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**COMMUNICATION FROM THE COMMISSION
TO THE COUNCIL AND THE EUROPEAN PARLIAMENT**

2003 ENVIRONMENT POLICY REVIEW

Consolidating the environmental pillar of sustainable development

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1. INTRODUCTION

The main purpose of the Review is to report on developments since 2001 and highlight priority issues for the year to come in EU and national environmental policies. The Review is also aimed at monitoring the implementation of the EU's 6th Environment Action Programme (6th EAP).¹

This Review should be placed within the context of the Lisbon Strategy on economic and social renewal launched in 2000. At Lisbon, EU leaders stated their objective of making the EU “*the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*” by 2010. The Lisbon Strategy was supplemented by a third, environmental, pillar following the adoption of the EU Sustainable Development Strategy at the Gothenburg European Council in 2001.²

This first Review of the European Union and Member States environment policies also follows from the 2003 Spring European Council, which noted “*the Commission's intention to carry out an annual stocktaking of the Cardiff process of environmental integration and a regular environment policy review and to report in time for the outcomes of these exercises to be taken into account in the preparation of its future Spring reports, starting in 2004.*”³

This Review first sets out the new political context of EU environmental policy since the adoption of the EU Sustainable Development Strategy in 2001. It then examines the most pressing threats to the environment and policy responses at EU level to date. It continues by outlining the environmental policy mix required to make sustainable development a reality: particular emphasis will need to be placed on the three cross-cutting objectives which underpin environmental policy – integration of environmental concerns into other policies, implementation and information. Finally, the Review considers the particular challenge of enlargement and developments at an international level.

¹ Decision 1600/2002/EC of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, OJ L 242, 10 September 2002, p. 1-15.

² Paragraphs 19-32, Presidency Conclusions, Gothenburg European Council (15-16 June 2001).

³ Paragraph 58, Presidency Conclusions, Brussels European Council (20-21 March 2003).

2. A NEW POLITICAL CONTEXT

The context for EU environmental policy has evolved significantly over the past two years, both through decisions directly affecting the environment – adoption of EU and national sustainable development strategies, launch of the 6th Environment Action Programme, the Johannesburg World Summit on Sustainable Development – and through changes to the broader policy setting – the enlargement of the Union to ten new Member States in 2004, the debate on the Future of Europe, the current economic slowdown, increased security concerns.

2.1. Sustainable development at the centre of the political debate

Sustainable development: a priority at all levels of public governance, and increasing awareness in the private sector

- Since its inclusion in the Treaty in 1997, sustainable development is recognised as an overarching goal of the EU. The adoption of the **EU Sustainable Development Strategy** in June 2001 at the Gothenburg European Council marked a turning point: the need to pursue in a balanced way economic growth, social improvements and environmental protection was translated into a set of detailed objectives and actions. The strategy seeks to promote economic growth and social cohesion without impairing environmental quality. Conversely, it implies that environmental objectives will need to be weighed against their economic and social impacts and ‘win-win’ solutions devised for the economy, employment and the environment. This marks a major shift in the way environmental policy has been conceived and designed thus far.
- In 2002, the Council and European Parliament adopted the **6th Environment Action Programme**, setting out the EU’s environmental roadmap for the next ten years. The 6th EAP is the main vehicle by which to achieve the environmental goals of the Sustainable Development Strategy. It sets ambitious, often quantified targets which highlight the long-term commitments of the Union to environmental protection and consequently provides a predictable framework for public and private actors in Europe and the rest of the world.
- At an international level, the second **World Summit on Sustainable Development** (WSSD) held in Johannesburg in September 2002 gave a new impetus to the global dimension of sustainable development ten years after Rio.
- At a national level, prior to 2001, only a handful of EU Member States had developed **national sustainable development strategies**. Today a majority of Member States and acceding countries have adopted such strategies, in line with the 2005 target date of the Johannesburg Plan of Implementation.
- Many public authorities throughout Europe have been active in elaborating **Local and Regional Agendas 21**, i.e. schemes for sustainable development at a local level.
- The **private sector** is showing an increasing interest in sustainable development, notably through the development of Corporate Social and environmental Responsibility strategies and other voluntary initiatives, including specific actions to improve its environmental performance.

These developments indicate an increased awareness of the interdependencies of economic, social and environmental policy objectives and a long-term commitment towards policy coherence.

An evolving policy setting affecting the sustainable development agenda

- The **enlargement** of the EU to ten new Member States as of May 2004 will bring a unique set of new environmental assets – including rich bio-diversity and vast areas of relative wilderness – but also represents an important challenge for EU environmental policy given the amplitude of capacity-building and financing needs in the context of the implementation and enforcement of the *acquis*.
- Directly linked to enlargement is the current debate on the **Future of Europe**. Building upon the work of the Convention, the Inter-Governmental Conference will decide upon the architecture of the enlarged Union, providing it with a Constitutional Treaty. This Treaty will form the new institutional framework within which to advance environmental protection and sustainable development. As the environment remains at the top of the list of EU citizens' priority issues, the challenge is to ensure that the new Treaty will not only preserve the EU environmental *acquis*, but also contribute to enhancing it.
- The deteriorating economic and social climate prevailing since 2001 has moved **growth and employment towards the top of the political agenda**. In line with the overarching objective of sustainable development, present efforts to address growth and employment concerns should also take environmental aspects into account. Innovative policies to maximise resource efficiency and minimise impacts on the environment need to be devised.
- The 11th of September 2001 terrorist attacks and their aftermath – including the Afghanistan and Iraq wars - have given rise to **increased security concerns**. This has implications for EU environmental policy. Environmental security -i.e. links between scarce resources and conflict, consequences of war for the environment, etc- and civil protection – i.e. preparedness and reaction to terrorist attacks with environmental implications- have moved up the policy agenda, yet the challenge of sustainable development can only be effectively addressed by continuing to pursue a multilateral approach.

This new political context creates a number of challenges that EU environmental policy has to meet in order to become fully integrated into the sustainable development approach.

2.2. Challenges ahead for environmental policy

EU environmental policy faces the following five main challenges:

i. Fully integrate the environmental dimension into the Lisbon Strategy

In many respects, the concept of sustainable development remains elusive. Policy-makers sometimes wrongly interpret it as a repackaging of environmental policy. They often fail to equate it with a balanced approach to the economic, social and environmental pillars, and with the need to place the three dimensions on an equal footing. This is true at EU level: the emergence of sustainable development at the centre of the political debate at EU level has resulted in the inclusion of an environmental dimension in the Spring Report since 2002. Yet to many actors the environment still appeared as an add-on to the rest of the Report in 2002 and 2003.

However, our long-term economic and social prospects very much depend on our ability to consider the environment as a key component of economic and social policy. Neglecting the environmental dimension has hidden costs - such as the health costs of poor air quality and the economic costs of

cleaning up pollution- and inherent risks, which could inhibit the ability of the EU to attain the Lisbon goals. Beyond the economic argument, there is a growing awareness that, if not tackled, the root causes of many long-term environmental problems pose significant risks to the quality of life of European citizens.

ii. Develop 'win-win' solutions for the environment and the economy

A strong environmental pillar, increasingly relying upon market instruments and based on cost-effectiveness, can contribute to the achievement of the Lisbon goals. Addressing in a balanced manner potential trade-offs⁴ between economic and environmental objectives can bring forth “win-win” solutions and enhance sustainable development. Higher environmental standards can also generate new economic opportunities, notably in fostering the development of new technologies. This can contribute to the core Lisbon objective of making the EU the locus of innovative activity and a knowledge-based society by 2010.

The EU Environment Technology Action Plan (ETAP) planned for the end of 2003 will propose concrete steps and a comprehensive framework for enhancing the synergies between environmental protection, economic growth and social inclusion.

iii. Better articulate efforts toward sustainable development at all levels of governance

Sustainable development cannot be achieved by individual countries or regions acting alone. It requires action at all levels of governance, and that priorities at all levels be better articulated and activities harnessed to serve a common goal.

In this context, the Open Method of Co-ordination (OMC),⁵ which is at the heart of the Lisbon Strategy and has thus far not been used in the environmental field, could usefully be introduced.

iv. Make a success of enlargement in the environmental field

Both the EU Sustainable Development Strategy and the 6th EAP include enlargement in their scope and were designed for the enlarged Union. Acceding countries have already made great strides in improving environmental protection and complying with EU environmental legislation. However, significant institutional and financial problems have to be overcome in order to implement and enforce the adopted legislation.

In addition, action taken to improve the infrastructure and living standards in acceding countries, while meeting the legitimate expectations of citizens, could increase pressures on the environment.

Addressing these challenges should continue to be a priority for the post-accession period.

⁴ See Section 4.1.1. – Improve policy making – Increase policy coherence (impact assessment).

⁵ The Lisbon European Council (paragraph 37, Presidency Conclusions, 23-24 March 2000) introduced the Open Method of Co-ordination, defined as “the means of spreading best practice and achieving greater convergence towards the main EU goals. This method, which is designed to help Member States to progressively develop their own policies, involves:

- Fixing guidelines for the Union combined with specific timetables for achieving the goals which they set; in the short, medium and long terms;
- Establishing, where appropriate, quantitative and qualitative indicators and benchmarks against the best in the world and tailored to the needs of different Member States and sectors as a means of comparing best practice;
- Translating these European guidelines into national and regional policies by setting specific targets and adopting measures, taking into account national and regional differences;
- Periodic monitoring, evaluation, peer review organised as mutual learning processes.”

v. *Build upon the international credibility gained by the EU in recent years*

EU leadership was instrumental in achieving a successful outcome at the World Summit on Sustainable Development. Through its active role at the Summit, domestic action to meet its Kyoto target, and promotion of other key international environmental agreements and conventions, the EU has confirmed its recognised worldwide leadership on environmental matters. Although this brings wider benefits to the EU, it also induces an obligation to deliver.

The credibility thus gained will increase the EU's ability to persuade partners, notably developing countries, to better take into account environmental concerns when defining their own paths to economic and social development. In this respect, the Greek Presidency's initiative, endorsed by the Thessaloniki European Council,⁶ to promote the establishment of European diplomacy on environment and sustainable development, could be a useful vehicle to better co-ordinate EU and national action.

Meeting the above challenges will help, over time, to strike the right balance between the economic, social and environmental pillars of sustainable development. The worrying environmental trends observed at the time of the launch of the EU sustainable development strategy have continued and require redoubled efforts in the medium and long-term. They are a clear reminder of the urgent need to place renewed emphasis on implementation of the environmental chapter of the Union's agenda for sustainable development.

⁶ Paragraphs 76-77, Presidency Conclusions, Thessaloniki European Council (19-20 June 2003).

3. TRENDS, CHALLENGES AND POLICY RESPONSES

This section is structured around the four priority issues of the 6th EAP (climate change; nature and biodiversity; resource management; and environment and health). Each section briefly identifies the key trends and challenges, as well as detailing recent policy responses.

3.1. Climate change

The 1990s were the warmest decade for 150 years. The evidence suggests that climate change is not only occurring but also directly affecting the EU. Average temperatures are projected to rise still further with a 1.4 to 5.8° C increase over the next hundred years, increasing the risk of droughts and forest fires if climate change is not mitigated. It is expected that Eastern and Southern Europe will be particularly affected. In addition, parts of Europe may experience higher and more intense rainfall, which will increase the risk and frequency of floods, similar to those that affected Europe in 2001 and 2002.

The EU has played a leading role in developing a multilateral response to the climate change. It successfully rescued the Kyoto Protocol in 2001 together with partners around the world following the U.S. withdrawal. In ratifying it on 31 May 2002, the EU committed itself to reducing its greenhouse gas emissions by 8% in 2008-2012 over 1990 levels.

The latest data available show that in 2001 EU emissions were 2.3% below 1990, indicating that the EU has lost some of the gains that it made in 1999 and 2000, where emission levels had fallen to 4% below 1990 levels (see figure 1 in Annex). If the EU is to deliver on its Kyoto target of an 8% reduction by 2008-2012, and in turn retain its leadership role on climate change, stringent implementation by the Member States of the relevant EU measures recently set in place is needed and additional action may be required.

The causes of climate change, notably greenhouse gas emissions from the industrial, transport and energy sectors (see figure 2 in Annex), are deeply rooted in the structure of the economy. Thus, only an integrated set of measures, coupled with determined leadership and the engagement of all stakeholders, can tackle the issue. In this context, **the introduction of flexible market-based instruments is intended to help reduce climate change at a lower cost for industry. Additionally, the climate change issue will only be resolved if the environmental dimension is fully integrated into other policy areas, notably energy, transport and industry.**

Priorities

3.1.1. Implement measures identified by the European Climate Change Programme (ECCP)

The European Climate Change Programme (ECCP) was established in June 2000 as a cross-sectoral activity to identify the most cost effective measures required to meet EU Kyoto targets. It is based on a participatory process and fosters policy integration with particular focus on energy, transport, industry and research.

The ECCP is the EU's main instrument in identifying emission reduction measures and it has already produced several important measures. In October 2001 the adoption of the Commission's draft Directive on Greenhouse Gas Emission Trading was a landmark for environmental legislation.

The Directive entered into force in October 2003.⁷ The EU scheme is the first multi-national emissions trading scheme in the world.

The Directive exemplifies the flexible approach chosen by the EU to fulfil Kyoto obligations in a cost-effective manner. The system of cost optimisation for the whole of the Union foreseen in the Directive will offer substantial economic benefits compared to a scenario in which separate national emission trading systems would have been set in place or more traditional regulatory policy instruments would have been used.⁸

In addition, the Commission recently put forward an ambitious proposal to reduce fluorinated greenhouse gas emissions by 25% by 2010.

Despite these important steps, the results of the second Progress Report on the ECCP, released in April 2003,⁹ are unambiguous: the measures currently in place will not allow the EU to achieve its Kyoto target. This is a strong incentive to speed up the pace of implementation of the measures identified in the ECCP and reinforce them with a strong monitoring and review process in those areas where action is most needed. A number of key measures are in an advanced stage of preparation, notably proposals on energy services, minimum energy efficiency standards for end-use equipment.

3.1.2. Enhance the integration of climate change concerns in other policies

In 2000 **energy** industries were the source of 27% of total EU greenhouse gas emissions (see figure 2 in Annex). Improving energy efficiency is a priority. Environmentally harmful energy subsidies will be analysed within the framework of the Commission's Green Paper for the security of Energy Supply, taking into account economic, social, security and environmental impacts, with a view to progressively phasing them out in line with the objectives of the EU Sustainable Development Strategy¹⁰ and the 6th EAP.¹¹

Positive steps have been taken since the launch of the ECCP. Milestones include measures for promoting the generation of electricity from renewable energy sources,¹² the improvement of the energy performance of buildings¹³ and promotion of co-production of heat and power.¹⁴ An

⁷ Directive 2003/87 EC of the European Parliament and the Council of 13 October 2003, OJ L 275/32, 25 October 2003.

⁸ For more details of the Emissions Trading Directive, see Annex.

⁹ Second ECCP Progress Report 'Can we meet our Kyoto targets?', April 2003.
<http://www.europa.eu.int/comm/environment/climat/eccp.htm>

¹⁰ Communication from the Commission, A sustainable Europe for a better world: a European Union strategy for sustainable development, COM(2001)264final, 15 May 2001 (p.10): "Phase out subsidies to fossil fuel production and consumption by 2010."

¹¹ Article 3, 4), first indent: "encouraging reforms of subsidies that have considerable negative effects on the environment and are incompatible with sustainable development, inter alia by establishing, by the mid-term review, a list of criteria allowing such environmentally negative subsidies to be recorded, with a view to progressively eliminating them."

¹² Member States are currently implementing this Directive. The Commission is actively following up the measures needed for achieving the 22% of gross electricity consumption from renewable energy sources by 2010. The Commission will present a report to the Council and the European Parliament in May 2004.

¹³ This Directive, in force since January 2003, is estimated to have a potential for greenhouse gas emissions reduction of 35-45 Mt CO₂eq, as mentioned in the second ECCP progress report (p.13).

¹⁴ The greenhouse gas emissions reduction potential of this measure is estimated to be 65 Mt CO₂/year.

additional positive step is the Directive on energy labelling of domestic appliances.¹⁵ The effects of these measures are still to come.

Regarding energy taxation, the adoption in 2003 of a Directive on energy products taxation,¹⁶ following a Commission proposal from 1997, is a positive development. The new Directive will ensure that minimum rates of taxation on oil products, which continue to account for over 40% of the EU's gross inland energy consumption (see figure 3 in Annex), will be brought back in real terms to the levels of 1992. It also introduces minimum rates on a variety of substitute energy products whose use also leads to emissions. However, the directive will only induce limited increases in the levels of energy taxation in a number of Member States so that the impact on energy efficiency and emissions is not likely to be strong.

Further efforts will be needed to curb unsustainable trends in the energy sector. While the EU's total inland energy consumption has increased steadily, at approximately 1% per year, since 1985 the share of renewable energy remains low at around 6% (see figure 3 in Annex). In the acceding countries the share is 5%.¹⁷ Latest projections from the European Environment Agency indicate that, unless additional policy measures are taken, the EU will fail to meet its indicative target of 12% by 2010. It is also unlikely that the EU will be able to meet its indicative target of generating 22% of gross electricity consumption from renewable sources by 2010 (see figure 4 in Annex).

In 2000 **transport** not only accounted for approximately 21% of EU greenhouse gas emissions, but was the only sector where emissions were increasing (figure 5 in Annex). In addition, trends are not encouraging in acceding countries: there has been a sharp fall in rail and bus transport and higher growth rates in air and private car transport than in the EU.

Positive steps have been taken in the framework of the EU Sustainable Development Strategy, the 6th Environment Action Programme and the White Paper on European Transport Policy to reduce greenhouse gas emissions from transport, including the biofuels Directive, with the envisaged target of 5.75% market share of alternative fuels by 2010; the proposal for a modification of the Eurovignette Directive; measures on fuel taxation; and the above mentioned energy products taxation Directive, which allows Member States to apply lower minimum tax rates for alternative fuels generating fewer CO₂ emissions.

The above measures, of which the effects are still to come, are important steps to achieve the set objective of bringing about a modal shift from road and air transport to rail, water and public passenger transport; and to ensure that the environmental costs of different transport modes are better captured in prices charged to users, and in turn achieve the objective of decoupling of the environmentally harmful effects of transport growth and GDP growth. However, additional efforts will be needed if the EU is to meet its Kyoto commitments, and in view of future commitments.¹⁸

¹⁵ Commission proposals for Directives 2002/31/EC and 2002/40/EC of 22 March 2002 implementing Council Directive 1992/75/EEC with regard to energy labelling of domestic air-conditioners and electric ovens. The aim of these Directives, which came into force in January 2003, is to influence the consumer's behaviour by displaying a label, at the point of sale, showing the energy performance of the appliance.

