Final Report for the Assessment of the 6th Environment Action Programme

DG ENV.1/SER/2009/0044

Ecologic Institute, Berlin and Brussels

in co-operation with

Institute for European Environmental Policy, London and Brussels

Central European University, Budapest

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EXECUTIVE SUMMARY

Background

Since 1973, Environment Action Programmes have provided longer-term orientation on key objectives and planned policy action. They have set out the broad approaches and principles for taking forward EU environmental policy in the years ahead and signposted the more crucial forthcoming initiatives and measures. The current Programme, the 6th Environment Action Programme (6EAP), was adopted by the European Parliament and the Council in July 2002 and establishes a 10 year framework for Community action on the environment. As the 6EAP nears its end in 2012, preparations for its final assessment have begun. In 2010, the European Commission contracted an independent study to assess the achievements of the 6EAP. The results of this assessment, together with the 2010 State and Outlook of the Environment Report (SOER) by the European Environment Agency[1] will be used as input for the Commission's own final assessment of the 6EAP. This is expected to be presented in 2011.

This report presents the results of the independent evaluation of the 6EAP. The overall objective of this evaluation was to provide an in-depth assessment of the achievements of the 6EAP since its adoption in 2002 to the end of 2010. The assessment is based on two primary sources. One is desk research to analyse relevant EU policies, measures and tools adopted since 2002 and their contribution to objectives set out in the 6EAP. The other is a series of targeted consultations with key European stakeholders through an electronic survey, three expert workshops and several interviews with relevant policy-makers in the European institutions and stakeholders, which explored the overall added value of the 6EAP.

A particular focus of this assessment has been the added value of the 6EAP and its role in leveraging the adoption of EU environmental policies. The different stages of the policy formulation and implementation chain have framed the analysis. The principal elements of this chain include the initial formulation of the 6EAP, the subsequent processes and measures adopted, their implementation and, finally, the outcomes in terms of the achievement of the objectives. To assess the added value of the 6EAP the assessment looks at a range of factors which have influenced the adoption of relevant policies and measures and contributed to the achievement of the objectives set out in the Programme. Some are inherent to or closely linked to the 6EAP and others are entirely outside its direct control. Throughout this assessment it is important to keep in mind the role and function of an EAP. Provisions in the Treaty allow for the adoption of general action programmes which should set out priority objectives to be attained, while concrete measures to implement the programmes are to be adopted through separate processes. Account should also be taken of the fact that an EAP remains in many respects reflective of the time of its adoption, even if amended in due course. Based on the legislative and political context in 2002, the 6EAP aimed to establish a 10 year framework for Community action on the environment which was both aspirational in view of the scale of the environmental challenge and achievable in view

[1] European Environment Agency (2010): The European environment - State and outlook 2010. Synthesis. Copenhagen.

of political realities. Inevitably, a number of changes have taken place subsequently which could not have been envisaged when the 6EAP was developed. These highlight some of the challenges inherent in undertaking such forward-looking exercises in a dynamic context.

Overall approach and key contents of the 6EAP

The 6EAP establishes a framework for Community action on the environment by setting out key environmental objectives to be achieved in four thematic areas - climate change, nature and biodiversity, environment and health and natural resources and waste. The 6EAP also emphasises a number of horizontal and governance-related objectives and measures to strengthen policy coherence and policy integration and sets objectives on international issues. For several of its objectives no concrete policy targets and measures are set and were meant to be developed subsequently through so called Thematic Strategies. The seven Thematic Strategies cover soil protection, marine environment, pesticides, air pollution, urban environment, natural resources, and waste.

Unlike its predecessors, the 6EAP was adopted through the co-decision procedure and reflects a formal commitment of the European Commission, Council and Parliament. Although formally an inter-institutional document, in practice many stakeholders perceive the 6EAP largely as a Programme of the Commission, and in particular of DG Environment. The process of developing the 6EAP through co-decision was lengthy and absorbed significant resources, taking 18 months to conclude. However, it also provided an opportunity for engagement by the other EU institutions in the process of setting out the strategic framework for EU environmental policy and provided additional or alternative channels of information and influence for external stakeholders and experts. According to some stakeholders, while the approach to developing the 6EAP through the co-decision procedure strengthened some aspects of the Programme with the inclusion of issues that were not in the original Commission proposal, it also introduced a number of new topics, which to some extent diluted the focus and clarity of the Programme.

