cannot be avoided, then the European Commission’s message is to re-use, recycle and recover what can be a valuable resource. Landfill taxes and ‘pay as you throw’ schemes can help achieve this. Some Member States have already achieved recycling rates of over 80 % and have virtually eliminated landfill. Others still have some way to go.

Legislation on specific items such as waste electrical and electronic equipment, packaging, batteries and accumulators or end-of-life vehicles is already in place and contributing to resource efficiency.

AIR: Over the past 20 years, the EU has successfully reduced the levels of a number of pollutants. Lead emissions, for example, have fallen by some 90 %. Despite the progress made, air pollution ranks high among Europeans’ environmental concerns and causes many premature deaths every year. The Union still has some way to go to meet its aim of securing levels of air quality that do not give rise to significant negative impacts on, and risks to, human health and the environment.

The European Commission is conducting a wide-ranging review of the EU’s air quality policies, taking account of the latest science and cost-effective measures which will be presented before the end of 2013.

WATER: In recent decades, the EU has put in place a comprehensive policy to ensure the quality of Europe’s water. Initially, this addressed health concerns. It was followed by measures to address the impact on the environment of major water-using sectors such as agriculture, industry and domestic households.

The EU’s main piece of water legislation, the water framework directive, requires all rivers, lakes, coastal waters and groundwater to be clean by 2015. Member States have to check the state of their waters and draw up plans explaining how they will clean them.
Another piece of European legislation, the marine strategy framework directive, adopts a coordinated approach to managing human activities that have an impact on the marine environment. It requires national measures to be introduced from 2015 to ensure marine litter does not harm the coastal and marine environment and aims to have marine waters healthy by 2020.

A European Commission blueprint to safeguard Europe’s water resources up to 2020 and beyond should help the EU meet its targets. This will operate like a toolkit to improve the implementation of water management, mainstreaming it into other policy areas.

**Bathing water**

The annual European bathing water quality report provides the most up-to-date picture of the state of health of over 22 000 swimming sites — at the seaside and inland rivers and lakes — in EU Member States as well as some neighbouring countries.

It confirms that the overall quality of bathing waters in the EU has improved markedly since 1990. In that year, 9.2 % of coastal sites and 11.9 % of inland bathing areas did not comply with the EU legislation in place. By 2011, those figures had fallen to 1.5 % and 2.4 % respectively.

It is now easy for the public to check the status of the water wherever they plan to swim. The bathing water section of the water information system for Europe (WISE) can be consulted on the EEA’s bathing water website. The Eye on Earth — WaterWatch application can be used to zoom in on a section of the coast, riverbank or lake in either street map or bird’s eye format.


Thanks to EU environmental legislation, the overall quality of bathing waters in the Union has improved markedly over the past two decades.
NOISE: Noise pollution has been linked to a range of health problems. It also harms wildlife. The EU regulates noise from a number of sources, including motor vehicles, trains and equipment used outdoors. Under the EU directive on environmental noise, passed in 2002, Member States must draw up maps of noise levels in their larger towns and cities, and for major roads, railways and civil airports. They then need to come up with plans to tackle the problem.

FORESTS: Forests are being cut down at an alarming rate around the world. The EU has called for global deforestation to be halved by 2020 and halted entirely by 2030. It is working with various timber-exporting countries to improve forest governance. EU legislation now minimises the risk of illegally harvested timber being sold in the Union.

SOIL: There is no specific EU legislation on soil, but many of the problems affecting soils are addressed by specific measures for water, waste, chemicals, industrial pollution, nature protection and pesticides. The EU has a strategy specifically addressing all the different threats to soil, particularly from farming practices and industrial processes. In 2012, the European Commission produced guidelines drawing attention to the dangers of covering soil with impermeable material such as concrete and offering more sustainable alternatives.

Working with the EU’s neighbours

Pollution from neighbours has a direct impact on the EU, and vice versa. In addition, natural resources like water, air, soils and biodiversity are connected in complex ecosystems across the region. This interdependence calls for a region-wide system of environmental protection and recovery.

For this reason, the EU gives priority to environmental cooperation with the countries along its borders. To the south this means North Africa and the Middle East and to the east the countries of eastern Europe and South Caucasus.

International cooperation

The Union plays a highly committed role in international environmental negotiations, whether these be to protect biodiversity, promote sustainable development or tackle climate change.

The thrust of the EU approach is to emphasise the importance of the sustainable management of resources and natural capital, particularly in developing countries since these are crucial in tackling poverty. These same countries are the first to be affected by environmental degradation since floods, droughts and other natural disasters undermine efforts for their economic and social development.

The EU played a key role at the 2010 biodiversity summit in Nagoya. This led to an agreement on an ambitious global strategy to combat biodiversity loss and a package of measures to ensure that the planet’s ecosystems continue to sustain future human well-being. In Brazil in 2012, the Rio+20 conference on sustainable development underlined the need for more concerted action to address global environmental challenges. The EU will strive to help translate the Rio commitments into actions, both within the EU and globally.

Working with future EU Member States

Every country that applies to join the Union has to harmonise its environmental norms with those of the EU. In this way, Union enlargement is helping to raise environmental standards across the continent.

Negotiations to become a member of the EU are rigorous and detailed. Aligning existing national legislation with European rules is complex, since environmental responsibilities can cut across many different agencies, departments and stakeholders. The European Commission supports candidate countries with technical expertise and finance.
The environment cannot be considered as separate from the economy any longer. The increasing use of limited global resources leads to rising prices. Europe’s economy needs to be transformed to derive more value from fewer materials, and changes in consumption patterns are necessary. Policies to encourage research, bring eco-innovation to the market and raise consumer awareness all contribute to this transformation.

The EU already has unparalleled information resources and technologies, an established culture of precaution and prevention and a strong record of rectifying damage at source and making polluters pay. Better implementation of existing policies will help provide regulatory stability for businesses.

The EU’s ‘Seventh environment action programme’ sets out a longer-term environment strategy, but one sufficiently adaptable and flexible to respond to the many challenges ahead. It provides an overall approach towards the environment, setting the course for a green and competitive economy that will safeguard our natural resources and health for present and future generations. It emphasises a limited number of priorities aimed at protecting Europe’s natural capital and ecosystems and improving the economy’s resource efficiency. A better implementation of environmental legislation and policies at national and local levels is also a priority. All this aims to ensure that EU citizens will be able to live in a safe and healthy natural environment which is managed in ways that respect environmental limits and ensure ecological resilience.

There is no escaping the fact that Europe and its environment also face some serious global challenges. These include an increasing world population, growing middle classes with high consumption rates, rapid economic growth in emerging economies, constantly rising energy demands and intensified global competition for resources. Most of these are outside our direct influence, but the EU can nonetheless help other countries move towards more sustainable development by promoting more effective environmental governance globally.

Demand for food, feed and fibre may increase by 70% by 2050. If we carry on using resources at the current rate, we will need more than two planets to sustain us.
Further reading

- For an overview of EU environmental policy: http://ec.europa.eu/environment/index_en.htm
- For information on the European Environment Agency: http://www.eea.europa.eu
- For specific information on the registration, evaluation, authorisation and restriction of chemical substances (REACH): http://echa.europa.eu
- Questions about the European Union? Europe Direct can help: 00 800 6 7 8 9 10 11
  http://europedirect.europa.eu