¹⁶ The Energy Products Tax Directive (2003/96/EC) is due to enter into force on 1 January 2004.

¹⁷ However, several candidate countries register a high share of renewable energy – Latvia (30%), Estonia, Romania and Slovenia (11% each).

¹⁸ See second ECCP Progress Report, p.14: *“the limitation of greenhouse gas emissions in the transport sector will require the development of new strategies and strengthened policies and measures in the future. This is necessary to preserve the overall reductions that are achieved in view of meeting the target of the first commitment, and even more prominently, in view of future commitment periods.”*

Agriculture, which in 2000 accounted for about 10% of total emissions, remains a major source of emissions of methane¹⁹ and nitrous oxide,²⁰ two of the important greenhouse gases.²¹ The overhaul of the Common Agricultural Policy (CAP) agreed in 2003, introducing increased funding for rural development, is a positive step that could lead to emissions reductions in the agricultural sector.²² The mid-term evaluation of rural development plans in 2004 will provide a useful opportunity to better articulate the agricultural and climate change policies.

In order to reduce EU greenhouse gas emissions and improve policy coherence climate change concerns should be better integrated into the EU's **Cohesion policy** and synergies between environmental and cohesion policies further explored. In its recently adopted Revised Guidelines, the Commission has suggested to Member States to take particularly into account the objectives of promoting energy efficiency measures and of increasing the renewables' share of electricity production to 22%, together with the target of 5.75% for the use of bio-fuels in transport. Local and regional authorities should take on board these Commission Guidelines while looking for the best use of the Structural Funds to boost regional economic development.

3.2. Nature and biodiversity

Biodiversity reflects the complexity, balance and status of the various ecosystems. Not only does biodiversity perform essential life support functions but it also provides the basis for important economic, recreational and cultural activities. The erosion of biodiversity²³ is therefore of great concern. At the UN WSSD at Johannesburg parties committed themselves to significantly reducing the rate of biodiversity loss by 2010. The EU has gone even further by committing itself to halting the loss of biodiversity by 2010.²⁴

In order to fulfil these objectives, current agricultural and fishing practices, which place considerable pressure on biodiversity, need to be made more sustainable through **increased integration of environmental considerations**.

In parallel, the difficulties in protecting biodiversity, as illustrated by the problems in implementing Directives such as the Habitats and Birds Directive, and with financing the Natura 2000 network, need to be addressed. **Solutions must be found to current implementation difficulties and pressures on the environment must be better evaluated through effective indicators.**

Priorities

3.2.1. Move towards a more sustainable agricultural policy

Under the recently agreed reform of the Common Agricultural Policy (CAP), the vast majority of EU direct payments are to be decoupled from production: there is to be a single farm payment for

¹⁹ CH₄ - Methane emissions are generated principally by enteric fermentation and manure management.

²⁰ N₂O - Nitrous oxide emissions are principally three-fold: (1) direct emissions from agricultural soils and from animal production systems; (2) indirect emissions which take place after nitrogen is lost from the field as nitrogen oxides (Nox) or Ammonia (NH₃) or after leaching or runoff of nitrates; (3) emissions resulting from agricultural burning.

²¹ In addition, decline in soil organic matter of cropland might add substantially to CO₂ emissions but figures at European level are very uncertain. The quantification of biospheric greenhouse gas emissions has therefore been targeted as a research priority within the EU's 6th RTD Framework Programme.

²² See 3.2 for further information regarding CAP reform.

²³ As documented by IUCN's Red list of endangered and threatened species (IUCN - World Conservation Union).

²⁴ See Paragraph 31, Presidency Conclusions, Gothenburg European Council (15-16 June 2001).

EU farmers, independent from production. Moreover, this payment will be linked to respect of environmental and food safety standards, including relevant provisions of the Birds and Habitats Directives, and the obligation to keep agricultural land in good agricultural and environmental condition. The introduction of this decoupling is expected to reduce the incentives for intensive farming methods and encourage more sustainable farming.

In addition, support for rural development is to be substantially increased through the transfer of the amounts resulting from savings made through a reduction in the direct payments made to farms receiving such payments beyond a certain threshold. This can allow new measures to be introduced to boost quality production and to promote environmental protection. This should help foster more environmentally benign farming practices, such as organic farming (see figure 6 in Annex).

3.2.2. Green the Common Fisheries Policy

Despite recent measures taken, many fish stocks in European waters are now considered to be below their safe biological limits (see figure 7 in Annex). Further steps need to be taken to secure sustainable exploitation of fish resources to avoid greater long-term economic damage to fishing communities and to the marine environment. Counter-productive subsidies are being progressively removed and appropriate measures need to be taken to help fishing communities to adjust to a lower level of fishing activity, along the lines of the CFP Reform. If implemented, the ecosystem approach to fisheries, multi-annual plans for catches, action based on scientific advice and reductions in subsidies put forward in the Commission Proposals would enhance the prospect of restoring EU fish populations.

3.2.3. Better protect soils and the marine environment

In addition to providing the basis for agricultural production and fisheries, soils and oceans are also huge reservoirs of biodiversity. There is evidence that both soils and oceans are under increasing threat from a series of human activities, causing, in the case of soils, problems such as erosion, decline in organic matter and biodiversity, local and diffuse contamination, sealing, compaction and salinisation. In the case of oceans, problems range from decline in fishing resources, eutrophication to impacts on biodiversity of the introduction of non-indigenous species and of deliberate or accidental releases of oil at sea. It is therefore essential to better protect oceans and soils. An integrated approach must be adopted to this end including appropriate co-financing through Cohesion policy to adequately cover the territorial dimension.

A first step was the adoption of the Communications “Towards a strategy to protect the marine environment”²⁵ and “Towards a strategy to protect European soils”²⁶ in 2003. These Communications provide the framework within which the necessary data to elaborate action plans will be collected, in co-operation with all stakeholders with a view to developing fully fledged soils and marine strategies.

3.2.4. Improve implementation in the field of nature protection

The key to improving implementation of legislation, on nature and biodiversity and in other areas, is to take implementation issues into account right from the formulation stage - as in the case of the Water Framework Directive. In addition, the Commission needs to play an active role in providing

²⁵ Commission Communication – Towards a Strategy to protect and conserve the marine environment, COM(2002)539final, 2 October 2002.

²⁶ Commission Communication – Towards a Thematic Strategy for Soil Protection, COM(2002)179final, 16 April 2002.

support and advice to Member States once legislation is in place – as is currently done to improve implementation of Birds and Habitats Directives.

Implementation of the **Birds and Habitats Directives** has been difficult. Infringements relating to the two Directives account for over a quarter of instances where the European Commission has taken legal action (see figure 8 in Annex). New ways of working with Member States are being developed to improve implementation of these two Directives, leading to important progress.

The pace of **guidance efforts** on the implementation of the two Directives has been stepped up since 2000. In 2000, an interpretation document was published on the management of Natura 2000, the “coherent European ecological network of special areas of conservation”, for which the Habitat Directive provides. Guidance documents on hunting and forest management will be published shortly. In addition, a ‘Sustainable Hunting Initiative’ was launched in 2001 as a constructive dialogue with Member States and stakeholders on hunting and conservation issues.

Regarding **funding possibilities for Natura 2000** requirements, existing instruments such as the LIFE-Nature programme and Rural Development Plans under the CAP already offer important possibilities. So do the Structural Funds and the Cohesion Fund which set as a condition of awarding financing the compliance with Natura 2000. The Commission is currently working on a Communication on possibilities for future specific EU funding for Natura 2000.

With respect to **monitoring progress in site designation** under Natura 2000, the Commission is using a ‘distance to target’ barometer. Once designations are completed, the Commission will develop a barometer of site management progress. In parallel, the Commission has proposed extending by two years the third phase of the LIFE programme notably to support the management of designated sites at national and regional levels, hence bridging the gap between the end of this third phase and the new financial perspectives. In addition, the Commission will develop indicators and geographical information systems to assess Member States' management and monitoring of Natura 2000 sites.

3.2.5. Better highlight trends in the biodiversity area

The Commission has recently launched a **broad consultative review of EU biodiversity policy**. This review will assess progress at EU and Member State level in implementation of the EC Biodiversity Strategy and Action Plans, effectiveness of action taken in terms of impact on the rate of biodiversity loss, and appropriateness of the objectives and actions proposed within the context of the 2010 biodiversity target and of enlargement. On this basis, a Commission Communication, scheduled for June 2004, will make recommendations for a prioritised set of measures with actors, timeframes and resources identified.²⁷

Part of the process of raising awareness on biodiversity trends is the development of the monitoring and reporting framework against the biodiversity strategy and action plans. The Commission is actively working with the European Environment Agency toward the **establishment of a set of biodiversity implementation indicators**, building upon the progress achieved on the means to measure biodiversity, including standards for monitoring and surveillance of habitats and species of European interest. These standards along with continued research efforts to improve the knowledge-base will give the EU a ‘finger on the pulse’ of European biodiversity crucial to monitor and evaluate policy actions in this sector (see figure 9 in Annex).

²⁷ This exercise follows from Chapter IV paragraph 12 of the Communication from the Commission to the Council and to the Parliament on a European Community Biodiversity Strategy (COM (1998) 42), 4 February 1998.

3.2.6. *Strengthen biodiversity protection at international level*

The Convention on Biological Diversity (CBD) is the key international instrument for the conservation and sustainable use of bioresources. In order to improve the effectiveness of the CBD on the ground, the Commission has been actively supporting the set up of new instruments²⁸ and a shift of focus from policy development to implementation. The Commission is also active in other international biodiversity agreements, such as the Convention on International Trade on Endangered Species (CITES).²⁹

The ability of international biodiversity agreements to lead to a substantial reduction of the loss of biodiversity also depends on effective implementation by all Parties to these agreements. Devising ways of promoting implementation of these agreements in developing countries is therefore a priority of the EU's international environmental action.³⁰

An additional, important, EU initiative in the field of international biodiversity is the Commission Action Plan: forest law enforcement, governance³¹ adopted in May 2003 to combat illegal logging in line with the EU's Johannesburg commitments. Measures set out in the Action Plan include support for improved governance in wood-producing countries, voluntary partnerships with wood-producing countries to ensure only legally harvested timber enters the EU market, and efforts to develop international collaboration to combat the trade in illegally harvested timber.

3.3. **Resource management**

The Lisbon Strategy sets out the ambitious goal of achieving an economic growth rate of 3% per annum, which would roughly double GDP in 25 years. However, if we are to avoid additional social and environmental costs, such as continually growing volumes of waste, then we have to break the strong historical link between GDP growth and environmental pressure. Decoupling environmental degradation from economic growth is a central theme of the EU Sustainable Development Strategy.³² One of the ways to achieve it is through a significant increase in resource efficiency.

The efficiency of raw materials and energy use has been increasing in many EU countries. Much of this improvement, however, has been achieved because the economies of many EU countries shifted from manufacturing to service economies in the 1980s and 1990s (see figure 10 in Annex).

To achieve decoupling, the challenge is to **further promote sustainable patterns of production and consumption** as underscored in the Johannesburg Plan of Implementation. By successfully developing a ten-year Programme for sustainable production and consumption, the EU would ensure that its domestic action is consistent with, and underpins, its international commitments, boosting EU leadership on sustainable development.

²⁸ Such as the CBD Strategic Plan, the target to 'significantly reduce the rate of loss of biodiversity by 2010', and the development, thanks to Commission efforts, of a revised and comprehensive Work Programme on Forest and of Guidelines on Access to Genetic Resources and Benefit-Sharing, and of the Guiding Principles on Invasive Alien Species.

²⁹ The Commission notably supports the listing under CITES of additional fish and timber species and is taking steps to implement these commitments in EC legislation.

³⁰ See Section 6 – International.

³¹ COM(2003)251final, 21 May 2003.

³² The importance of decoupling was recognised in the Commission's proposal for an EU sustainable development strategy which set out a headline objective to "*break the links between economic growth, the use of resources and the generation of waste*". It was reaffirmed by the spring 2003 European Council (see paragraph 53, Presidency conclusions, Brussels European Council, 20-21 March 2003).

Priorities

3.3.1. Intensify efforts towards a more sustainable use of resources

Decoupling is the overarching goal to which the Commission Thematic Strategy on Resource Management will contribute.³³ As implementing new policies and adapting existing ones to achieve the necessary decoupling of resource-related negative environmental impacts from economic growth will be a long-term process, the time scale of the strategy is 25 years.

A comprehensive strategy will be proposed in 2004 based on an open and collaborative process involving the Community institutions and stakeholders.

Priority will be given to three strategic elements throughout the development of the strategy. In a first stage, the strategy will focus on knowledge gathering to determine which resources are of biggest concern in terms of the environmental impacts associated with their use, taking into account technological possibilities and socio-economic considerations. A key objective will be to fill current gaps as to pathways taken by resources in the economic cycle and their impacts on the environment. Based on this knowledge, the strategy will assess how far policy choices are compatible with the overall decoupling objective. It will eventually propose actions to better take into account resource use considerations when devising policy in other sectors.

This Strategy will be underpinned by an Integrated Product Policy,³⁴ combined with a Thematic Strategy on the Prevention and Recycling of Waste.³⁵ Based on an extensive consultative process with all stakeholders concerned, these initiatives will look at the environmental impacts across the life cycle of products, so as to reduce pollution, facilitate recycling whenever economically justified, and reduce the costs of waste disposal.

EU resources policy is supported by important research efforts under the 6th Research and Technological Development Framework (RTD) Programme in the field of sustainable production and consumption.

EU resources policy must be flexible enough to allow for smooth adaptation within the private sector. The whole range of market-based instruments (as well as voluntary agreements³⁶ whenever appropriate and cost-effective) must therefore be drawn upon in the pursuit of eco-efficiency.

3.3.2. Ensure proper implementation of existing waste legislation

In addition to preventing waste generation by modifying our patterns of production and consumption, we need to limit the environmental impacts of the use of resources. This requires that existing waste legislation be properly implemented.

Member States have made some progress in recent years in developing and putting into practice the waste management plans required under Community legislation. However, increased efforts are needed to fully transpose and apply the existing legislation and, in turn, reduce waste disposal. In

³³ Commission Communication Towards a Thematic Strategy on the Sustainable Use of Natural Resources, COM(2003)572 final, 1 October 2003.

³⁴ Commission Communication on Integrated Product Policy, 12 June 2003.

³⁵ Commission Communication Towards a Thematic Strategy on the Prevention and Recycling of Waste, COM(2003)301 final, 27 May 2003.

³⁶ COM(2002)412 final, 17 July 2002.

addition, progress is also needed to minimise waste generation from production processes through better use of environmental technologies.

A particular effort is needed in acceding countries to shift from heavy reliance on landfilling – over 90% of municipal waste in most countries- to a more sustainable system of waste management.

3.4. Environment & Health

The protection of public health has been a constant priority of EU environmental policy. However, existing standards have used a ‘one size fits all’ approach, without taking into account the need to protect the most vulnerable groups in society, such as children. There has never been a comprehensive assessment of the overall impact on human health of the combined effects of the various toxic agents in our environment. A new, integrated approach needs to be developed **to efficiently address environment and health challenges as well as existing information and knowledge gaps regarding the environment and health impacts of specific pollutants and product groups.**

Priorities

3.4.1. Develop an integrated approach to environment & health issues

There is a strong link between environmental problems and poor health. Around 60,000 deaths per year in large European cities are caused by long-term exposure to air pollution. Furthermore, in Europe, asthma affects one child in seven. Compared to just 30 years ago, the number of children suffering from asthma and other allergies has increased dramatically.

To reduce diseases caused by environmental factors in Europe, it is necessary to step up research to better understand the cause-effect relationships between environmental threats and adverse health impacts. This is the core objective of the EU Environment & Health Strategy adopted in June 2003.³⁷

The strategy outlines the integrated approach required to address complex environment and health interactions and their impacts on more vulnerable groups such as children. On this basis, an Action Plan for the period 2004-2010 is under preparation. It will constitute the Commission’s main contribution to the 4th World Health Organisation Ministerial Conference on Environment & Health to be held in Budapest in 2004. Areas of action under consideration include establishing an EU bio-monitoring framework; launching pilot projects on integrated monitoring of dioxins, heavy metals and endocrine disrupters; and developing harmonised environment and health indicators. During a first cycle, work will focus on three priority groups of diseases: childhood cancers, respiratory diseases and neuro-developmental disorders.

3.4.2. Reduce air pollution

Although much progress has been made over the past few decades in improving air quality, serious problems remain. Studies³⁸ are showing that existing levels of air pollution pose a significant risk to human health, particularly as regards particulate matter and ground-level ozone. There is a real

³⁷ Commission Communication – A European Environment and Health Strategy, COM(2003)338final, 11 June 2003.

³⁸ See Report on a WHO Working Group, Health aspects of air pollution with particulate matter, ozone and nitrogen dioxide (Bonn, 13-15 January 2003), <http://www.euro.who.int/document/e79097.pdf>.

danger that the downward trend in concentrations of these pollutants might be reversed, e.g. due to growing traffic, if further action is not taken.

In order to address this problem the Commission launched the Clean Air for Europe (CAFE) programme to gather scientific evidence, assess the likely evolution of pollution levels between now and 2020 and identify the most cost-effective measures to improve the situation. This programme is well underway and will lead to a thematic strategy on air pollution in mid 2005. In this context sound implementation of the existing legislation is crucial, but further legislative and other measures may be necessary in order to achieve levels of air pollution that do not give rise to significant negative impacts on health and the environment, as set out in the 6th EAP.

3.4.3. *Reform chemicals policy*

The use of synthetic chemicals is widespread in industry and households – 400 million tonnes of chemicals are sold worldwide each year.

The chemicals industry plays a very important *economic* role, supplying materials to manufacturing industry, as well as stimulating innovation and supplying products needed to sustain and improve the quality of life. The EU is the largest chemicals producing area in the world. Maintaining a competitive and innovative chemicals industry in Europe is therefore a major goal.

At the *social* level, improving the health and safety of workers and the general public is a key political objective of the Community chemicals policy. Maintaining high levels of employment is also a priority.