The prioritisation of four thematic areas did not hamper a comprehensive review of the entirety of EU environmental policy. The 6EAP covered a wide range of issues including both challenges with a high public profile, such as climate change, and challenges that are less prominently perceived in the political debate, such as the urban environment, addressing nearly the whole of EU environmental policy. This provided a useful starting point and umbrella for taking stock of existing and planned EU environmental measures, and identifying gaps, cases of incoherence and overlaps in different policy areas. The 10-year timeframe of the 6EAP enabled better coverage of the full policy cycle from the development of measures to their adoption and initial stages of implementation, and allowed for some continuity in priorities beyond short-term political cycles. However, the 6EAP lost momentum during this long timeframe, and ensuring the continued relevance of the Programme proved to be a critical challenge.

The Thematic Strategy processes: Objectives and outcomes

The Thematic Strategies were envisaged as a framework for the selection, development and subsequent adoption of a set of discrete measures. According to the 6EAP, the Thematic Strategies ‘may include’ environmental targets, should be developed and implemented in close consultation with relevant parties, and were to be finalised by June 2005.

The Thematic Strategies became a central governance mechanism of the 6EAP. They created and/or reinforced European networks of policy-makers, stakeholders and experts and contributed to the 6EAP objectives of improving the knowledge base and promoting broad stakeholder participation in the policy-making process. The outcomes of the Thematic Strategy processes differ between the policy areas covered. Five of the Thematic Strategies (air, waste, pesticides, marine, soil) were accompanied by legislative proposals, some of which had not been envisaged at the start of the stakeholder consultation process. In areas with established regulatory frameworks, such as air and waste, the Thematic Strategies provided a platform for consolidating and revising existing legislation, helping to fill gaps and adapt to new challenges. With respect to certain areas in which the EU had previously been relatively inactive (marine and soil) the Thematic Strategies resulted in important legislative proposals to extend EU environmental policy to these areas. In other cases (resources and the urban environment) the Thematic Strategies have so far only led to proposals for/ the adoption of non-binding measures, which tend to have a preparatory character, such as additional research. The different outcomes of the Thematic Strategy processes are the result of different conditions and opportunity structures in the area concerned and varying degrees of political support for the development of new legislative proposals.

The Thematic Strategies absorbed considerable financial and human resources both within the Commission and externally among the stakeholders involved. The 6EAP had envisaged the Thematic Strategies to be finalised by June 2005 and initiatives to achieve their objectives to be presented by June 2006. However, the adoption of the Thematic Strategies was delayed and the last Thematic Strategy (on soil) was only presented in September 2006, thereby to some extent compromising the prospect of achieving the objectives of the 6EAP before its expiry in 2012. However, the EU legislative process often takes approximately five years from initial policy conception to final adoption through the co-decision procedure and some of the Thematic Strategies and associated legislative proposals were surrounded by significant political controversy. It therefore seems unlikely that a more conventional approach would have been more successful. In fact, the Thematic Strategy processes provided a more neutral platform for stakeholders to discuss and develop broader consensus on the needs for policy action, thus at least initially depoliticising to some extent what otherwise were politically highly contentious areas.

Progress towards the environmental objectives set out in the 6EAP

In the area of **climate change**, the main objectives set out in the 6EAP will be met. The EU as a whole and most of its Member States are on track to meet their GHG-emission reduction commitments as shown by the 2010 SOER. The emission reductions already achieved and the adoption of targets for 2020 and associated legislative measures have strengthened the EU's credibility in international climate negotiations. However, rising global emissions and continued lack of agreement in international negotiations indicate the formidable challenges that remain.

In the area of **nature and biodiversity,** despite some progress including the extension of the Natura 2000 network and research on the socio-economic value of biodiversity and ecosystem services, the main headline target of halting biodiversity decline by 2010 has clearly been missed, as highlighted by the 2010 SOER. Negative trends in key pressures,

such as pollution of freshwater, land abandonment, and habitat fragmentation continue and additional efforts are required to fully achieve the biodiversity related objectives of the 6EAP.

In the area of **environment and health**, some 6EAP objectives, for example in relation to air quality, will not be achieved at least within the timescale envisaged by the 6EAP; while the attainment of other important objectives, for example in relation to pesticides and water, depends critically on future implementation efforts. Achieving full implementation of the REACH regulation and other policies will help to close certain gaps further. However, some gaps remain, for example in relation to air quality and the urban environment.

In the area of **natural resources and waste**, the objectives with regard to encouraging better waste management have partly been achieved. For example, the disposal of waste in landfills has been reduced in favour of increased rates of recycling and recovery. However limited progress has been made in decoupling the use of resources and the generation of waste from the rate of economic growth. Despite some relative decoupling, absolute decoupling has not yet been achieved, as shown by the 2010 SOER.

In the **international** area despite efforts, only limited progress has been made towards the 6EAP objective of integrating environmental concerns in the EU's development, trade and neighbourhood policies. Limited progress has also been made in relation to the 6EAP objectives of promoting sustainable environmental practices in foreign investment and export credits. The EU has made consistent efforts towards the objective of strengthening international environmental governance. It has been a constant force behind the ratification, compliance and enforcement of relevant international conventions and has promoted better policy coherence within the framework of different conventions. However, this does not mean that the 6EAP's objectives have been fully reached at the international level as progress is dependent on efforts of other parties.

Factors affecting the achievement of objectives

Part of the varying progress towards the objectives set out in the 6EAP can be explained by factors endogenous to the Programme. This is particularly clear in relation to the respective levels of ambition in the different thematic areas of the 6EAP. For example, the objectives set for climate change were subsequently overtaken by the dynamic policy developments in that field which were not driven by the 6EAP. By contrast, the 2010 biodiversity target was very difficult to achieve, particularly given the scale of the task and insufficient political support and action by Member States, hence missing the objective is not too surprising. The objectives on natural resources did not properly reflect the knowledge gaps and methodological challenges in this policy area, which prevented quicker progress. In some areas, the level of ambition of the 6EAP was regarded as being too high and was subsequently revised, for example in the case of air quality. Underlying political realities and the scope of the Community's competence also had an influence on the measures adopted in certain fields and the outcome on the ground. For instance, Community action in relation to forestry, the urban environment and soils has been limited by the formal competence of the EU and the sensitivities of Member States in relation to subsidiarity. The difference between what was initially envisaged and what has been achieved in practice to a considerable degree reflects the different opportunity structures which have developed in the thematic areas since the adoption of the 6EAP in 2002.

Other external drivers outside the direct realm of influence of the 6EAP, which are generally difficult to forecast, have also had an influence. Inadequate implementation and enforcement of EU environmental legislation has been an important factor in preventing the achievement of several objectives, for example in biodiversity. Political priorities in countries both within and outside the EU have affected the attainment of certain international objectives of the 6EAP. Changes in economic circumstances and concerns about European competitiveness have led to a shift in political priorities at the EU, national and global level towards spurring economic growth. This has changed the political opportunity structure for important areas of the 6EAP. Growing scientific evidence about the harmful effects of climate change, technological solutions with attractive market prospects, and links with competitiveness and energy security issues have helped overcome these constraints in the climate change area and led to important developments in particular the adoption of the 20-20-20 targets and the Climate and Renewable Energy Package which have also had implications on other policy areas. These favourable opportunity structures have thus far been available to a lesser extent in the biodiversity and natural resources areas. This helps explain the relatively slower progress towards respective objectives in these areas.