In relation to the *environment*, the avoidance of chemical contamination of air, water, soil and buildings, as well as preventing damage to biodiversity are also major goals. Improved control of persistent, bioaccumulative and toxic substances is of particular importance in this respect. The potential impacts on the environment and human health of synthetic chemicals use and disposal are increasingly a cause of concern. Although research and data gathering increasingly point to a cause-effect relationship between the exposure to certain chemicals and adverse health or environmental effects, scientific evidence is not always conclusive. Improving knowledge of chemicals and management of risks from chemicals is therefore a priority.

In line with the above objectives, the Commission presented in October 2003³⁹ a proposal for a new EU regulatory framework for chemicals. The aims of the proposed new regulation are to improve the protection of human health and the environment while maintaining the competitiveness and enhancing the innovative capability of the EU chemicals industry. It establishes the new REACH (**R**egistration, **E**valuation and **A**uthorisation of **C**hemicals) system aiming to:

- Require companies that produce and import chemicals to provide information on the properties of substances produced or imported in the EU, in particular the 30,000 existing substances for which little or no information is available, and for higher volume substances to assess the environmental and health risks arising from their use and take the necessary measures to manage any risks they identify;
- Ensure that the resulting information is made available to downstream industries, public authorities, civil society and to the general public;

³⁹ COM(2003)644, 29 October 2003.

- Permit public authorities to take more speedy action in cases where risk reduction measures are needed;
- Other guiding principles of the REACH approach include precaution whenever there are information gaps prevention of environmental and health hazards arising from chemicals use; and the promotion of the substitution of dangerous chemicals by safer ones, where possible.

In addition to domestic action, the EU has been active internationally in promoting better health and environment, notably in developing countries, through the negotiation and conclusion of the Rotterdam Convention on the Prior Informed Consent (PIC) procedure for certain hazardous chemicals in international trade; and the Stockholm Convention on Persistent Organic Pollutants (POPs).⁴⁰

3.4.4. *Implement the EU regulatory framework on biotechnology*

Technological progress is one of the major driving forces behind economic growth. Increasingly, innovation is associated with the commercial exploitation of research and development results in rapidly growing areas of knowledge, such as biotechnology. In order for the EU to be able to fully exploit the potential benefits of biotechnology, while taking a careful approach to managing risks to human health and the environment, proper authorisation mechanisms have been established at EU level.

The EU regulatory framework in the field of GMO-related biotechnology is now complete. Measures set in place on the contained use and deliberate release of GMOs into the environment,⁴¹ as well as on full traceability and labelling for GMOs and processed products for food and feed use will ensure an appropriate level of human health and environmental protection. EU implementation of the Cartagena Protocol on Biosafety regulating the transboundary movements of GMOs, which entered in force in June, will further increase health and environment protection in third countries by controlling movements of GMOs. It is hoped that the implementation of these measures will contribute to re-establishing public confidence and demonstrate that the Community authorisation procedure for the release of GMOs works as designed.

However, Member States often lag behind with transposition and implementation of Community legislation in the field of GMOs. Yet, a timely and proper implementation of the EU regulatory framework is essential to demonstrate that technological progress and free trade are compatible with high standards of environment and health protection.

⁴⁰ The Rotterdam Convention, adopted and opened for signature by a Conference of Plenipotentiaries on 10 September 1998, establishes a first line of defence against possible problems by enabling importing countries, particularly developing countries, to decide which chemicals included in the PIC procedure they want to receive and those to exclude when they cannot manage them safely. The objective of the Stockholm Convention, adopted on 22 May 2001, is the elimination of intentionally produced POPs and the continuous minimisation, or where feasible ultimate elimination, of those POPs that are unintentional by-products. The Stockholm Convention on Persistent Organic Pollutants provides a framework, based on the precautionary principle, to ensure the safe elimination/continuous minimisation of the initial 12 priority Persistent Organic Pollutants. In future it will also enable Parties to identify other candidates for international action using established criteria so as to prevent and minimise their harmful impact on human health and the environment.

⁴¹ Directives 98/81 and 2001/18.

3.4.5. *Develop a strategy on the sustainable use of pesticides*

Agricultural over-production combined with increasing evidence that even low-level exposure to pesticide residues in food may contribute to health problems have led to a reassessment of EU policy in this sector. Steps will continue to be taken to minimise the health and environment risks of pesticides; improve controls on the use and distribution of pesticides; reduce the levels of harmful active substances including through substituting the most dangerous ones with safer, including non-chemicals, alternatives; encourage low-input or pesticide-free crop farming methods. Measures addressing these specific objectives will be covered by the Commission Thematic Strategy on the Sustainable use of Pesticides,⁴² which is currently under preparation.⁴³

⁴² Commission Communication Towards a Thematic Strategy on the Sustainable Use of Pesticides, COM(2002)349 final, 1 July 2002.

⁴³ These measures will also be covered in the context of revisions to the plant protection *acquis*.

4. A RENEWED APPROACH TO ENVIRONMENTAL POLICY

EU policy responses to reverse environmentally unsustainable trends will only be effective if placed within a further renewed approach to environmental policy that focuses on **integration, implementation and information**. The effectiveness of the EU in enhancing the environmental component under the Lisbon strategy depends on its ability to:

- Promote an integrated approach to policy-making and give a boost to the *integration* of the environmental dimension into all other policy areas at EU and national levels;
- Develop a new approach to *implementation* ensuring, on the one hand, that the EU body of legislation is properly complied with, to bring maximum benefits to the environment, while modernising, on the other hand, the environmental regulatory framework, by, wherever appropriate, moving toward a more flexible, market-friendly, approach, fixing long term environmental targets, and making increasing use of market-based instruments.
- Base environmental policy on sound knowledge and information to increase its efficiency; and make *information* on environmental impacts widely available to the public to foster the behavioural changes necessary to achieve sustainable development.

4.1. Integration

4.1.1. *Improve environmental policy-making*

Develop an integrated approach to environmental policy-making

Environmental legislation in Europe has traditionally focused on tackling single pollutants and protecting single environmental compartments, often presenting ‘end of pipe’ solutions to environmental problems rather than addressing the source of those problems or the combined effects of pollution on different environmental media and the interdependency between these media.

Curbing current unsustainable environmental trends requires developing an integrated approach to policy making. Environmental policy should not only focus on remedying the environmental impacts but also on addressing the most prominent environmental stressors.

The 6th EAP exemplifies this new approach notably through the EU Strategy on Environment and Health⁴⁴ and the use of Thematic Strategies. The latter, which are to be presented by 2005, aim to address in an integrated way seven central issues.⁴⁵ At the end of 2003, each strategy will have been the subject of a Communication focusing on problem definition. These Communications will be presented to stakeholders for a wide consultation. In a second stage, the strategies as such will be developed. They will include clear sustainable objectives and targets, to be met through a set of cost-effective measures accompanied by a timetable and their own specific objectives.

⁴⁴ See Section 3.4. – Environment & health.

⁴⁵ The seven thematic strategies cover: soil protection; marine environment; sustainable use of pesticides; urban environment; sustainable use and management of resources; waste recycling and air quality.

FIGURE A: PROGRESS MADE TOWARD DEVELOPING THEMATIC STRATEGIES

1. Air quality	<i>The Clean Air For Europe (CAFE) programme: Towards a Thematic Strategy for air quality</i> – COM(2001) 245 final, 4 May 2001
<i>Objective</i>	There is increasing scientific evidence that existing policies are not sufficient to protect human health and ecosystems from the harmful effects of air pollution. The Strategy will therefore propose an integrated set of cost-effective measures to achieve levels of pollution that do not give rise to unacceptable impacts on human health or the environment
2. Soil protection	<i>Towards a Thematic Strategy for soil protection</i> - COM(2002) 179 final, 16 April 2002
<i>Objective</i>	Soil is a vital resource that is essential of the proper functioning of the environment for life supporting function and as providing the basis for many economic activities. The aim of the strategy is to protect and conserve the ecological, chemical and physical status of soil resources in Europe
3. Sustainable use of pesticides	<i>Towards a Thematic Strategy on the sustainable use of pesticides</i> - COM(2002) 349 final, 1 July 2002
<i>Objective</i>	Growing concerns regarding the effects of pesticides on human health and the environment need to be addressed. The strategy will define the set of policy measures and instruments to achieve a more sustainable use of pesticides and to decrease the risks associated with their use
4. Protection and conservation of the marine environment	<i>Towards a Strategy to protect and conserve the marine environment</i> – COM(2002) 539 final, 2 October 2002
<i>Objective</i>	The marine environment is subject to a wide diversity of threats and pressures. An integrated and holistic approach is needed to ensure that the sum of the different actions achieves the necessary level of environmental protection to protect and conserve the ecological, chemical and physical status of the marine environment
5. Waste prevention and recycling	<i>Towards a Thematic Strategy on waste prevention and recycling</i> - COM(2003) 301 final, 27 May 2003
<i>Objective</i>	Waste generation is still increasing as waste prevention is not sufficiently considered a priority. There is therefore a need to explore ways to improve the EU approach to waste management within the framework of sustainable resource management. The objective is to reduce the environmental impact of resource use through waste prevention and recycling. An important additional aim is to simplify and improve implementation of existing waste legislation
6. Sustainable use and management of resources	<i>Towards a Thematic Strategy on the sustainable use of natural resources</i> – COM(2003) 572 final, 1 October 2003
<i>Objective</i>	Due to pervasive demand for natural resources, many different policies affect their use and the associated environmental impacts. These policies are not co-ordinated towards coherent goals regarding quantities used or environmental impacts generated. This issue needs to be addressed. The overarching objective is to decouple negative environmental impacts associated to the use of natural resources from economic growth.
7. Urban environment	<i>Towards a Thematic Strategy on the urban environment</i> – <i>expected end 2003</i>
<i>Objective</i>	Cities, home to 80% of EU citizens, generally suffer from poor air quality, noise, traffic congestion and a lack of sustainable planning. The Communication will propose a framework for local, regional, and national actions to promote sustainable urban transport, urban management and design with a view to improve the environmental performance and quality of urban areas and secure a healthy living environment for urban citizens

Increase policy coherence

Many of the current environmentally unsustainable trends stem from a lack of attention to inter-linkages between sectors, leading to policies in different areas working against one another rather than being mutually supportive. This lack of policy coherence renders policies both more costly and less effective and thus hinders progress towards sustainable development.

To further avoid that differing objectives between policy areas lead to policy inconsistency, a unified system for ex-ante impact assessment of all major policy proposals was introduced in the Commission in 2002⁴⁶ following a request from the European Council.⁴⁷ By allowing the Commission to base its decisions on sound analysis of economic, social and environmental effects, impact assessment enables informed political judgements and sensible trade-offs to be made in achieving competing objectives.

Impact assessment by itself is not sufficient: trade-offs and spill-overs need not only to be identified. They also need to be systematically taken into account up stream by sectoral policies.

4.1.2. Enhance sectoral integration

Environmental policy alone cannot address the challenges of environmentally unsustainable trends. The changes required to reverse current trends in fisheries, agriculture, energy, transport and other areas where environmental pressures are particularly high can only be achieved through a process of environmental policy integration in these sectors, and by also ensuring that the specific economic and social considerations applicable to these sectors are taken into account.

At EU level the importance of environmental integration is recognised in Article 6 of the Treaty. In June 1998 the European Council took an important step to give practical application to Article 6 - known as the 'Cardiff Process': it requested different Council formations to prepare strategies and programmes aimed at integrating environmental into their policy areas, starting with energy, transport and agriculture. The process now embraces nine sectors.⁴⁸

The Cardiff process has produced positive results. It has contributed to raising the profile of environmental integration, now regularly discussed at the highest political level. It has also led to concrete results for integration in some sectors - the historic reform of CAP achieved in June 2003 is a case in point. However, the consistency and implementation of existing strategies needs to be improved as underscored by the Spring European Council in March 2003.⁴⁹ To this end, the Commission intends to carry out a stocktaking of integration to date. It will examine which priority actions are required to revitalise the Cardiff process and, in particular, whether:

- Sufficient emphasis is placed on strategy implementation to ensure that Council formations deliver on promises made. Obviously the strategies need to be given time to ripen and be implemented. One should remain vigilant however that they do not remain mere declarations of intent.

⁴⁶ Commission Communication on Impact Assessment, COM(2002)276 final, 5 June 2002.

⁴⁷ See paragraph 24, Presidency Conclusions, Gothenburg European Council (15-16 June 2001).

⁴⁸ In addition to the transport, agriculture and energy sectors, the Cardiff process covers industry, internal market, development, fisheries, General Affairs and economic and financial affairs.

⁴⁹ See paragraph 57, Presidency Conclusions to the European Council (Brussels, 20-21 March 2003).

- Strategy monitoring needs to be strengthened: progress needs to be made on the development of integration indicators and sector-specific decoupling objectives.⁵⁰
- Adequate updating and review mechanisms have been foreseen to allow for adjustments and relevant policy developments to be taken into account in implementation.

The specificities of each strategy's institutional and policy contexts will be taken into account in the future development of the Cardiff process. In any case, efforts to improve environmental integration at EU level need to be backed by commitments at national level to reach their full potential.

4.1.3. Enhancing integration in Member States

The national level

The majority of EU Member States and acceding countries have now developed sustainable development strategies. EU and national sustainable development strategies are interdependent as, on the one hand, some environment-related policy objectives are established at the EU level - e.g. air quality norms, total allowed fish catches; and some policy instruments operate at the EU level – e.g. agricultural subsidies, internal market rules, state aids, etc. On the other hand, in line with the subsidiarity principle, Member States and regional authorities remain responsible for other areas of environmental policy making. Against this backdrop, it is essential to ensure coherence and maximise synergies between strategies at EU and national levels.

National strategies are at different stages of development. However, the structure and approach are clear enough to lend themselves to a preliminary comparative analysis. Such an analysis should be considered a first step toward fostering further convergence and consistency between the environmental objectives of the strategies; and toward identifying good practices with a view to facilitating their dissemination.

A first overview of existing strategies shows that they are highly diverse reflecting specific national contexts. The environmental dimension is a predominant theme in many strategies. However, some strategies address sustainable development in its three dimensions and include explicit social and economic objectives. Geographical focus also varies widely from one strategy to the next, with some focusing primarily or exclusively on domestic priorities, and others considering global issues as well; and with some giving prominence to the territorial dimension while others do not. Finally some strategies are based upon a sectoral approach -e.g. transport, agriculture, fisheries etc- while others are organised around priority issues -e.g. climate change, biodiversity protection, resource use, etc.

Exchanges of experiences may eventually help to identify common elements whose inclusion into the strategies would be conducive to progress irrespective of the national context, and which may therefore usefully be disseminated.

Priority should be given to exploring how key sustainable development issues are being addressed in Member States. On that basis, the most effective solutions devised could be highlighted with a view to spreading them elsewhere whenever relevant and feasible.

⁵⁰ This was underlined in the Presidency Conclusions to the Spring European Council (20-21 March 2003), paragraph 57.

A measure of success of a strategy is how effectively it tackles the problem of *resolving trade-offs between the different pillars of sustainable development*. Comparing institutional mechanisms in place for this, examining the principles on which they operate as well as instruments set in place, and how effective they are, would therefore be useful to determine which successful experiences may be followed.

A strategy is of little value unless it is properly implemented. *Indicators and review procedures* are also key to ensuring that there is proper follow-up. In this context, it is valuable to compare the steps that have been taken to assess the impact and effectiveness of the strategy. Measures should focus not only on impacts through outcome indicators, but also on processes to ensure coherence.

The local and regional levels

Local authorities play a key role in constructing, operating, and maintaining economic, social, and environmental infrastructures. They are responsible for setting local environmental policies and regulations, and assist in implementing national and EU environmental policies. They are particularly active in areas such as land use, waste management, mobility plans, or control of industrial nuisances. Due to these broad responsibilities and to the particular acuteness of environmental issues at the local level – e.g. air pollution in urban areas, EU and national efforts towards sustainable development need to be complemented by appropriate measures at the regional and local levels.

An important tool to achieve sustainable development at a local and regional level is the Local Agenda 21 process, launched at the Rio Summit in 1992. This Local Agenda 21 process has been particularly well supported in Europe since 1992.

Complementary initiatives such as the 1994 Aalborg Charter of 'European Cities and Towns towards Sustainable Development' and the Commission supported 'European Sustainable Towns and Cities Campaign' have helped make Europe the global leader in Local Agenda 21. Nearly 2,000 European towns and cities have voluntarily signed the Aalborg Charter committing themselves to developing long-term action plans for sustainability, a key step towards sustainable development at the local level.

The European Commission's forthcoming Thematic Strategy on the Urban Environment⁵¹ will propose a framework which local, regional national and European authorities will be invited to use when addressing the issues of sustainable urban transport as well as urban management, design and construction.⁵²

The Commission's main instrument to foster the further development of regional and local sustainable development strategies is the Cohesion Policy. Advancing integration of environmental –alongside economic and social- considerations into this policy area is thus the best avenue to promote sustainable development at local and regional levels. It may also help in facilitating further the transposition and implementation of EU environmental legislation.

⁵¹ http://www.europa.eu.int/comm/environment/urban/home_en.htm

⁵² The priority themes for the Thematic Strategy are urban management, urban transport, construction and urban design. Promoting integration between these and other themes will be an important part of the Thematic Strategy.

4.2. Implementation

During the last thirty years, the European Community has developed an extensive body of European environmental law. Approximately 200 pieces of EC environmental legislation, including more than 140 directives, are currently in force, covering almost all areas of environmental policy.

When adequately implemented in the Member States, Community environmental legislation has contributed to substantial progress – e.g. regarding the quality of waters or the treatment of waste. Ensuring the proper implementation of existing environmental legislation remains a priority.

Newly adopted Directives often replace and streamline older legislative initiatives.⁵³ In this context, renewed attention must be paid to the need to avoid generating policy inconsistencies and to ensure that cross-cutting issues are addressed satisfactorily.

Only a combined effort from government and society at large will make it possible to move towards sustainable development. It is therefore important that ongoing efforts to modernise environmental legislation be pursued in parallel to ensuring the proper implementation of EU environmental legislation.