Added value of the 6EAP in the thematic and international areas

Would progress in the thematic policy areas have been different without a 6EAP? It is difficult to establish the added value of an overarching framework like the 6EAP and its role in leveraging the adoption of specific policies and measures with any precision without a clear counterfactual. The 6EAP was one significant impulse for policy action alongside a number of different drivers and their respective roles are difficult to disentangle. This assessment partly explains that the role of the 6EAP itself has varied across its different thematic areas.

The 6EAP contributed only marginally to developments in the **climate change** area. Other drivers have been much more forceful, in particular the European Climate Change Programme, the desire to exert leadership in international climate negotiations, the EU's international commitments under the Kyoto Protocol and, more recently energy security concerns, new scientific findings and public opinion. Nevertheless, the 6EAP set out and reconfirmed a path for EU action on climate change and strengthened it, through contributing broader institutional support, including that of the European Parliament.

In the **nature and biodiversity** area, the process of developing the 6EAP brought together a number of fairly discrete sub-areas and helped map out existing commitments, plans and actions expected to be adopted, identifying overlaps and gaps in the coverage of EU policy. According to stakeholders a key merit of the 6EAP is that it increased the political relevance of the nature and biodiversity issues to a similar level as other environmental issues, in particular climate change. Although the 6EAP instigated some useful processes through the development of the Thematic Strategies on soil and the marine environment, which led to proposals for legislative action in new areas of EU policy, it did not help address the key challenges in the area, including a lack of political will and inadequate implementation.

In the **environment and health** area, the 6EAP provided a useful stock taking exercise of existing commitments and planned actions and served as a point of reference for subsequent developments. Moreover, there are instances where the 6EAP helped to push forward action which otherwise may not have happened at all, e.g. on the urban environment, or may have

taken longer without the impetus of the 6EAP, e.g. in relation to pesticides Although the air Thematic Strategy was largely a continuation of the pre-existing CAFE Programme, a number of stakeholders maintained that the requirement to develop this Strategy in the 6EAP helped to keep it on the agenda in the face of political opposition. Nonetheless, as confirmed by stakeholders, the 6EAP failed to push forward a coherent approach towards an integrated policy agenda addressing environment and health concerns.

In relation to **natural resources and waste**, the 6EAP strengthened the link between waste policy and resource policy and provided the basis of the Thematic Strategies on resources and waste. In the field of waste management, the 6EAP principally builds on and perpetuates policy choices which had been made prior to its adoption, but served to reinforce these choices and helped defend them against competing approaches. The Thematic Strategy on resource use inspired further research and led to the creation of new institutions and fora. However, given limited political support, methodological difficulties, and an insufficient knowledge base at the time, the Strategy failed to produce targets for resource use as originally envisaged and did not deliver clear guidance for future policy. Consequently, this is still a nascent field of policy action.

In the **international** area, relevant objectives and policy priorities were to a large extent integrated in the framework of the EU's environmental policy before the adoption of the 6EAP. Integration requirements in the Treaty, commitments on the external dimension in the renewed EU SDS, developments in the international agenda and the EU's desire to shape its identity as a global 'green leader' have been the main factors driving forward action in relation to the EU's development and trade policies and its approach towards international environmental governance. There are however some instances where the 6EAP played a role, for example in relation to measures to combat illegal logging. With some noteworthy exceptions, the 6EAP has not been a major driver or vehicle for EU action in the international area, although it reiterated EU commitments, in particular the requirement to integrate environmental considerations in all the EU's external relations, thus acting as a further justifying factor for action in this regard.

Added value of the 6EAP in the context of the EU SDS and the Lisbon Strategy

The 6EAP includes priorities for the environmental dimension of the EU Sustainable Development Strategy (SDS), which in turn was meant to complete the economic and social objectives of the Lisbon Strategy with an environmental dimension (as stated at the Conclusions of the Göteborg European Council in June 2001), or even to form the overall framework within which the renewed Lisbon Strategy provides the motor of a dynamic economy (as stated in the renewed EU SDS of June 2006). Despite this stated relationship, the actual interaction between these two strategies and the 6EAP is unclear in practice.

While there is a strong overlap between the environmental objectives and aims of the 6EAP and the **EU SDS**, the 6EAP is more comprehensive, specific and detailed and provides concrete governance approaches and tools for framing new environmental policy action, such as the Thematic Strategies. Thus, the 6EAP provides a much more suitable framework for programming European environmental policy discussions and functions better as a point of reference for key sectoral policy discussions, as confirmed by some stakeholders consulted. A similar effort would not have been possible with only the SDS. This is, of

course, quite logical, as the 6EAP and the EU SDS have different functions in the EU policy-making process. The EU SDS was designed to help strengthen the alignment and integration of strategic environmental objectives with social and economic objectives. Elevating and linking environmental considerations in the broader debate about economic and social development is an added value of the EU SDS. Thus, although the 6EAP and the EU SDS have different perspectives and serve different functions, they are complementary and each adds value to the aims of the other.

The underlying economic climate at the time when the **Lisbon Strategy** was 're-launched' in 2005 led to a focusing of political attention on issues concerning economic growth and Europe's competitiveness at the international level. In this context, it is perhaps unsurprising that the 6EAP and the EU SDS did not attract a similar degree of political attention as the Lisbon Strategy, either within Member States or the European institutions. The Lisbon Strategy was perceived by some stakeholders as a challenge to the previous momentum in environmental policy, as proposals for new environmental legislation were met with increasing concerns about impacts on economic growth and competitiveness. The Lisbon Strategy left an imprint on EU environmental policy but also set the context for the green dimension of economic policy, on which the debate has subsequently grown. Some environmental issues have proved more compatible with the dynamics of the Lisbon Strategy than others. Climate change is the best example where the identification of the economic benefits of appropriate environmental commitments helped drive forward progress in this thematic area. Increasing recognition of the economic value of biodiversity and ecosystem services has also helped to raise the political profile of biodiversity issues in recent years.

Added value of the 6EAP in relation to environmental governance

Furthermore, the 6EAP succeeded in strategic agenda-setting by outlining a number of important principles, approaches and objectives for environmental policy making over a 10 year timeframe. This helped to focus the attention of policy-makers and stakeholders and provided them with a **better understanding of EU environmental policy and its future direction**. The thematic priorities selected in the 6EAP are still of relevance today as is evident from the findings of the 2010 SOER. The 6EAP served as a useful point of reference both within the Commission and among external stakeholders and in certain instances supported the integration of environmental considerations in sectoral debates. The effectiveness of the 6EAP as a source of orientation was however compromised by its complicated structure and the number of objectives and actions it contains.

According to several stakeholders consulted, the fact that the different strands of environmental policy were represented in one document, and had been agreed under the co-decision procedure, provided a clear and strong mandate to uphold existing EU commitments and has been important in terms of increasing its legitimacy. In particular the 6EAP was perceived by stakeholders as a useful defensive document in the broader European policy dialogue, helping to **underpin and legitimise the environmental agenda** at a time when concerns about the economic costs and benefits of new EU environmental policy proposals were raised.

Achieving **policy coherence** is a difficult challenge for any strategic programme that cuts across many different, well-established policies. One contribution that an EAP can make is to

put the issue of better policy coherence on the agenda and provide guidance for further policy deliberations. While the process of developing the 6EAP and its holistic approach to the thematic areas helped to identify issues of policy incoherence, the 6EAP largely failed on the second objective. Despite certain efforts, the 6EAP did not sufficiently explore the main links between its four thematic areas; improving policy coherence **between the thematic areas** of the 6EAP remains a challenge. **Within particular sub-areas of the thematic areas**, the 6EAP contributed to policy coherence through the Thematic Strategies. However, the scope of the Thematic Strategies generally was too narrow to improve the overall coherence within the respective thematic areas. At the **cross-sectoral level**, evidence suggests the 6EAP had a rather limited role in improving mutual coherence between the environment and other sectors, but had some positive impact on environmental policy integration. Some stakeholder views suggest, for example, that the 6EAP has been helpful in promoting the consideration of environmental issues in certain processes within the Commission, e.g. during inter-service consultation. It has also served as a point of reference on relevant environmental objectives among actors in other sectors, thus contributing to the integration agenda. The majority of stakeholders consulted in the field of external action did not recognise the 6EAP as a key tool in their policy discussions. Thus, although the 6EAP set out the EU's international commitments alongside its wider environmental objectives this has not helped address issues of coherence between **internal and external actions**.