4.2.1. *Confront the shortcomings of implementation*

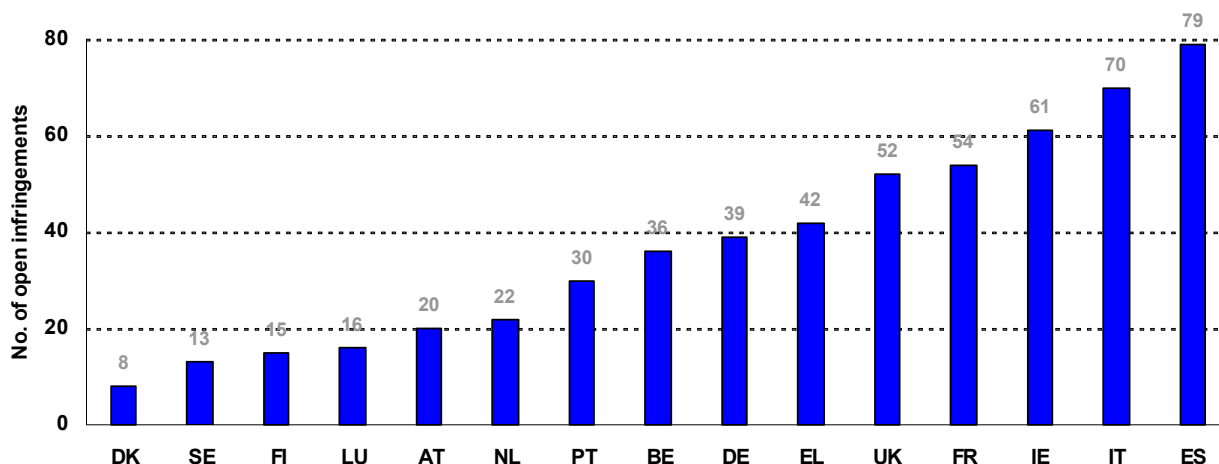
Implementation of existing legislation is an area that poses increasing challenges for both the Commission and Member States – present and future - and where improvements are urgently needed.

The current infringement difficulties

The environment sector alone represents over a third of all infringement cases concerning instances of non-compliance with Community law investigated by the Commission. However, these figures need to be put into perspective, as they reflect the whole spectrum of implementation problems, ranging from where Member States have failed to transpose a Directive through to cases where while having successfully transposed a Directive the Member States has failed to communicate this to the Commission. Figure B depicts the current situation.

⁵³ For instance, Directive 2000/76/EC on incineration of waste replaces three older Directives and Water Framework Directive 2000/60/EC replaces seven Directives.

FIGURE B: OPEN INFRINGEMENTS PER MEMBER STATES AS OF 04.11.2003



The graph illustrates the wide range in the number of open infringements among Member States, as of 4 November 2003.

Source: European Commission

Among the many factors causing the acute implementation gap, four play a particularly determinant role:

- Member States do not always give themselves the means to transpose and implement environmental legislation properly, as illustrated in certain cases by a lack of human and financial resources devoted to implementation. Implicitly opting for short-term avoidance of immediate costs signals a lack of political will to tackle longer-term issues.
- EU environmental legislation can sometimes be complex to implement. Several Directives require that far-reaching environmental assessment obligations be taken into account in planning and authorising a specific project.⁵⁴ This complicates decision-making, involving a wide range of policy sectors at different levels of governance. In addition, environmental rules must be regularly adjusted to take into account changing technical and scientific standards. These conditions can act as a brake to effective implementation.
- Environmental legislation may be costly: it can require significant economic investments from national authorities and society at large whose financing can be problematic.
- Infringements may be more widely reported than in other sectors: environmental issues attract a great deal of public attention and involve many stakeholders, which multiplies possibilities to bring instances of non-compliance to the attention of the Commission.

These factors have received specific attention as implementation has been identified as a priority in the 6th EAP:⁵⁵

⁵⁴ See for instance Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna (OJ L206, 22 July 1992, p.7) and Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (OJ L175, 5 July 1985, p.40) as modified by Directive 97/11/EC (OJ L73, 14 March 1997, p.5).

⁵⁵ The Commission publishes regular surveys on the implementation and enforcement of Community environment law. The latest survey, covering the year 2002, was published in July 2003 – SEC(2003)804

- In the framework of its commitment to update and simplify Community legislation,⁵⁶ the Commission will screen in 2004 waste and air quality legislation with a view to identifying specific legislative acts as candidates for simplification. Legal acts identified as candidates for possible simplification will be examined in detail and concrete simplification proposals be developed – such proposals will be made in 2004 for waste legislation.⁵⁷ This better regulation process will be continued in the future and will allow the Commission to better assess the consistency, clarity and effectiveness of EC environmental legislation.
- New working methods with Member States are being developed to sort out up-stream any potential implementation difficulties;
- Steps are being taken to address the financial burden of implementation and improve the cost-effectiveness of legislation, and to rely more systematically on the ‘best available scientific evidence’ when devising new legislation;
- Efforts are being made to offer citizens alternatives to complaint and infringement procedures.

Develop new working methods with Member States

It is crucial to involve Member States and regional authorities starting from the policy formulation stage. Insufficient co-operation with Member States in the past has in some cases resulted in legislation which is too prescriptive, too costly, or not in phase with the national context.

There is now growing awareness that environmental legislation should continue to be increasingly performance-based and flexible as to means to be used to reach targets. The Water Framework Directive adopted in 2000, which is flanked by a detailed implementation strategy involving Member States, stakeholders, NGOs and acceding countries, is a good illustration of how this new, framework approach can be made operational. The Directive is ambitious in its scope – the objective is to achieve good ecological and chemical status in all inland and coastal water by 2015 – but not overly prescriptive in its tools.

Increased co-operation between the Commission and Member States is of utmost importance prior to adoption. It is also essential once legislation has entered into force to sort out concrete implementation difficulties on the ground. Several important mechanisms have been set in place at EU level to bolster post-adoption co-operation.

- The *informal EU Network for the Implementation and Enforcement of Environmental Law* (IMPEL), a regular gathering between the Commission, Member States and acceding countries,⁵⁸ provides an opportunity for exchanging information and best practice and for injecting greater consistency to implementation, application and enforcement of environmental legislation. A major boost to IMPEL was the introduction, in 2001, of a scheme under which Member States

Commission Staff Working Paper. This latest survey provides up-to-date information on the state of application of Community environmental law. It also describes Commission efforts to smooth the progress of implementation in the framework of the European Network for the Implementation and Enforcement of Community Environmental Law (IMPEL).

⁵⁶ COM(2003) 71.

⁵⁷ See Communication from the Commission to the Council and the European Parliament – The Commission’s legislative work programme for 2004, COM(2003)645, 29 October 2003.

⁵⁸ There previously existed a similar network to IMPEL specifically dealing with acceding countries – AC IMPEL. The two bodies have now merged.

report and offer advice on inspectorates and inspection procedures on implementation.⁵⁹ This mechanism has contributed to drawing up minimum qualifications criteria and training programmes for inspectors; as well as to strengthening cross-border co-operation of inspections and in turn preventing illegal cross-border environmental practices.

- *Interpretative guidance documents* are regularly published to advise Member States on concrete aspects of implementation, e.g. efforts to provide clarifications on the implementation of nature and biodiversity legislation,⁶⁰ and recent Commission document aimed at helping Member States transpose the ‘Strategic Environmental Assessment’ Directive.⁶¹
- *Ad hoc seminars with Member States* on implementation of particularly complex directives are regularly organised with a view to prevent instances of bad application.
- *Capacity-building and training* efforts are carried out to facilitate implementation, e.g. training for the authorities responsible for dealing with individual Environment Impact Assessments in the framework of the Environment Impact Assessment Directive.
- In 2001 the Commission launched “*Name, Fame & Shame*” seminars to examine publicly with Member States a policy field or a defined piece of legislation, to highlight good and bad practice. These seminars contribute to sensitising Member States about the effects of poor implementation.
- Effective *reporting* from Member States on implementation of environmental legislation is key to monitoring the implementation process. In accordance with the 6th EAP, the Commission is committed to set in place a more coherent and effective system for environmental reporting.

Address the financing burden of implementation

Cohesion policy, which represents one third of the EU budget, makes a significant contribution to implementing environmental legislation. Taking further steps towards establishing sustainable development as an overarching objective of cohesion would usefully extend possibilities for structural funds’ contributions to environmental policy – alongside economic and social priorities – notably in relation to implementation – the Habitat Directive is an obvious candidate as the Community is required under it to co-fund the Natura 2000 network.⁶²

The use of structural funds requires compliance with Community policies and instruments including those for environment and sustainable development. In this way, structural funds constitute an important lever for the implementation of environmental legislation.

In parallel, the LIFE programme, which provides funding to projects aimed at demonstrating how new policies can be implemented in practice, continues to support the implementation of environmental legislation.

⁵⁹ Recommendation of the European Parliament and the Council on Minimum Criteria for Environmental Inspections (2001/331/EC), OJ L 118, 27 April 2001, p.41.

⁶⁰ See Section 3.2.4 - Improve implementation in the field of nature protection.

⁶¹ The Strategic Environmental Assessment Directive is due to be transposed by 21 July 2004. This document has been drawn up to provide guidance for Member States to ensure from an early stage as consistent implementation and application of the SEA Directive as possible across the whole Community. The document is available at http://europa.eu.int/comm/environment/eia/030923_sea_guidance.pdf

⁶² See Section 3.2. – Nature and biodiversity.

Offer alternatives to complaint and infringement procedures

The number of complaints in the environment sector alone has more than tripled between 1996 and 2000. In 2002, almost 600 new complaints on environmental issues were lodged with the Commission.

The complaint and infringement procedures set out in the Treaty cannot be the sole instruments in dealing with the growing public awareness and response to environmental issues in individual cases. In many cases, complainants can obtain satisfaction more quickly by using means of redress under national law.

Improving access to information and justice on environmental matters and harmonising complaints procedures in Member States are key to reducing infringement cases at EU level while enhancing citizens' rights. In this respect, the implementation at EU level of the Aarhus Convention⁶³ is particularly important as it will enhance the mechanisms to get access to environmental information and create a more efficient access to justice at Member State level.

4.2.2. Adapt environmental policy to the challenges of sustainable development

To progress on the way towards sustainable development, potential synergies between environment and the other two dimensions— economic and social- must be fully exploited.

Environment and the social dimension

– Environment and job creation

Economic activities linked to the protection of the environment are on a rising trend. The rising demand for better environment quality is already reflected in an expanding supply of environmentally friendly products and services, as well as in more investments in eco-efficient technologies. Current market developments in the eco-industry sector, as defined by the OECD, provide clear evidence of these trends. Both total turnover and employment creation in a sector which presently accounts for over 2.5 million jobs have constantly been above average over the last decade⁶⁴. Against this background, the challenge for the EU is to fully exploit this market potential, and turn the ideas of decoupling and sustainable development into a driving force for growth by placing the focus on measures which combine productivity and resources efficiency through innovation, new technology and job creating investment. In line with the European Initiative for Growth, this will be the main thrust of the Environmental Technology Action Plan.

– Environment and job quality

Environmental policies can affect the quality of employment. For example, the increased use of environmental technology has in several instances led to some high-tech cleaner technology jobs replacing low-tech waste management jobs. The evolution of environmental policies away from end-of-pipe solutions towards integrated solutions that tend to require more skilled workers will contribute to that trend. Such shifts need to be accompanied by retraining that allows workers to

⁶³ The Aarhus Convention deals with Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. See Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information.

⁶⁴ COM(2002) 122 final of 13.3.2002, Report from the Commission: Environmental technology for sustainable development

adapt to their new jobs. This retraining can in turn be an important vehicle to raise awareness of environmental challenges within the framework of sustainable development.

Workers are often also subject to high levels of exposure to environmental hazards, and this needs to be addressed by environmental policies. For example, it has been estimated that around 35,000 workers lose their lives each year due to exposure to carcinogenic chemicals at their workplaces.⁶⁵

– *Environment policy and the fight against poverty and exclusion*

Environmental policies can contribute to the fight against poverty and exclusion. The people who gain most from environmental policies are often society's poorest, who tend to occupy areas that suffer the most from air quality problems or blighted landscapes. Tackling a degraded environment can therefore have positive distributional impacts.

Environment and the economic dimension

While there can be a need to make trade-offs between a high standard of environmental protection on the one hand, and economic growth and competitiveness on the other, there are also a number of potential 'win-win' areas:

- *A number of private sector activities depend directly on the quality of natural resources.* Tourism and the agri-food industry are obvious examples. In specific cases of commercially exploited resources like fish-stocks, current unsustainable trends threaten not only the environment but also the industry itself and thus the livelihoods of those in the industry. In these conditions, it is crucial that there be clear limits to the pressure on natural resources to ensure that the resource has time to renew itself and maintain its long term productivity.
- *In the fast moving economy in which the private sector operates, innovation, knowledge and responsiveness to public perceptions are precious assets to be 'quicker to market and closer to customer.'* In this context, businesses can no longer succeed based on low cost strategies in which the environment is seen as a cheap resource to exploit. The environment becomes a source of value and a vehicle for competitiveness opportunely contributing to boosting industry's dynamism and image.
- *Environmental quality may be a means for attracting skilled workers and foreign investors.* An illustration of this trend can be found in the high-tech research park movement where 'green' locations are considered to be key assets, alongside highly qualified resources and the proximity to knowledge-base centres.

Synergies between enterprise and the environment need to be fully exploited to foster economic growth that brings broader benefits while minimising environmental damage. To this end, in addition to legislation, the environmental policy mix needs to include innovative instruments that may reconcile the business sector including industry with environmental protection.

On the one hand, a balanced approach to regulation based on a combination of flexibility, incentives and predictability needs to be taken to engage actively with industry and social partners. In this context, the Commission will, whenever appropriate and applicable, increasingly rely upon market-based instruments to improve cost-effectiveness. On the other hand, industry needs to be encouraged to further embrace sustainable development through a greater sense of environmental

⁶⁵ "Assessment of the Impact of the New Chemicals Policy on Occupational Health", RPA, 2003

responsibility and accountability. In cases where industry fails to act responsibly and causes damage to the environment, a sanctioning system, in the form of a liability scheme, must be in place.

Further develop synergies between environment and the private sector

– Promoting the development of environmental technologies

New and innovative technologies will be instrumental in achieving the shift to the model of a knowledge-based society the EU embraced in the Lisbon Strategy. These technologies are a powerful engine for economic growth, competitiveness and improved environmental protection and quality of life. They can contribute to reducing the costs of environmental protection by allowing users to meet environmental targets at a lower cost.

Environmental technologies can free up resources for use elsewhere in the economy. This decoupling of economic growth from environmental damage and resources use is precisely what is required to move towards sustainable development. Environmental technologies constitute therefore a natural bridge between the economic and environmental pillars of the Lisbon Strategy.

However, much of their potential remains unrealised due to market and institutional barriers hindering their use. Action is therefore required on several fronts crucial if the full potential of environmental technologies is to be realised. Further efforts need to be made to raise awareness and fill information deficits when it comes to the potential of these technologies - the LIFE programme makes a valuable contribution in this respect. In addition, removing market obstacles, especially many implicit and direct subsidies for more polluting technologies, is crucial.

Promoting the development of environmental technologies is a Commission priority. The Commission is working on an Action Plan to establish the adequate framework to boost environmental technologies. This Action Plan will build upon the Commission Report on environmental technologies of 2002⁶⁶ and the Commission Communication ‘Developing an action plan for environmental technology’ of 2003.⁶⁷

– Favour flexible market-based solutions

Provided that they are designed appropriately, flexible market-based mechanisms such as taxes, charges, reduction of environmentally harmful subsidies, promotion of trading mechanisms and voluntary environmental agreements are doubly attractive for environment policy: they can help achieve maximum efficiency in implementation while ensuring wider acceptance by industry by limiting costs. They can also contribute to making the EU economy more competitive by achieving more efficient use of natural resources. This potential is increasingly recognised by policy makers.

Important progress has been made at EU level in the use of market-based instruments in recent years as illustrated by the adoption of the Directive on Emissions Trading.⁶⁸ Action at EU level is of particular importance to avoid distortions in the single market and risks of a loss of competitiveness for industry stemming from national initiatives to ‘green the market.’

⁶⁶ COM(2002)122, 13 March 2002.

⁶⁷ Commission Communication – Developing an action plan for environmental technology, COM(2003)0131final, 25 March 2003.

⁶⁸ See Section 3.1. - Climate Change.

The Commission approach on the use of market-based instruments in the framework of environmental policy will be outlined in a Communication foreseen for 2004.

- Provide a predictable regulatory environment

Increasing reliance on flexible regulation and voluntary initiatives does not mean that more stringent regulation and binding instruments have lost relevance. Mandatory schemes continue to be necessary to lay down environmental standards. They must remain an integral part of the environmental policy mix.

Binding instruments can generate costs for industry and other economic actors. It is therefore imperative to set long-term targets to be reached gradually to allow those economic actors and industry to anticipate changes and to adjust their business plans to them. The more predictable our regulatory environment, the easier its incorporation into the normal investment cycle of business will be.

Foster new business approaches to the environment

- Promote responsibility and accountability

Government efforts to make the regulatory framework more flexible need to be backed by industry commitments.

This can best be achieved by the development of company Corporate Social Responsibility (CSR) strategies which explicitly cover the environment. CSR implies voluntarily taking on commitments that go beyond the regulatory framework in place to raise the standards of environmental protection and social development with a view to promoting sustainable development.⁶⁹ CSR is thus an important business contribution to sustainable development.

An increasing number of European companies have developed CSR strategies in recent years. These strategies are conceived in the first place as assets in competition, based on the increased profitability that can arise from an improvement in social and environmental performance. They are also seen as a marketing tool, based on the assumption that being perceived as ‘doing well while doing good’ is likely to attract new customers.

Communication by companies of the efforts that they are making is an important contribution to maximising the external impact of CSR. Raising awareness of CSR through the exchange of best practice between businesses and within sectors as well as benchmarking business initiatives are also important means of encouraging CSR. The European Multistakeholder Forum on CSR is one step towards achieving this. The two following tools, already supported by the Commission, can make an important contribution to operationalising CSR:

- *Publication of rigorous and independently verified environmental reports by companies.* The 6th EAP encourages the publication of such reports. This is particularly applicable to larger companies. The number of companies established in the EU that regularly publish environment reports is steadily increasing but is still not large enough. For these reports to realise their full potential, they should be based on common sets of indicators, thus allowing for sector-based benchmarking.

⁶⁹ See Communication from the Commission concerning Corporate Social Responsibility: a business contribution to sustainable development, COM(2002)347, 2 July 2002.

- *EU Eco-Management and Audit Scheme (EMAS)*. Introduced in 1993, the EMAS scheme is aimed at promoting continuous environmental performance improvements of industrial activities by committing organisations to evaluate and improve their own environmental performance and provide information to the public. Since 2001, the scope of EMAS has been extended to all sectors of the economy including public authorities⁷⁰ and efforts have been made to adapt it to the particular context of SMEs. EMAS registrations have increased steadily since 1993 but remain too unequally distributed throughout the Union.

Introduce an EU liability framework

Liability is the necessary corollary to business environmental responsibility. By acting as a disincentive to unsustainable practices, liability contributes to bolstering responsible behaviour from industry.

The draft Directive on Environmental Liability⁷¹ establishes an environmental liability framework at EU level based on the polluter pays principle. Under the draft Directive, operators are required to take preventive action where there is an imminent threat of damage and remedial action - at their own expense - when damage occurs.

Political agreement on the Liability Directive was reached in the June Environment Council, paving the way for legislative adoption in 2004, consistent with the spring 2003 European Council Conclusions.⁷²

Protect the environment through criminal law in cases of severe non-observance of Community law

Not all Member States provide for criminal sanctions against the most serious breaches of Community law protecting the environment. Therefore, the Commission presented in 2001 a proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law.⁷³ As the Council adopted instead a Framework-Decision⁷⁴ under the third pillar of the Treaty on the European Union, the Commission brought an action before the Court of Justice, in order to obtain clarifications as to whether provisions on penal sanctions belong to the first or third pillar of the Treaty on the European Union.⁷⁵

In addition, after the accident of the Prestige tanker off the Spanish coast in November 2002, the Commission promptly adopted two new instruments introducing criminal sanctions in order to prevent new oil spills on the European coastline.⁷⁶

⁷⁰ See Regulation 761/2001 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), OJ L 114/1, 24 April 2001.

⁷¹ Proposal for a Directive of the European Parliament and the Council on environmental liability with regard to the prevention and remedying of environmental damage, COM(2002)17 final, 23 January 2002.

⁷² Paragraph 58, Presidency Conclusions, European Council, Brussels, 20-21 March 2003.

⁷³ COM (2001) 139 Final – OJ, 26 June 2001, C180/238.

⁷⁴ OJ, 5 February 2003, L029/55.

⁷⁵ See press release of the Commission, IP/03/461 and summary of the case 176/03, published in OJ C 135 dated 7 April 2003, p.1.

⁷⁶ A proposal for a Directive on ship-source pollution and on the introduction of sanctions, including criminal sanctions, for pollution offences (COM(2003)92, 5 March 2003). The content of this proposal is twofold. It incorporates the existing international discharge rules for ship-source pollution into Community law (MARPOL 73/78 standards) and provides that violations for these discharge rules shall be qualified as criminal offences.

In order to complement the proposal for a Directive, the Commission adopted a proposal for a Council

4.3. Information and knowledge

The contribution of knowledge and information to environmental policy-making is twofold:

- Firstly, they empower decision-makers to make better policies. In the context of sustainable development increased knowledge is needed to allow decision-makers to assess whether action is required, to manage risks in situations of uncertainty and weigh the potential benefits and costs of policies in all three dimensions. It is therefore necessary to improve knowledge of environmental issues and their interactions to ensure that policies are based on the best available scientific knowledge and information.
- Secondly, making environmental information widely available to the public and increasing participation of stakeholders in environment policy-making are key to improving governance and in turn the quality of policy initiatives.

4.3.1. *Base our actions on sound knowledge*

The 6th EAP strongly reaffirms that environmental policies should be based on knowledge and the best available scientific evidence. The information that forms the knowledge base (i.e. data, statistics, indicators, or best practice of either a scientific, technical or economic nature) comes from a variety of sources and stakeholders, notably Member States, the European Environment Agency (EEA), Eurostat, the Community's 6th RTD Framework Programme and the various national research programmes and organisations. A better communication between the various networks involved is necessary to improve mutual co-ordination, increase information flows and make better use of the information that is currently available.

Knowledge as a driver for environmental policy

In addition to helping to raise public awareness of the status and trends of various environmental issues, information plays a number of key roles in the environmental policy process. The first is as a driver for environmental policy. By monitoring the driving forces, the pressures and changes in the state of the environment, problems can be identified as they arise. Secondly, information is key to creating the most suitable policy responses to an identified problem. Due to the complex nature of many environmental issues, knowledge of the inter-linkages and overlaps is essential to create the most appropriate policy response without adversely affecting other policy areas. Thirdly, environmental information helps decision-makers measure the implementation of environmental policies. Policies can only be effective if they are implemented correctly and consistently. Information feedback can ensure that new policies benefit from the lessons learned from previous experiences. And lastly, information helps to evaluate the effectiveness of policies - in short, to ascertain whether the problem has been solved.

Setting in place a suitable framework

Environmental information is often compared unfavourably, in terms of quality, coverage and timeliness, to data from other sectors, notably economic data. While these criticisms have some justification there is a considerable difference in the resources allocated to obtaining this information.

Framework-decision to strengthen the criminal law framework for the enforcement of the law against ship-source pollution (COM(2003)227final, 2 May 2003). This proposal relates in particular to harmonisation of penalties by setting thresholds of prison sentences and level of fines that Member States may impose.

However, improving environmental information is not purely a matter of increasing resources but also of adopting a better co-ordinated approach to data collection. In that area, the co-operation between the EEA and Eurostat networks and other existing networks supported under the Commission Research Framework programme should be improved. The Commission committed itself in the 6th EAP to providing a more coherent and effective framework for reporting and thus ease the burden on Member States. It will come forward with proposals to that effect in 2005.

However, sufficient resources need to be made available for monitoring and reporting in policy design. This may later have important consequences on the monitoring of implementation of environmental legislation and on the information of the public. For instance, comparability of information between Member States may be hampered if there is too wide a variety in the number or location of monitoring sites, as this was the case in the field of air quality.

Improving the knowledge base

Many of the forthcoming thematic strategies will include provisions, such as indicators, to monitor their effectiveness. Work is continuing to improve environmental indicators, notably in areas where gaps exist, such as biodiversity and chemicals.⁷⁷ In this respect, the priority on scientific support to policies introduced within the EU's 6th RTD Framework Programme, which offers research assistance to environmental policy initiatives at the different stages of the policy making cycle – conception, development and monitoring of implementation, is a useful tool.

Progress is however complicated by the fact that the scale of a problem in the environmental field can be difficult to assess. Nevertheless several initiatives are underway to identify and develop environment related 'integration' indicators, such as TERM⁷⁸ for transport, and IRENA⁷⁹ for agriculture. In addition a multinational task force has been set up by Eurostat at the request of the European Statistical Committee to develop Sustainable Development Indicators that can measure the overlap and trade-offs between the various dimensions.

A further Commission initiative aims to create a common Infrastructure for Spatial Information in Europe (INSPIRE), in order to ensure coherence between the public sources of spatial information thus allowing economies of scale and interoperability. Closely associated is the Global Monitoring for Environment and Security (GMES) initiative which seeks to develop monitoring services to support environment and security related policies. GALILEO and ESPON are additional relevant instruments. Among its many applications, GALILEO, the European Programme for Global Navigation Services, could contribute to ocean and cryosphere mapping, including the determination of the extent of polluted areas and tracking of pollution sources. ESPON, the European Spatial Planning Observatory Network, will help to define a set of territorial indicators to analyse the regional impacts of Community policies.

The aim is to deploy a broad range of instruments at the disposal of the Commission and the European Space Agency (ESA) in order to establish a European capacity for monitoring by 2008. The Commission will endeavour to improve the synergies between these different initiatives. The ultimate aim is to make full use of the potential of existing and new technologies for data collection and analysis to streamline and lighten the burden of reporting, to facilitate the implementation of

⁷⁷ BIO-IMPS (biodiversity implementation indicators) for biodiversity and REACH (Registration, Evaluation and Authorisation of Chemicals) for chemicals.

⁷⁸ Transport and Environment Reporting Mechanism.

⁷⁹ Development of agri-environmental indicators.

environmental policies and to foster the integration of the environmental dimension into other policies.

Managing risk

There will always be limits to knowledge no matter how much effort is made to increase it, due to insufficient scientific expertise. These knowledge gaps cannot be an excuse for inaction. There is a need to apply an approach to risk management based on the precautionary principle,⁸⁰ the prevention at source principle and the polluter pays principle. The environment liability Directive will ensure that the financial means are available to redress any environmental damage that might arise. An essential part of such an approach is ensuring that the nature and extent of risks are communicated to the public.

4.3.2. Improved access to information and participation in policy-making

Ensuring public access to environmental information not only increases government accountability and transparency, but also improves governance. In turn increased public participation in the environment policy-making ensures that all stakeholders are consulted, improving not only the quality of the policy outcomes but also the chances of their successful implementation. Given the potential impact of the measures proposed on a wide range of groups, article 10 of the 6th EAP stresses the importance of extensive stakeholder consultation at all stages of the policy process and of strengthening participation by environmental NGOs. In relation to this latter aspect, the Community has engaged in a programme⁸¹ to support environmental NGOs, including those from acceding and candidate countries, for the period 2002-2006.

Further public access to environmental information and participation in the environment policy-making at EU level will be achieved through the implementation of the Aarhus Convention,⁸² which also covers the right to environmental justice. Aarhus can be viewed as a means of democratising the environment and engaging with the public. The Commission adopted in October 2003 a package of proposals aimed at ratifying the Aarhus Convention.⁸³

⁸⁰ See Communication from the Commission on the precautionary principle, COM(2000)1 final, 2 February 2000.

⁸¹ Decision No. 466/2002/EC of the European Parliament and of the Council of 1 March 2002 laying down a Community action programme promoting environmental NGOs primarily active in the field of the environment (OJ L 75, 16 March 2002, p. 1-6).

⁸² The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

⁸³ The legislative package, adopted on 24 October 2003, consists of three proposals: a proposal for a Directive of the European Parliament and the Council on access to justice in environmental matters (COM(2003)624); a proposal for a Regulation of the European Parliament and of the Council on the application of the provisions of the Aarhus Convention on access to information, public participation in decision making and access to justice in environmental matters to EC institutions and bodies (COM(2003)622); a proposal for Council Decision on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision making and access to justice regarding environmental matters (COM(2003)625).

5. NEW MEMBER STATES – SPECIFIC CHALLENGES OF ENLARGEMENT

The conclusion of enlargement negotiations, the signature of Accession Treaties with Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic, and Slovenia, and the completion of the ratification process in these countries, have paved the way for an historic enlargement of the EU to ten new members in 2004.

Under EU guidance and monitoring, acceding countries have made significant efforts on the environmental front over the past ten years. Alignment with EU standards is getting closer – Around 90% of the *acquis* has been transposed on average; in certain sectors such as horizontal legislation, air and waste transposition is nearing completion. In parallel, important steps have been taken on implementation, notably through administrative- capacity reinforcement.

On the eve of enlargement, the acceding countries are for the most part well on track to be able to implement the *acquis* from accession. The Comprehensive Monitoring Reports on the state of preparedness for EU membership⁸⁴ adopted in November 2003 have not identified issues of serious concern in the environmental field. However, the Reports drew attention to a number of issues where acceding countries still need to enhance their efforts to meet the obligations of membership: the main concern remains for most countries the implementation of the Natura 2000 legislation and for some countries waste management and industrial pollution.

Accession negotiations continue with Romania and Bulgaria although the environment chapter has been provisionally closed with the latter.⁸⁵ The Regular Reports adopted by the Commission at the same time as the Comprehensive Monitoring Reports for the acceding countries conclude that Bulgaria has reached a good level of alignment of the environmental *acquis* and needs to maintain and reinforce its implementation efforts in particular the strengthening of administrative capacities. The report on Romania concludes that while a considerable amount of legislation has been adopted administrative capacity and financial resources dedicated to the sector remain inadequate.

The above efforts are beginning to pay off. The state of the environment has improved in recent years in acceding and candidate countries, with substantial reduction of air and water pollution achieved.⁸⁶

The Commission is taking every step to respond to the post-accession environmental challenges, giving priority to capacity-building and financing where further progress is required; and to integration which has suffered from the almost exclusive focus on implementation in the last decade and where the situation is deteriorating.

⁸⁴ Comprehensive monitoring reports of the European Commission on the state of preparedness for EU membership of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia, COM(2003) 675 final; SEC(2003) 1200; SEC(2003) 1201; SEC(2003) 1202; SEC(2003) 1203; SEC(2003) 1204; SEC(2003) 1205; SEC(2003) 1206; SEC(2003) 1207; SEC(2003) 1208; SEC(2003) 1209.

⁸⁵ Transitional arrangements until 2011 for the sulphur content of liquid fuels, until 2009 for emissions of volatile organic compounds from the storage and distribution of petrol, until 2011 for the recovery and recycling of packaging waste, until 2014 for the landfilling of certain liquid wastes, until 2009 for certain shipments of waste, until 2011 for IPPC (in respect of certain existing installations), until 2014 for urban waste water, and until 2014 for large combustion plants have been agreed.

⁸⁶ See Europe's environment: the third assessment, European Environment Agency, Environmental assessment report N°10, 2003.

5.1. Implementation of the environment *acquis* – the institutional dimension

Accession will bring to environmental administrations in the acceding countries increased requirements and additional tasks in relation to monitoring, inspections, permit emitting and reporting, which present them with a challenge. Difficulties of environmental authorities in obtaining adequate funding and staffing as well as a persistent shortage of co-ordination between policy sectors have unfortunately hampered the progress made to date.

On the positive side, a majority of acceding countries allocate increasing human resources to the implementation of environmental legislation. In addition, exchange programmes with Member States administrations have been set up under bilateral programmes and have been included into ‘twinning projects.’ In parallel, inspection offices are being strengthened, environmental agencies established and monitoring systems for air and water quality extended. However, these steps alone remain insufficient. Member States should be encouraged to continue technical assistance and twinning type action after accession. The Transition Facility can assist in this process.

5.2. Implementation of the environment *acquis* – the financial dimension

The financial challenge is as significant as the institutional challenge. The cost of compliance with the investment-heavy environmental *acquis* for the ten acceding countries is estimated to amount to approximately €50-80 billion. To this can be added a further €30 billion for Bulgaria and Romania.⁸⁷ The Urban Waste Water Treatment Directive alone will require major investments of around €15 billion. To achieve full implementation the new Member States will have to spend on average between 2% and 3% of GDP on environment in the coming years. However, current expenditure is generally well below this target.

Noticeable progress has been made in recent years:

- Environmental infrastructure has been developed and improved: the rates of connection to waste water treatment plants, which remain well below the EU average level, have nonetheless doubled since the early 1990s. Since 2000 the pre-accession instruments ISPA, PHARE and SAPARD have supported the improvement of environmental infrastructure.
- Implementation plans accompanied by financing strategies have been prepared for a number of investment-heavy pieces of legislation.

Waste plans have now been adopted in most of the acceding countries and air quality assessments have been undertaken. However, more needs to be done. Environmental financing in the pre-accession period has proved to be a particularly problematic task, especially in the water and urban waste management sectors, notably due to administrative shortcomings in a number of countries. It is paramount to secure adequate financing resources to achieve effective implementation of EU legislation. In parallel, institutional capacities need to be strengthened to ensure that financial resources aimed at funding environmental infrastructure are efficiently used.

Against this background, priority actions should focus on:

- Ensuring that structural and cohesion funds as well as the rural development programmes are used to help the new Member States achieve full compliance with the *acquis*, by the

⁸⁷ These figures only cover the investment-heavy environmental *acquis* (urban waste water, waste water supply and air [IPPC]). See Commission Communication (2001)304 final.

end of the negotiated transition periods, and in particular for the investment-heavy directives for waste management, water supply and urban wastewater.

- In the current period, ensuring that a significant part of the main Structural Funds be used for financing environment infrastructure and capacity-building.
- Ensuring that EU grant assistance leverages financing from other sources including the European Investment Bank (EIB), bilateral grants and credit schemes, commercial bank loans, foreign direct investment, and revenue generated from consumer charges, fees or taxes
- Encouraging acceding countries to secure sufficient resources for implementation in national budgets. The binding nature of the targets and clear final deadlines for directives for which transition periods were awarded (for which detailed implementation including financial strategies are foreseen) justify reserving adequate financial and human resources for implementation at national level.

5.3. Enhance integration

The focus placed by environment policy-makers in acceding countries on compliance with the *acquis*, as well as the general shortage of resources have hindered progress on integration. Efforts on the integration front need to be enhanced in the post-accession period.

Economic growth prospects in acceding countries over the coming years will generate steady increases in transport and electricity demand which could jeopardise the climate change performances of some of these countries. Principally due to economic decline and restructuring in the first half of the nineties, acceding countries are well on track to meet their Kyoto target. Total greenhouse gas emissions in these countries declined by 32% between 1990 and 1999.⁸⁸ To ensure that growth will not be coupled with increases in greenhouse gas emissions, long term infrastructure investments in the acceding countries will have to be sustainable.

Further integration of climate change policies in the Structural Funds, under which many transport and energy investments will be funded, should therefore be seen as a priority in a long term post-Kyoto perspective. In addition, a particular focus needs to be placed on transport and energy integration:

Transport: Acceding countries continue to perform substantially better than current EU Members when it comes to modal split or energy consumption for transport and Nox emissions. However, indicators are starting to point in the wrong direction with declines in rail transport for freight, a 62% increase in motorway lengths and a 73% increase in car ownership.

Community financial assistance, in particular the transport programmes, should therefore give priority to sustainable transport projects, with a special emphasis on the renovation of urban public transport systems where acceding countries are lagging behind, and on modal shift.

Energy: Energy efficiency has improved in the acceding countries due to positive measures undertaken but also due to economic restructuring. Nevertheless, it remains well below EU15 average and the intensity of energy consumption per unit of production is still much higher than in EU15.

⁸⁸ See Report from the Commission under Council Decision 93/389/EEC for a monitoring mechanism of Community greenhouse gas emissions, COM(2002)702 final, 9 December 2002.

The existing potential for win-win solutions in energy saving needs to be fully exploited in the context of investments made for power generation and business sectors. Any Community support in those sectors should include whenever appropriate an in-built energy saving component.

As regards renewable energy, acceding countries have adopted targets in the frame of the Directive on electricity from renewable energy sources.⁸⁹ The total EU25 target for renewable electricity for the year 2010 has now become 21%, instead of 22% for EU15.

⁸⁹ Directive 2001/77. This Directive will be transposed by new Member States in May 2004.

6. INTERNATIONAL DIMENSION

As the environment knows no borders, the environmental pillar of sustainable development cannot be promoted by individual countries or regions acting alone. The EU is therefore committed to promoting environmental protection externally.⁹⁰ The challenges of environmental policy in an international setting require the formulation of specific responses which the EU is developing.