The Commission's mid-term review of the 6EAP presented in 2007 recognised that recent scientific evidence reveals several gaps between the objectives set in the 6EAP and the measures for achieving them. A revision of the 6EAP itself was considered unnecessary at the time and the Commission chose to focus in particular on additional efforts to enhance international cooperation, implement better regulation principles in environmental policy-making, promote integration and improve implementation. Despite the mid-term review exercise, there is a sense among many stakeholders that the relevance of the 6EAP has declined over time. The added value of the 6EAP was perceived to be relatively high in the years of its development and immediately following its adoption. However, after the initial stages of drawing up the Programme and the development and publication of the Thematic Strategies in 2005/2006, attention to the Programme among policy-makers and stakeholders appears to have declined. To some extent this is to be expected, given the period of time involved. A mixture of changing circumstances, the launch of other strategic EU processes, and the failure to inspire lasting commitment and accountability among the EU institutions have contributed to the decreased relevance of the 6EAP in the more recent period.

Overall conclusions

The 6EAP aimed to provide a framework for Community action on the environment from July 2002 to July 2012. This assessment of progress achieved by the end of 2010 indicates that significant efforts have been made in several areas. Some objectives set out in the 6EAP have already been achieved, while the attainment of others is dependent on future implementation efforts. However, a number of shortcomings remain and additional efforts are required to fully achieve several 6EAP objectives. The variable progress towards the objectives set out in the 6EAP can be attributed to different internal and external factors and opportunity structures, including in particular shifting political priorities and inadequate implementation of EU environmental legislation. These changes which often could not have been foreseen at the time when the 6EAP was adopted, have had a significant role in determining what can be achieved in practice and consequently have influenced progress towards the objectives set out in the Programme.

Some of the concrete results of the 6EAP may appear disappointing and the impact of the 6EAP in leveraging specific EU environmental developments was variable and moderate. Nonetheless, one needs to keep in mind the limits to the role and function of an EAP in the environmental policy-making process and should be realistic about what can be expected from such a forward-looking 10-year Programme, given changing conditions and opportunity structures that will inevitably develop over time. Despite some shortcomings of the Programme, notably its limited capacities to steer subsequent policy processes beyond the Thematic Strategies and declining relevance over the years; when subjective factors, i.e. the perceptions of relevant actors, are taken into account, the role of the 6EAP appears in a significantly more positive light. Stakeholder consultations undertaken for this study suggest that the 6EAP had an added value as an overall strategic framework. It fulfilled an important policy orientation function, helping to focus the attention of policy-makers and stakeholders, providing them with a better understanding of EU environmental policy and a sense of its future direction. The 6EAP has also helped defend the environmental agenda in times of uncertainty. It has acted as a point of reference both within the Commission and among external stakeholders, further supporting the integration of environmental considerations in sectoral debates. When assessing the effects of the overall Programme, rather than progress on individual parts of it, one can see the added value of the 6EAP in providing strategic direction and policy orientation and generating support for, and engagement with, EU environmental policy.