6.1. International challenges for environmental policy

The EU faces four main challenges to advance the global sustainable development agenda:

Promote multinational and multilateral solutions to environmental issues

As many of the most critical environmental challenges are international in essence, effective responses can only come through a multilateral and multinational approach. Promoting international environmental co-operation at bilateral and multilateral levels, in the face of short-term economic and political pressures and at a time when the temptation to resort to unilateral action is strong, is a complex task.

Curb negative environmental spill-over effects on third countries.

Many of the EU's internal policies – notably agriculture and fisheries- have spill-over effects on third, often developing, countries. In addition, production and consumption trends in Europe bear environmental consequences for third countries and contribute to global environmental problems. Although there is no conclusive evidence, there is concern that high environmental standards may lead to the migration of polluting industries to poorer countries with less stringent standards in what is often termed the 'race to the bottom.' While industrialisation and economic development in third countries should be encouraged, the EU must ensure that in doing so third countries do not end up bearing the EU's social and environmental costs. One means of mitigating the transfer of costs is through the transfer of cleaner technologies, for instance by using the Kyoto flexible mechanisms.

Address the link between poverty and environmental degradation.

There are now 1.2 billion people around the globe who live on less than 1 dollar a day. Such levels of poverty and the struggle for survival leave too few means for investing in environmental protection. Yet sustainable management of local natural resources is an absolute necessity for developing countries as the economies of many of these countries rely heavily upon these resources. As poverty and environmental degradation are inextricably linked, international efforts are necessary to create the conditions for environmental protection and sustainable development by alleviating poverty.

Consider the relationship between environment and security.

There is a strong link between environmental and security issues. Scarce resources can represent a potential for conflict, as illustrated by recurrent tensions over water resources in some parts of the world. In addition, conflicts can lead to substantial environmental degradation that may hamper economic and social development, engender migration movements and in turn, nurture domestic

⁹⁰ Commission Communication, Towards a Global Partnership for Sustainable Development, COM(82)final, 13 February 2002.

and regional tensions. More positively, low-profile environmental issues can be used as catalysts to facilitate co-operation and build confidence between neighbouring countries.

These interlinkages between environment and security need to be explored more systematically. This implies that security concerns be taken into account in the way environmental policy is conducted. Similarly, the formulation of foreign policy needs to better integrate environmental concerns.

6.2. EU responses

To effectively respond to these challenges, the EU has given priority to the four following orientations.

6.2.1. Place sustainable development at the centre of the international agenda

Based on its belief that a multilateral and multinational approach is the only effective way to address global environmental issues, the EU has been at the forefront in setting up and advancing the international environmental agenda in recent years. This is illustrated both by its commitment to, and leadership in, multilateral environmental processes and by its active engagement with partners on environmental issues. Most of the necessary international agreements having been put into place, the next task is to ensure their effective implementation in developed and developing countries.

EU Leadership at the Johannesburg World Summit on Sustainable Development

The successful outcome of the Johannesburg Summit owes much to the EU's determination and leadership. The Johannesburg Plan of Implementation not only set new targets in important areas such as access to sanitation, biodiversity protection, protection of fish-stocks and regulation of chemicals; it also launched more than two hundred voluntary partnerships for sustainable development, including two important EU partnerships on water and energy. There is also a commitment by all countries, with developed countries taking the lead, to change unsustainable patterns of production and consumption so as to decouple economic growth from environmental degradation.

The EU is determined to translate the Johannesburg Plan of Implementation into concrete results. The EU Sustainable Development Strategy is the main vehicle to achieve this. The review of the Sustainable Development Strategy planned for 2004 will provide an opportunity to further integrate the internal and international dimensions.

As regards concrete action, the further development of the **EU Water Initiative** – which has raised high expectations in particular in Africa- notably through the establishment of the proposed EU Water Facility, will be key. Equally important will be to set up targets for renewable energy through the **Johannesburg Coalition on Renewable Energy (JREC)** launched thanks to EU efforts; and to successfully implement the **EU Initiative for Poverty Eradication and Sustainable Development (EU Energy Initiative)**. The June 2004 World Renewable Energy Conference will be an opportunity to present and achieve progress on both initiatives.

Engaging partners on environmental issues

The fast-approaching enlargement of the EU will bring ten new Member States to the EU in 2004 but also new neighbours to the East, and closer links with the Southern Mediterranean rim through the accession of Cyprus and Malta, resulting in an unprecedented widening of the EU's strategic interests. In this context, enhancing relations with Western Balkan countries, Russia and the New

Independent States as well as the Mediterranean Basin will be of key importance, including in the environmental field, to promote sustainable development in the countries covered by the **Wider Europe policy initiative**.⁹¹ In the context of this initiative, the Commission is due to adopt a Wider Europe Package including a strategy paper, an action plan and country reports which will cover the environmental dimension.

The EU is also committed to advancing environmental co-operation with key **partners outside the broader European region**, whether in the developed or developing world and co-operation is currently ongoing with a number of countries.

As the world's largest economies, the EU and the U.S. should provide leadership and commitment to the sustainable development agenda. Common actions in the past have led to important successes such as, the establishment of the Regional Environmental Centre for Central Europe and Eastern Europe. The EU remains firmly committed to continuing to engage actively with the U.S. at bilateral and multilateral level with a view to deepening co-operation.

6.2.2. Strengthen policy consistency

The EU's credibility and effectiveness in promoting sustainable development at an international level depends, amongst other things, on its ability to ensure more coherence between its internal and external action and to further integrate environmental concerns into its own external policies

Ensure coherence between EU internal and external policies

At Johannesburg it was recognised that internal policies have spill-over effects on third countries that need urgently to be tackled. In this framework the EU and other developed countries committed themselves to developing a **Ten-year Framework of Programmes on Sustainable Production and Consumption**.⁹²

In addition, in order to reduce the EU's environmental footprint, **ensuring coherence between our internal and external policies** will be key, in particular in the fisheries and agricultural sectors. Pursuing the incorporation of commitments made at Johannesburg into internal policies is fundamental if the EU is to live up to its international obligations.

Further integrate environmental concerns into EU external policies

Integration efforts into development co-operation, foreign and trade policies are underway, in line with the **Development and General Affairs Councils' environmental integration strategies** adopted respectively in 2001 and 2002. These efforts need to be pursued, since, as with the other Cardiff integration strategies, these should not be one-off exercises but rather effective commitments to deliver through permanent processes.

In implementing the strategy, particular attention is attached to two objectives: promoting synergies between development and environment objectives especially in the follow-up to the WSSD in developing countries and ensuring that appropriate procedures are in place to assess the environmental impacts of all development co-operation programmes. Reciprocally when devising environmental policy it is also necessary to ensure that the consequences on developing countries are duly considered.

⁹¹ See Commission Communication on Wider Europe, COM(2003)104 final of 11 March 2003.

⁹² For further information relating to sustainable production and consumption, see section 3.3. – Resources management.

In the field of trade policy, the **Sustainability Impact Assessment (SIA)** programme, first developed in 1999, continues to be refined with a view to informing trade negotiators of the possible social, environmental, and economic consequences of a trade agreement. The objective is to integrate, where possible, the results of SIA into the trade negotiations and to design, where needed, possible flanking, complementary, measures to maximise positive impacts while reducing any negative ones.⁹³ In addition, the EU endeavours to integrate and discuss sustainable development in the context of bilateral and regional trade negotiations.

6.2.3. Contribute to creating the conditions for global sustainable development

As the Johannesburg Plan of Implementation is an essential contribution to the poverty alleviation agenda, the EU is committed to fulfilling its objectives. In addition, the EU continues to play a leading role in furthering other ongoing multilateral efforts aimed at ensuring that the benefits of globalisation are more widely shared and poverty reduced, and at increasing the resources available for sustainable development in developing countries. In the EU's view, the Johannesburg Plan of Implementation, the Official Development Aid (ODA) commitments agreed at the Monterrey Conference on Financing Development (2002) and the WTO negotiations under the Doha Development Agenda (2001) form three complementary pillars necessary to achieve sustainable development at a global level.

In this context, concrete steps need to be taken to make available the increased levels of ODA committed in Monterrey with a view to contributing to the Millennium Development Goal of halving the number of people living in poverty by 2015. Efforts towards the timely conclusions of the current WTO negotiations in the context of the 'Doha Development Agenda' need to be pursued in spite of the disappointing outcome of the 5th WTO ministerial meeting in Cancún, bearing in mind that the sustainability agenda constitutes the necessary balancing element without which the free-trading system promoted by the WTO cannot foster a more equitable share of the benefits of globalisation. In this context, adequate supporting measures – e.g. enhancing corporate responsibility, sustainable and fair trade as well as export credits consistent with sustainable development - need to be encouraged.

In the meantime, the EU will continue to play a pivotal role in advancing Multilateral Environment Agreements (MEAs) -notably the Kyoto Protocol but also others, such as the Convention on Biological Diversity⁹⁴- and in seeking new financial means to facilitate the implementation of all the key MEAs as well as environmental protection in developing countries. The EU will also continue to actively support the strengthening of the United Nations Environment Programme (UNEP) both financially and institutionally in order to enhance global environmental governance.

6.2.4. Enhance the EU's voice in the international environmental debate

An increasing awareness of global environmental problems in recent decades and the subsequent adoption of numerous multilateral environmental agreements, as well as the many interlinkages existing between environment and security issues, call for an improved framework for environmental diplomacy at EU level. The European Security Strategy due to be adopted by the European Council this December provides an opportunity to make progress in addressing joint environment and security concerns.

⁹³ SIAs of the EU-Chile Association Agreement as well as of certain aspects of the Doha Development Agenda have already been concluded. SIAs for ACP, Gulf Co-operation Council and the Euro-Mediterranean Free Trade Area are ongoing or about to be launched.

⁹⁴ See Section 3.2. – Nature & biodiversity.

At the Thessaloniki European Council, European heads of state and government endorsed a proposal from the Greek presidency of the Union to create a ‘network of experts’ to lead a European Green Diplomacy Initiative.⁹⁵ This initiative, conceived in a first stage as a network, is aimed at allowing appointed experts or diplomats to communicate regularly in view of exchanging information and ideas on cross-cutting environmental and sustainable development issues in the framework of bilateral and multilateral negotiations. This is an important development in the implementation of the General Affairs Council’s environmental integration strategy and could provide a useful vehicle to enhance the EU’s voice and influence on international environmental issues. The Commission is therefore exploring the potential of this initiative as well as its implications for and possible articulations with existing co-ordination mechanisms.

⁹⁵ See Section 2.2. - Challenges ahead for environmental policy.

7. CONCLUSIONS

This Review has made the case for speeding up the pace of reforms to improve the state of the environment in the EU and internationally, notably by achieving a decoupling between environmental pressures and economic growth in line with the objectives set out in the 6th EAP and in the EU Sustainable Development Strategy.

The Review's conclusions point to the need for further efforts to deliver on the EU commitments on environment and sustainable development. These efforts should focus on ensuring the timely implementation of existing environmental legislation; strengthening policy coherence and integration; continuing to promote sustainable development internally and on a global scale; and making a success of enlargement and establishing sound bases for future environment policies.

The 2003 Spring European Council pointed out that *“economic and social development will not be sustainable in the long run without taking action to curb environmental pressures and preserve natural resources within the framework of the comprehensive sustainable development strategy launched at Gothenburg. This must include action aimed at decoupling environmental degradation and resource use from economic growth.”*⁹⁶

The challenge of the years to come is therefore to develop balanced policies to stimulate growth and employment which also protect the environment and public health from increasing pressures and threats so as to preserve our quality of life and that of future generations.

(1) Implementation

Implementation of existing EU environmental legislation and environmentally relevant legislation in other sectors is key to improving the status of the environment. Efforts towards that goal should be pursued and more emphasis should be placed on workability when devising new legislation.

In the context of enlargement, the Commission will give priority to securing appropriate funding to finance the investment needed to meet the transitional periods agreed in the Acts of Accession for the implementation of the environmental *acquis*.

To translate legislation into concrete results for the environment, it is important that Member States:

- Complete their **National Allocation Plans under the Directive on Emissions Trading**, due for submission to the Commission by March 2004; and increase their efforts to meet their burden-sharing targets under the Kyoto Protocol by developing and implementing national climate change strategies.
- Transpose and implement the completed **EU regulatory framework on biotechnology** to ensure an appropriate level of health and environment protection while stimulating innovation and safeguarding the competitiveness of the EU industry.
- Fully transpose and apply the existing **waste legislation** and, in turn, reduce waste disposal.

⁹⁶ Paragraph 53, Presidency Conclusions, Brussels European Council (20-21 March 2003).

- Take all necessary steps to timely implement the **Water Framework Directive** based on Joint Implementation Strategy, and other water directives, to adequately preserve water resources.

(2) **Integration**

Environmental policy alone cannot reverse trends in policy areas where environmental pressures are particularly high. The integration of environmental protection requirements into all Community policies and actions should therefore continue to be promoted. In particular:

- Efforts to better capture the environmental costs of different transport modes in prices charged to users should be pursued to reach full internalisation. Through a progressive approach, the pricing of transport infrastructure must better reflect – and help internalise – the external costs.
- Environmental integration efforts need to be pursued in the agricultural sector, in line with the reform of the CAP decided in June 2003, to meet the objectives set at the WSSD and in the 6th EAP. To this end:
 - **Reform of the Common Market Organisations** should be continued, with a view to further decoupling producer support from production subsidies through the introduction of the single farm payment.
 - The **mid-term evaluation of rural development plans** is an opportunity to further strengthen the contribution of rural development plans to environmental policy objectives, in particular as regards climate change and protection of Natura 2000 sites.
- Building upon the recently achieved reform of the **Common Fisheries Policy**, environmental integration efforts need to continue in the fisheries sector as set out in the Commission Action Plan for environmental integration of the CFP.⁹⁷
- **Cohesion policy** should continue to contribute to environmental policy objectives.

In parallel to these efforts, environmental policy integration needs to be reinvigorated. In particular:

- Integration indicators should be further developed, building upon work in progress in transport – TERM, agriculture – IRENA, and energy – ERM.
- Sector-specific decoupling objectives against which progress towards sustainable development can be measured should be set.
- Updating and review mechanisms should be included in Council integration strategies so as to ensure that the objectives are translated into visible action.
- In line with the Presidency Conclusions to the March 2003 European Council,⁹⁸ the Commission will carry out an annual stocktaking of environmental integration.

⁹⁷ Communication from the Commission setting out a Community Action Plan to integrate environmental protection requirements into the CFP, COM(2002)186, 28 May 2002.

⁹⁸ Paragraph 58, Presidency Conclusions, Brussels European Council (20-21 March 2003).

(3) The environmental dimension of sustainable development

- All necessary steps will be taken to achieve a high level of economic growth and social cohesion in the Union while ensuring **decoupling** from environmental degradation.
- Further convergence between the EU and **national** environmental policies should be fostered. To this end, the Commission will support benchmarking and peer review between Member States and the identification and exchange of good practice on the environmental dimension of their national sustainable development strategies.
- **Headline environment indicators and sustainable development indicators** should continue to be developed on the basis of the Task Force set up by Eurostat and in close collaboration with Member States and the European Environment Agency.
- The **Review of the Sustainable Development Strategy** planned for 2004, provides an opportunity to assess progress made thus far, to consider the linkages between the EU and national sustainable development strategies and identify priority actions needed to speed up the pace of reform. In addition, it will help to clarify the links between Gothenburg, Lisbon and Cardiff and to better integrate the internal and external pillars of the Strategy.
- The **Environmental Technology Action Plan** (ETAP), planned for the end of 2003, should propose concrete measures at EU and national level. The Commission will further examine, jointly with the EIB Group, relevant instruments to support increased equity investment in environmental technologies.
- The environmental regulatory framework will be modernised by increasingly using, where appropriate, market based instruments to promote environmental protection, building upon recommendations in that sense in the Broad Economic Policy Guidelines since 2001. The **Communication on the use of market-based instruments for environmental policy in the internal market** planned for 2004 will clarify the interrelations between the new instruments that have been recently introduced at EU level -e.g. emissions trading, energy taxation, state aid environmental guidelines.
- Swift adoption by the Council of the Commission's proposal for a new **chemicals policy** is a priority, so as to allow the timely entry into force of the REACH system.
- Adoption of the Environmental Liability Directive should be completed speedily to allow for the establishment of an EU environmental liability framework based on the polluter pays principle.

(4) International dimension

In order to ensure the timely and successful implementation of the EU initiatives launched at the WSSD, the EU will need to:

- Take forward the **EU Water Initiative** by moving to action on the ground in concert with all major stakeholders. A significant boost would be given to this initiative if Council can agree to an additional €1 billion **Water Facility** for implementation in ACP countries as proposed by the Commission.
- Take a leadership role in the preparation of the June 2004 World Renewable Energy Conference to be held in Bonn.

- Take forward the EU Initiative for Poverty Eradication and Sustainable Development and Johannesburg Coalition on Renewable Energy, notably by agreeing upon targets for renewable energy.

ANNEX

Facts and figures illustrating environmental trends in greater detail

COMPLEMENTARY INFORMATION REGARDING THE EMISSIONS TRADING DIRECTIVE

The Directive provides for an introductory phase of trading in the power and heat generation sector and energy-intensive industry from 2005 onwards as a preface to the start of international emission trading under the Kyoto Protocol in 2008. The Commission will assess the coverage of the scheme in 2004 and 2006 with a view to its possible extension to other sectors, such as transport, chemicals or aluminium.