LIST OF ACRONYMS

ABS	Access and Benefit Sharing
AHTEG	ad hoc Technical Expert Group
AHJWG	ad hoc Joint Working Group
5EAP	The Fifth Environmental Action Programme
6EAP	The Sixth Environmental Action Programme
7EAP	The Seventh Environmental Action Programme
BAP	Biodiversity Communication and Biodiversity Action Plan
CAFE	Clean Air for Europe
CAP	Common Agricultural Policy
CARE	Climate and Renewable Energy Package
CBD	Convention on Biological Diversity
CFP	Common Fisheries Policy
CDM	Clean Development Mechanism
CEE	Central and Eastern European
CEHAPE	Children's Environment and Health Action Plan for Europe
CITES	Convention on International Trade in Endangered Species
CIS	Common Implementation Strategy
CRP	Country Environmental Profile
CSG	Community Strategic Guidelines
CSR	Corporate Social Responsibility
CSPs	Country Strategy Papers
CTE	Committee on Trade and Environment
DCI	Development Cooperation Instrument

DG	Directorate General
GMOs	Genetically Modified Organisms
EAFRD	European Agricultural Fund for Rural Development
EAP	Environment Action Programme
EC	European Community
ECCP	European Climate Change Programme
ECENA	Environmental Compliance and Enforcement Network for Accession
ECHA	European Chemicals Agency
ECJ	European Court of Justice
EEB	European Environmental Bureau
EESC	European Economic and Social Committee
EHAP	European Environment & Health Action Plan
EFFIS	European Forest Fire Information System
EFSA	European Food Safety Authority
EGS	Environmental Goods and Services
EHS	Environment and Health Strategy
ELV	End-of-life-vehicles
ENPI	European Neighbourhood Partnership Instrument
ENRTP	Thematic Strategy for the Environment and Sustainable Management of Natural Resources, including Energy
EMAS	Eco-management and audit systems
EIAs	Environmental Impact Assessments
EIB	European Investment Bank
ELD	Environmental Liability Directive
EPAs	Economic Partnership Agreements

EPE	European Principles for the Environment
EPI	Environmental Policy Integration
ErPs	Energy Related Products
ETAP	Environmental Technologies Action Plan
ETS	Emission Trading Scheme
EU	European Union
EUWI	EU Water Initiative
EuP	Energy using Products
FAO	Food and Agriculture Organisation
FLEGT	Forest Law Enforcement, Governance and Trade
GAEC	Good Agricultural Environmental Conditions
GCCA	Global Climate Change Alliance
GDP	Gross Domestic Product
GEOSS	Global Earth Observation System of Systems
GES	Good Environmental Status
GMOs	Genetically Modified Organisms
GPP	Communication on Green Public Procurement
JTIs	Joint Technology Initiatives
HELCOM	Convention for the Protection of the Marine Environment of the Baltic Sea
IA	Impact Assessment
ICAO	International Civil Aviation Organization
ICZM	Integrated Coastal Zone Management
IGAOT	Spatial Planning General Inspectorate
IMP	Integrated Maritime Policy

IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
IPPC	Integrated Pollution Prevention and Control
JRC	Joint Research Centre
LA21	Local Agenda 21
LULUCF	Land Use, Land Use Change and Forestry
MARPOL	Marine Pollution Convention
MAWP	Multi Annual Work Programme
MCPFE	Ministerial Conferences on the Protection of Forests in Europe
MDGs	Millennium Development Goals
MFIs	Multilateral Financing Institutions
MSFD	Marine Strategy Framework Directive
NIP	National Indicative Programme
NECD	National Emissions Ceiling Directive
NFP	National Forest Programmes
NGOs	Non Governmental Organisations
NSFR	National Strategic Referential Frameworks
OECD	Organization for Economic Co-operation and Development
OMC	Open Method of Coordination
OP	Operational Programmes
OSPAR	Convention for the Protection of Marine Environment of the North East Atlantic
PCD	Policy Coherence for Development
POPs	Persistent Organic pollutants
RACs	Regional Advisory Councils