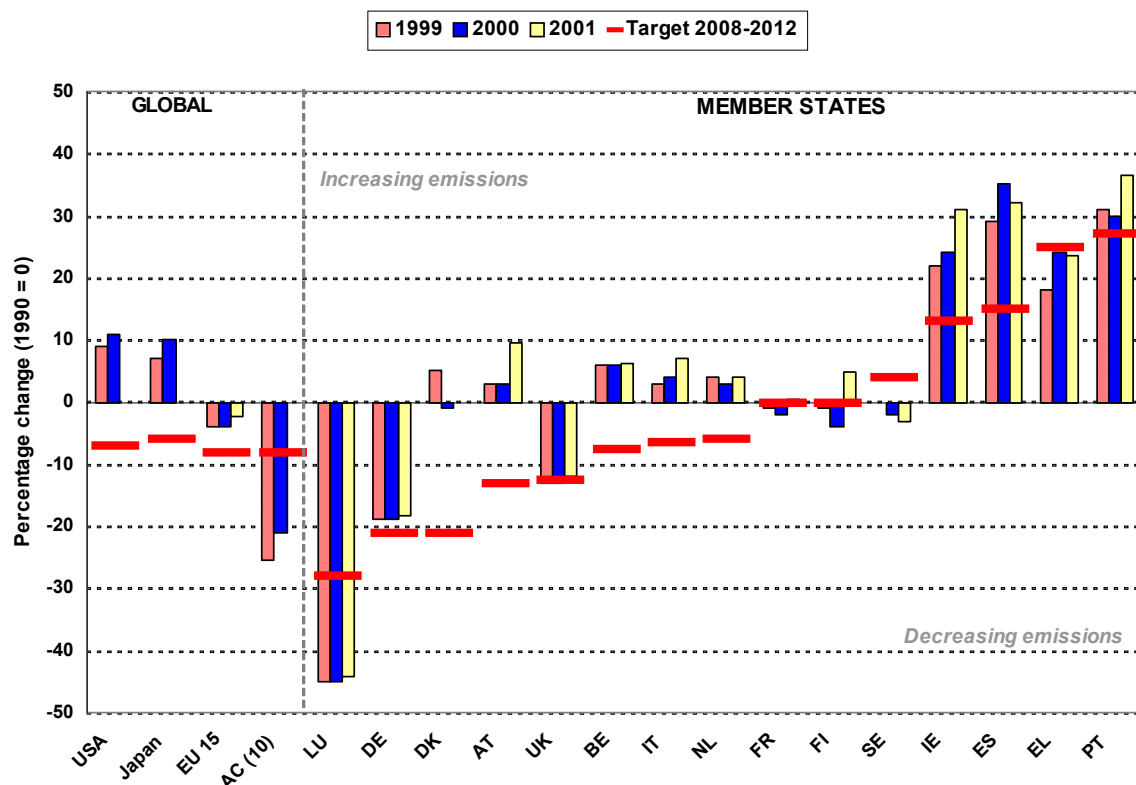
Member States and Acceding Countries are pressing ahead with implementation of the Directive. An important task is for governments to draw up a National Allocation Plan by spring 2004 outlining their methodology for setting greenhouse gas limits, and the resulting number of allowances for each installation covered by the Directive.

The Commission will be adopting guidelines for the monitoring and reporting of emissions on company level later in the year. The adoption of a Regulation for a standardised and secured system of registers to record issuing, transfer and cancellation of the tradable allowances is also foreseen.

The emissions trading Directive was complemented in July 2003 by a new Commission proposal aimed at allowing European companies to carry out emissions-curbing projects world-wide and converting the credits earned into emissions allowances under the EU emissions trading scheme (Commission Proposal for a Directive of the European Parliament and of the Council amending the Directive establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, COM(2003)403 final, 23 July 2003).

This proposal builds on the market-based, flexible mechanisms "Joint Implementation" and "Clean Development Mechanism" envisaged by the Kyoto Protocol. These two schemes were devised to enable governments to meet part of their national greenhouse gas reduction commitments by developing emissions reduction projects in other countries. The objective is to contribute to reaching the global emissions reduction targets in a cost-effective way with the added benefit of transferring advanced technology to other industrialised and developing countries. While "Joint Implementation" projects are to be undertaken in countries for which emissions reduction targets are foreseen, i.e. industrialised countries, "Clean Development Mechanism" projects are to be hosted by countries for which no quantitative targets are foreseen, i.e. developing countries.

FIGURE 1: TOTAL GREENHOUSE GASES EMISSIONS (IN CO₂ EQUIVALENTS) AS A PERCENTAGE OF 1990 LEVELS WITH KYOTO PROTOCOL / BURDEN SHARING AGREEMENT TARGETS⁹⁹



The graph illustrates GHG emissions in 1999, 2000 and 2001 as a percentage of 1990 levels, which is the base year for the Kyoto Protocol. The left-hand area of the graph provides a global level comparison of emissions to Kyoto Protocol targets for 2008-2012. The target for the ten acceding countries¹⁰⁰ - AC(10) - is purely indicative. While 6 of the 10 acceding countries have a Kyoto reduction target of 8%, the reduction target for Slovenia and Poland is 6%, while Cyprus and Malta do not have any targets.

In 2001 EU emissions were 2.3% below 1990 baseline levels but significantly short from the EU's Kyoto target of an 8% reduction by 2008-2012.

The right hand area illustrates existing Member States' GHG emissions relative to their Burden Sharing Agreement targets¹⁰¹. While Member States still have 7-11 years to meet the agreed targets only five countries are currently close to doing so (Luxembourg, Germany, United Kingdom, France and Sweden). A number of other countries (Austria, Belgium, Italy and the Netherlands) have still not turned the corner. Despite having reduction targets of between 13-6% their emission are not only above their 1990 levels but showing a year on year increase, which is taking them further away from their targets. Most worrying is the trend in Ireland, Spain and Portugal. Although the Burden Sharing Agreement allow these countries to increase their emission by between 13-27% over 1990 levels these have already been exceeded.

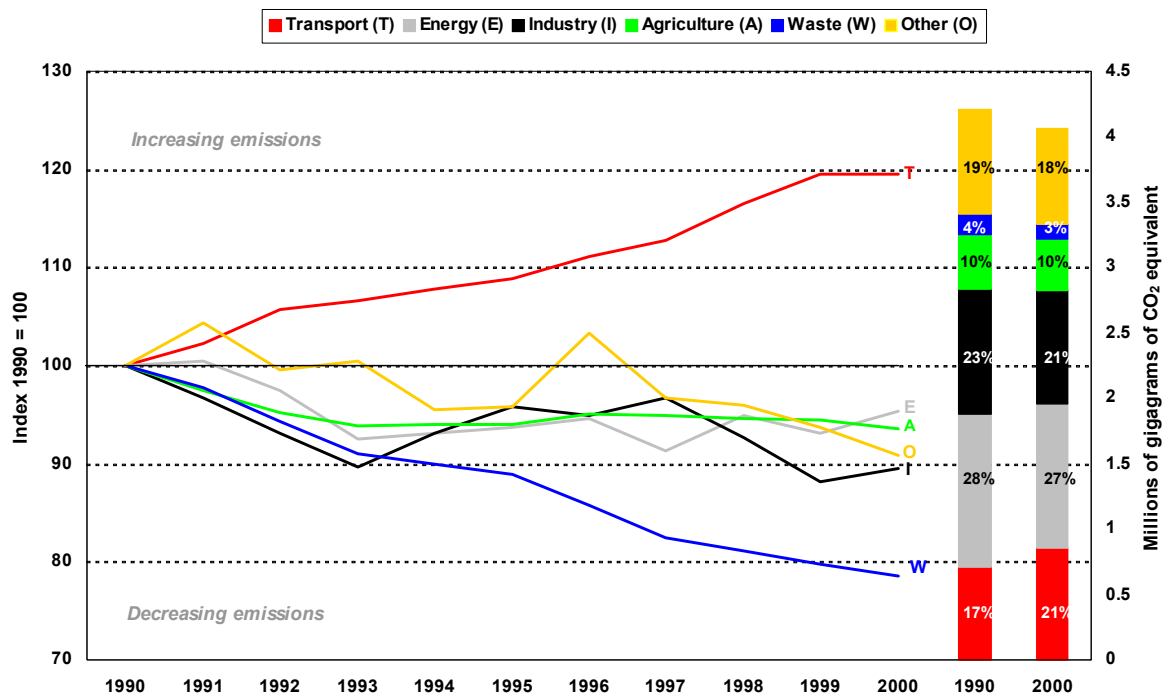
Sources: European Environment Agency, European Topic Centre on Air and Climate Change, United Nations Framework Convention on Climate Change, U.S. Climate Action Report 2002, Japan's Third Communication (May 2002), National Authorities.

⁹⁹ Total GHG emissions consist of the Kyoto basket of 6 greenhouse gases; CO₂, CH₄, N₂O, HFCs, PFCs and SF₆. Emissions and removals from land use change and forestry (LUCF) have been excluded. Emission for US and Japan in 2000 are based on Eurostat estimates.

¹⁰⁰ The ten acceding countries included are those due to join the EU on the 1 May 2004. This does not include Bulgaria, Romania and Turkey.

¹⁰¹ The EU's and Member States' greenhouse gas reduction targets were adopted by the Council of 4 March 2002 in a legally binding *Decision on the implementation of the Kyoto Protocol*. The Council's Decision included the Council conclusions of 16 June 1998, which set out each Member States contribution to the EU's 8% reduction, often called the 'Burden Sharing Agreement.'

FIGURE 2: TOTAL EU GREENHOUSE GAS EMISSIONS BY SECTOR AS AN INDEX OF 1990 LEVELS (LEFT) AND IN ABSOLUTE AMOUNTS (RIGHT)



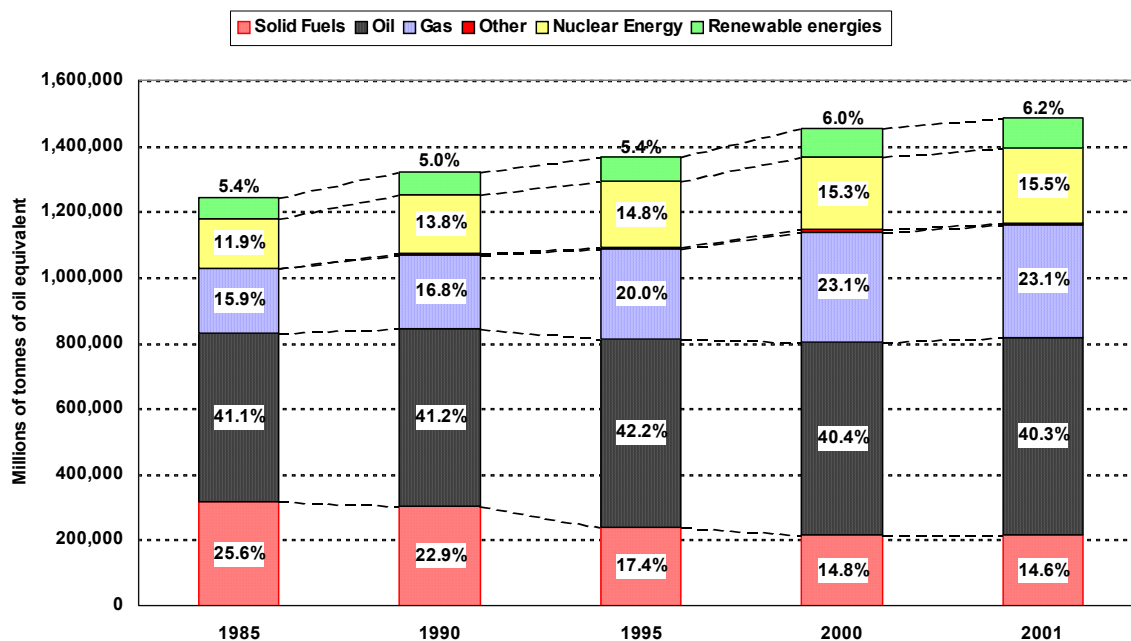
The line graph illustrates changes of GHG emissions, expressed as an index of 1990 emissions, by the various sectors. Between 1990 and 2000 all sectors reduced their emissions with the exception of transport, which increased its emissions by approximately 20% over 1990 levels.

The bar graph on the right represents total EU GHG emissions in real terms as well as each sector's relative contribution (in %). All sectors decreased their relative share with the exception of transport, which saw its share of total EU GHG emission rise from 17% to 21% between 1990 to 2000.

In 2000 the energy sector was the greatest contributor, accounting for 27% of total EU GHG emissions. Transport and industry both accounted for 21% each, meaning that these three sectors accounted for approximately 70% of all EU GHG emissions.

Source: Intergovernmental Panel on Climate Change (IPCC) , European Environment Agency

FIGURE 3: EU'S GROSS INLAND ENERGY CONSUMPTION BY FUEL (MILLION OF TONNES OIL EQUIVALENT) 1985-2001



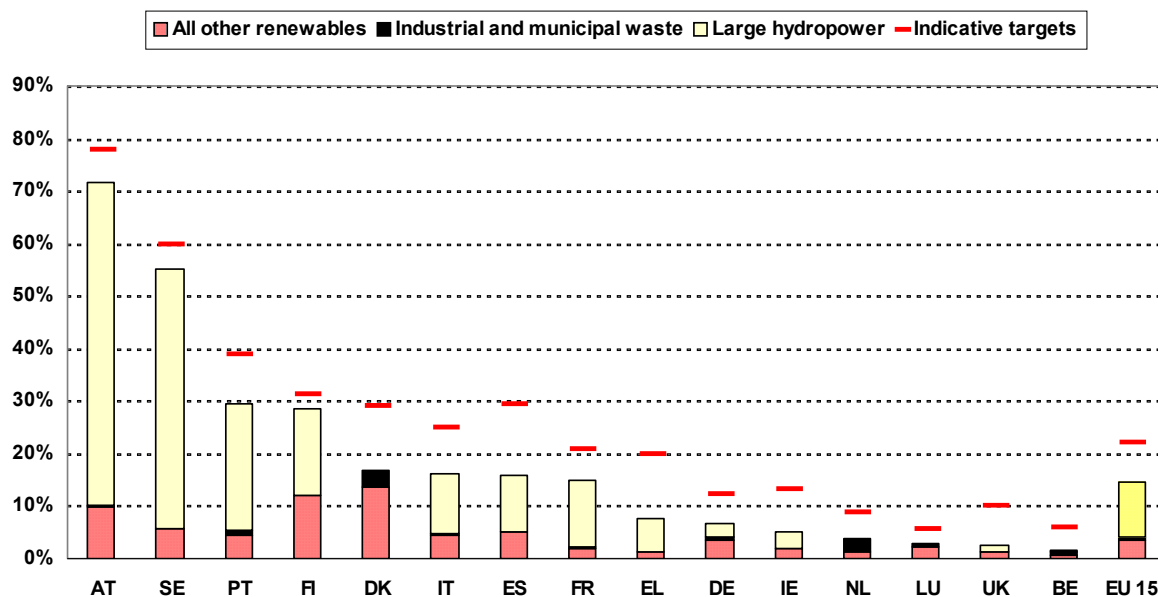
While the EU's total inland energy consumption has increased steadily at approximately 1% per year since 1985, the relative shares have changed significantly. Most notable are the decline of solid fuels - such as coal and lignite - and the rise in natural gas, due to changes in their economic viability. Oil continues to dominate and accounts for over 40% of the total gross inland consumption.

While the contribution of renewable energies has increased in absolute terms, renewable energies have, for the time being, failed to significantly increase their share of the total energy consumption over the last 16 years.

The 'other' category includes derived heat and industrial wastes. In total these make up less than 0.5% for any particular year. Values for renewable energies, and hence also the total inland energy consumption, in 2001 are provisional values.

Source: Eurostat, New Cronos

FIGURE 4: SHARE OF ELECTRICITY PRODUCED FROM RENEWABLE ENERGY SOURCES AS A PERCENTAGE OF GROSS ELECTRICITY CONSUMPTION IN 2000.



Electricity accounted for approximately 20% of the total final energy consumption in the EU in 2000. During the last decade the average annual growth rate for electricity was almost twice that of the total energy consumption, resulting in electricity increasing its relative share. The liberalisation of European energy markets may result in a reduction of electricity prices, which in turn, may accentuate the increase in the use of electricity.

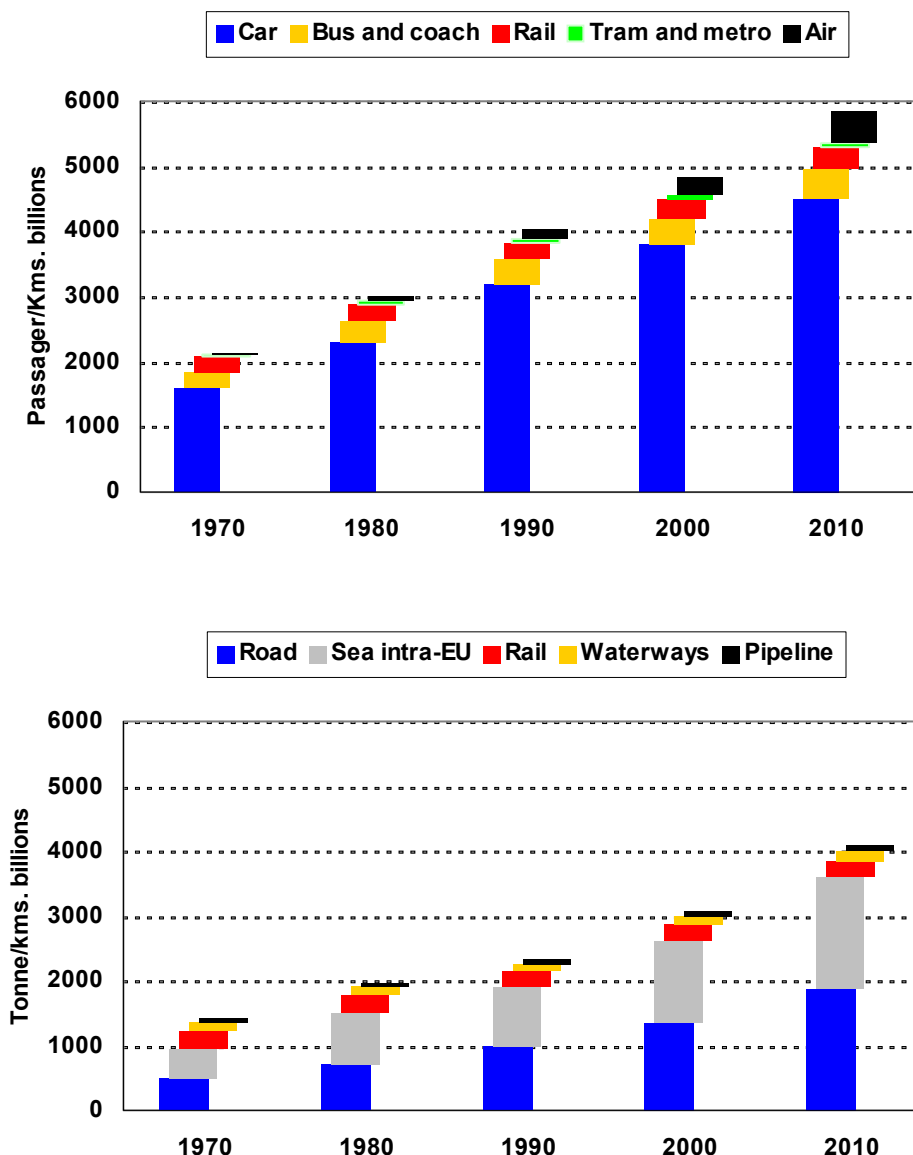
The consumption of electricity is particularly significant from the environmental perspective as electricity is predominately produced from fossil fuels at an efficiency rate of between 30%-50%, meaning that it takes between 2-3 units of fossil fuels to produce one unit of electricity. Increasing the share of electricity from renewable sources can therefore greatly help to reduce the associated environmental costs of fossil fuel use.

Only 2 Member States (Denmark and Finland) have more than 10% of electricity generated by renewable technologies other than hydropower, such as solar, wind etc. (included in the 'other renewables' category).

The targets depicted represent the reference values given in the Annex of the EU renewable electricity Directive (2001/77/EC). These reference values will be used to set national indicative targets for the next ten years. It should be noted that the Directive's definition of biomass only includes the biodegradable fraction of industrial and municipal waste. However data collection does not differentiate between the biodegradable or non-biodegradable industrial and municipal waste. In certain cases this may lead to an overestimation of the amount of electricity produced from renewable sources. However it is unlikely that this overestimation significantly affects the overall picture.

Source: European Environmental Agency

FIGURE 5: VOLUME OF EU 15 PASSENGER (TOP) AND FREIGHT TRANSPORT (LOWER) BY MODE 1970-2000 WITH PROJECTIONS FOR 2010.



The top graph shows that cars continue to be the dominant mode of passenger transport, accounting for approximately 80% of total passenger travel in the EU. The fastest growing passenger mode is air transport, which has on average doubled every decade since 1970. By 2000 it made up 6% of the total EU passenger transport. Meanwhile the relative shares of the more environmentally benign modes¹⁰² have declined every decade since 1970.

The lower graph shows that the two dominant forms of freight transport are road (44% in 2000) and sea (41% in 2000). Rail, which is considered a more environmental benign mode of transport not only lost relative share in every decade since 1970 but also declined in absolute terms.

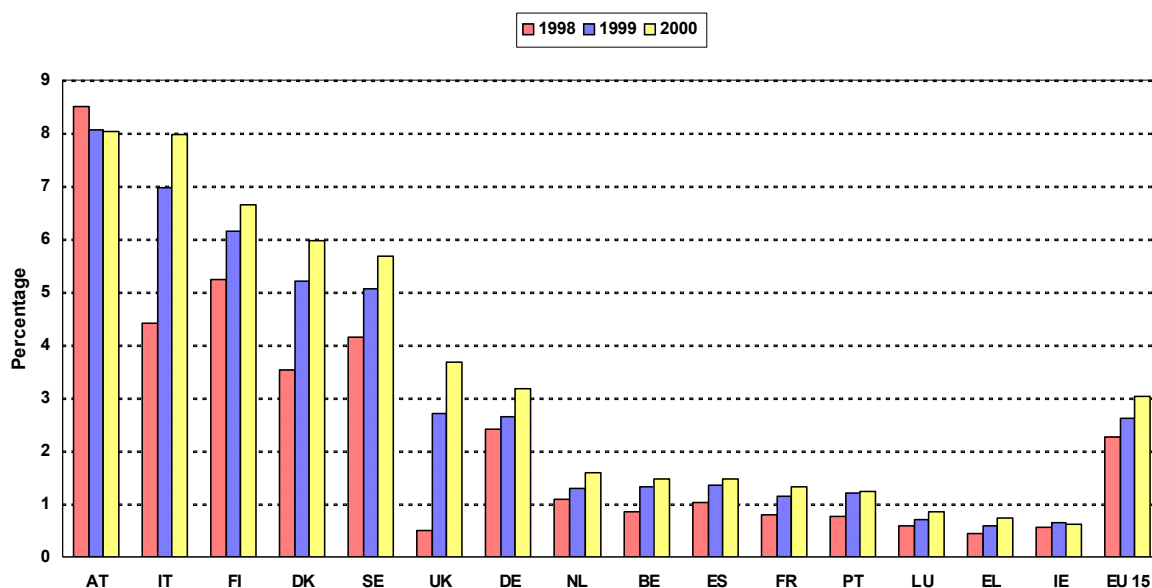
However it should be noted that each mode of transport has a different environmental impact. Moreover many means of transport have considerably reduced their environmental impact over time.

The projections for 2010 have been calculated by applying the rate of increase experienced by each mode of transport between 1990-2000 to the period 2000-2010.

Source: Eurostat, New Cronos

¹⁰² Rail, bus and coach, tram and metro.

FIGURE 6: ORGANIC FARMING AS A PERCENTAGE OF TOTAL AGRICULTURAL AREA.

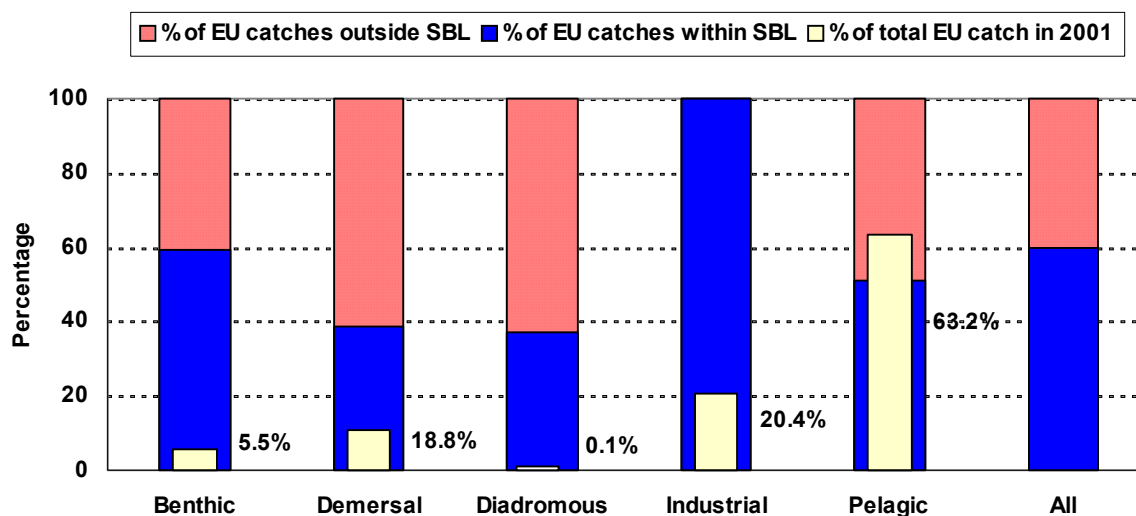


The percentage of agricultural land used for organic farming continues to rise year on year in almost all Member States. However there is a wide variation among Member states in terms of both the rate of increase and the total percentage of area that is farmed organically, which ranges from 0.6% to 8% of the total agricultural area. In 2000 the EU average was 3 % of total agricultural area, while in accession countries the average was significantly lower at approximately 0.35%.

Note: the high rate of increase in the UK can be attributed to the conversion of extensive holdings in Scotland.

Source: European Environment Agency, Eurostat, Farm Structure Survey 2000

FIGURE 7: PERCENTAGE OF 2001 CATCHES IN EU WATERS CONSIDERED TO BE OUTSIDE 'SAFE BIOLOGICAL LIMITS' (SBL) AND TOTAL CATCHES IN TONNES



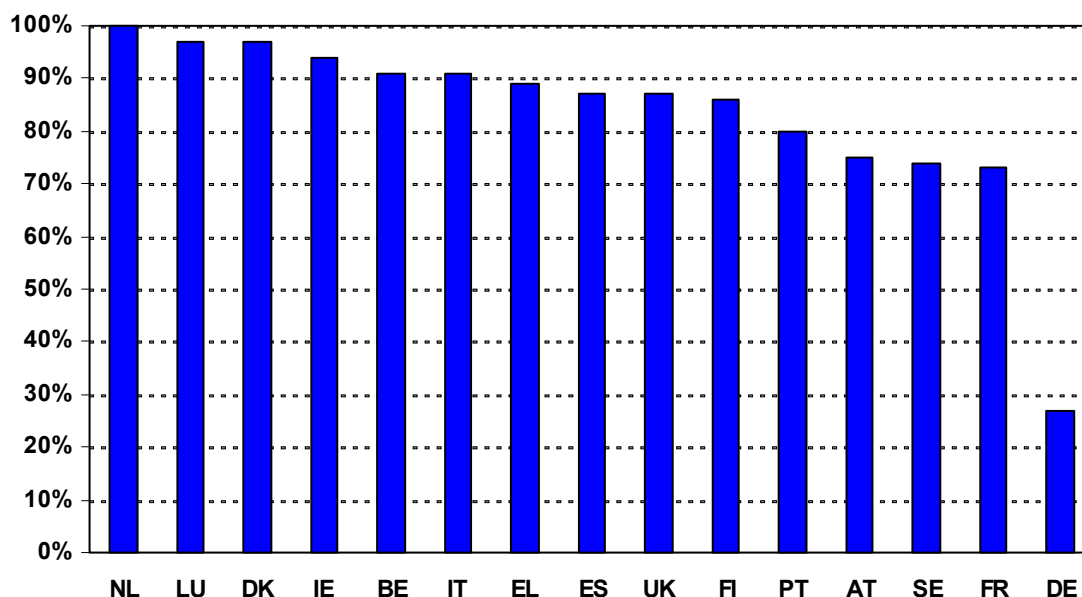
Benthic	Prawns, flatfish, anglerfish
Demersal	Cod, haddock, whiting, hake and other roundfish
Diadromous	Salmon, sea trout
Industrial	Sprat, sand eel, Norwegian pout
Pelagic	Herring, anchovy, sardine, horse mackerel, redfish

40% of all EU catches are taken from stocks that are considered to be outside safe biological limits. For certain types of fish, notably demersal and diadromous fish, the percentage is as high as 60%. The situation for certain species, such as cod and hake, is even more acute. The graph gives the percentage for each of the fish types of the total EU catch in 2001.

The data is based on ICES 2001-2002 ACFM reports and covers all ICES stocks that the EU manages, either solely or jointly. Data includes any catches taken by third countries. In general terms stocks are judged to be within safe biological limits if the fishing pressure (catches) and other causes of mortality (predation etc) do not exceed the rate of recruitment and growth of the stock. If this does occur, then this will cause the spawning stock biomass (SSB) to fall below what are considered 'safe' limits.

Source: International Council for the Exploration of the Sea (ICES)

FIGURE 8: NATURA 2000 NETWORK: SUFFICIENCY OF MEMBER STATE PROPOSALS (AS OF 30.06.2003)



The Natura 2000 network requires Member States to propose sites for the protection of a list of species and habitats determined to be of Community interest. The graph shows the percentage of species and habitats, as of the 30 June 2003, for which Member States proposals have been determined as sufficient for the creation of the network¹⁰³.

While the overall picture is moderately positive, ensuring that all necessary species and habitats are protected is an important step in halting the loss of biodiversity by 2010.

N.B *The Commission has recently received a significant set of proposals from Germany which are not included in the graph. These proposals have doubled the number of proposed sites in Germany and are likely to significantly reduce the gap identified.*

While indicators on protected areas illustrate the policy response and level of implementation they do not inform us if the loss of biodiversity has been halted. The European Environment Agency continues to work on a biodiversity index which is expected at the end of 2004.

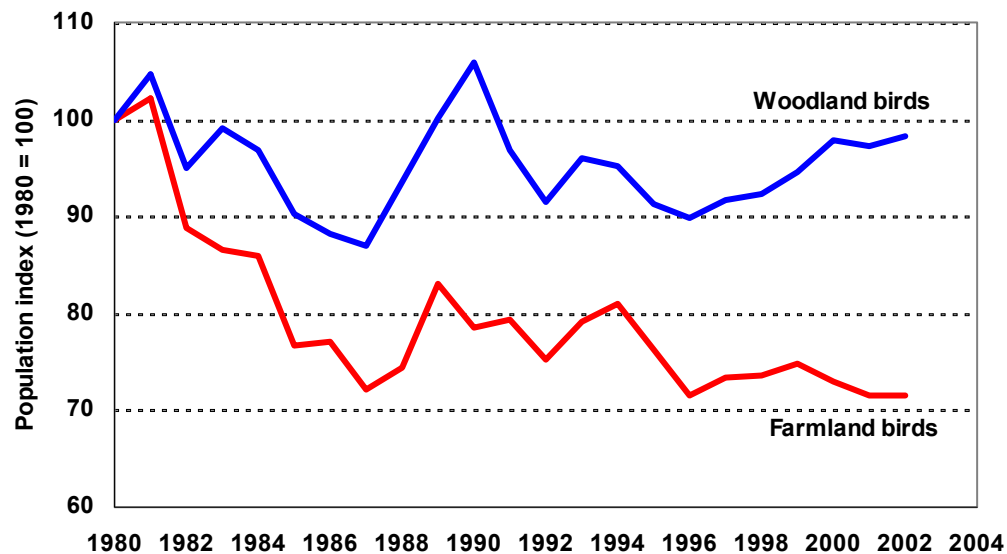
Source: European Topic Centre / European Environment Agency

For more details please see <http://europa.eu.int/comm/environment/nature/barometer/barometer.htm>

¹⁰³

The criteria for deciding which species and habitats should be protected are contained in Annex 3 of the Habitats Directive. The final list of species and habitats that meet these criteria is drawn up for each Member State in consultation with Member States and stakeholders. The process ensures that protected areas cover all six of the major biogeographic zones of the EU (Macaronesian; Alpine; Atlantic; Mediterranean; Boreal; and Continental).

FIGURE 9: PAN-EUROPEAN INDICATOR OF POPULATIONS OF SELECTED FARMLAND AND WOODLAND BIRDS



Royal Society for the Protection of Birds/European Bird Census Council/BirdLife International

The indicator is the first covering European birds¹⁰⁴ populations. There has been a marked decline of common and widespread farmland bird species since the 1980s and which presently are at only 71% of their 1980 levels. This is highly significant given the EU objective of halting biodiversity loss by 2010. This decline can be attributed in large part to changes in agricultural practices, including a shift to more intensive practices.

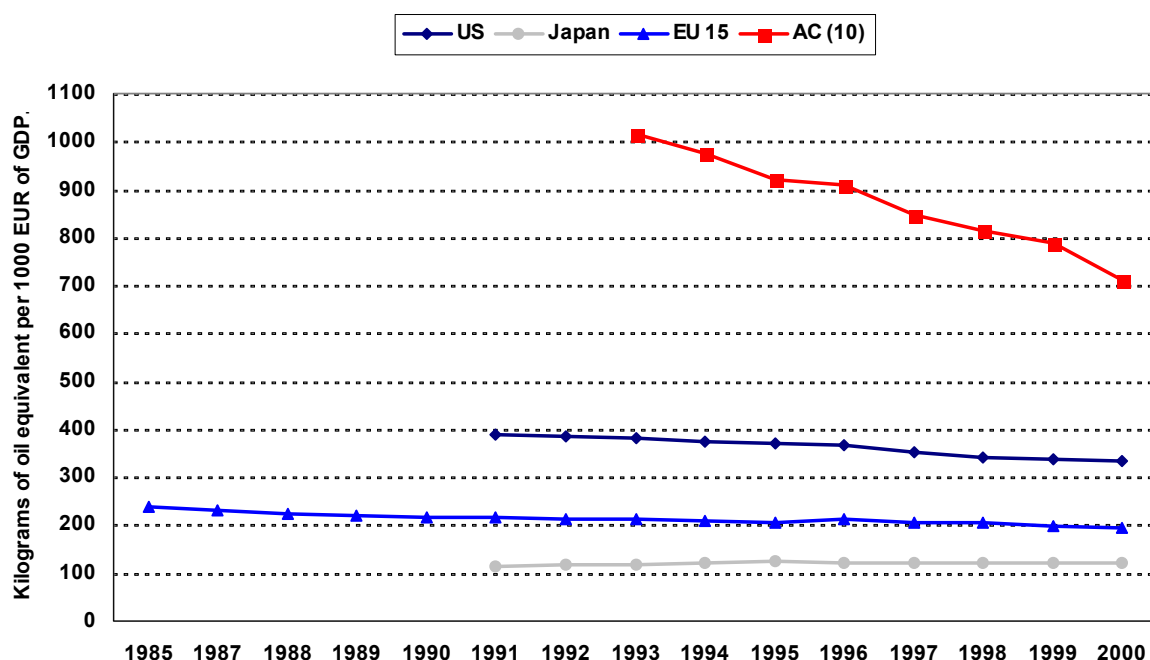
Birds are considered good proxies for biodiversity as they are high in the food chain - and so able to reflect changes in ecosystems - have large European ranges, and are abundant enough to be monitored accurately

The index is based on data for 23 common farmland and 24 common woodland bird species from 18 European countries, which includes 11 Members States and 5 acceding countries.

Source: Royal Society for the Protection of Birds / European Bird Census Council / BirdLife International.

¹⁰⁴ EU countries include: Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden and UK. Acceding countries include Estonia, Latvia, Poland, Czech Republic, and Hungary. EFTA countries include: Norway and Switzerland.

FIGURE 10: ENERGY INTENSITY OF THE ECONOMY



The graph shows the energy intensity of the economies of current EU Members States compared to the acceding countries, the United States of America and Japan. There are a number of notable trends. Firstly, acceding countries, whose energy intensity was five times less efficient than that the EU in the 1990s, have significantly improved during the last decade. However in 2000 acceding countries¹⁰⁵ were still, on average, three times less energy efficient than Member States.

Secondly the EU's energy efficiency has improved slowly but steadily between 1985-2000 by, on average, just over 1% per annum. And thirdly, the EU is significantly more energy efficient than the United States of America, but less so than Japan. However it is important to realise that changes in energy efficiency are not only due to the introduction of more energy efficient technologies and processes but may also be due to changes in the structure of the economy, such as a shift from manufacturing industry to services. Energy intensity may also be influenced by the geographical size of a country.

Source: Eurostat, New Cronos

¹⁰⁵

There is a wide variance between the various acceding countries' energy intensity. For example in 2000 Cyprus had a value of 236 Kgoe per €1000 GDP while that for Latvia was 1316 Kgoe per €1000 GDP. The variance among Member States was significantly smaller. The most energy efficient was Denmark with a value of 124 Kgoe per €1000 GDP and the least was Greece with 264 Kgoe per €1000 GDP.