RD&D	Research, Demonstration and Dissemination
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
REDD	Reducing Emissions from Deforestation and Forest Degradation
RENA	Regional Environmental Network for Accession
REP	Regional Environment Profile
RIP	Regional Indicative Programme
RSPs	Regional Strategy Papers
SBSTA	Subsidiary Body for Scientific and Technological Advice
SCP	Sustainable Consumption and Production
SDS	Sustainable Development Strategy
SEAs	Strategic environmental assessments
SIP	Sustainable Industrial Policy
SCP-SIP	Sustainable Consumption and Production and Sustainable Industrial Policy
SCIs	Sites of Community Importance
SPAs	Special Protection Areas
STECF	Scientific, Technical and Economic Committee for Fisheries
SUTPs	Sustainable Urban Transport Plans
SVHCs	Substances of Very High Concern
TEEB	The Economics of Ecosystems and Biodiversity
TEP	The Evaluation Partnership
TFEU	Treaty on the Functioning of the European Union
TS	Thematic Strategy
TAIEX	Technical Assistance and Information Exchange
UNFCCC	United Nations Framework Convention of Climate Change

QELRO	The Quantified Emission Limitations and Reduction Objectives
VOC	Volatile Organic Compounds
WEEE	Waste Electrical and Electronic Equipment
WFD	Waste Framework Directive
WFD	Water Framework Directive
WWF	World Wildlife Fund

1 Introduction

As the European Union's 6th Environment Action Programme (6EAP) nears its last phase, preparations for the final assessment of the Programme have begun. In 2010, the European Commission contracted an independent study to assess the achievements of the 6EAP. The results of this assessment together with the European Environment Agency's 2010 State and Outlook of the Environment Report will be used as input for the Commission's own final assessment of the 6EAP which is expected to be published in 2011.

This report presents the results of the independent assessment of the 6EAP. It aims to provide an in-depth assessment of the achievements of the Programme with a particular focus on the 6EAP's added value and its role in leveraging the adoption of EU environmental policies for the achievement of its environmental goals. This report is based on research and analysis of relevant EU policies, legislative measures and tools adopted since 2002 and targeted consultations with key European stakeholders. It should be noted that at the time of writing the 6EAP still had 17 months to run until it will expire in July 2012.

1.1 Context and overview of the 6EAP

Since 1973, the European Commission has periodically issued Environment Action Programmes which announced forthcoming initiatives and legislative proposals as well as broader approaches and principles for EU environmental policy. The European Parliament and the Council adopted the sixth and latest Environment Action Programme on 22 July 2002 (Decision1600/2002/EC, hereafter also referred to as '6EAP Decision' or simply '6EAP')). Based on Article 175(3) of the Treaty establishing the European Community (EC Treaty), the 6EAP was the first EU Environment Action Programme, which had been elaborated and adopted through the legislative Co-decision Procedure.

The 6EAP provides medium-term guidance for EU environmental policy over a 10-year period in both substantive and political process related terms. Its success will eventually depend on the extent to which progress towards its objectives in these areas will have been made. The Programme is also embedded in the broader framework of EU policy-making. In particular, it constitutes the environmental pillar of the EU Sustainable Development Strategy (EU-SDS), which, in turn, complements, and forms the overall framework for the EU's Lisbon Strategy for Growth and Jobs. The 6EAP is therefore also expected to contribute to the achievement of the overreaching aims formulated in these strategies.

The 6EAP sets out four environmental priority areas. Besides the long-term aims and principles in Article 2, which form a frame of reference, the 6EAP sets out main objectives in each of the four priority areas for the duration of the Programme. Examples of key objectives for the priority areas include the following:

- Climate change: to achieve the EU's Kyoto Protocol commitment of reducing greenhouse gas emissions by 8% by 2008 to 2012 and to place the Community in a credible position to advocate more stringent reduction targets for the Kyoto Protocol's second commitment period.

- Nature and biodiversity: halting biodiversity decline with the aim to reach this objective by 2010, and additional measures in the areas of biodiversity and landscape protection and restoration, habitats and the sustainable use and protection of the marine environment, coasts, wetlands, and of the soil.
- Environment and health: fundamental overhaul of the EU's risk-management system for chemicals, more sustainable use of, and reduction of risks from pesticides, improvement to generally safe levels of water and air quality and sustainable water management, noise abatement and an integrated approach focussing on urban areas.
- Natural resources and waste: Breaking the linkages between economic growth and resource use and generating 22% of the electricity production from renewable energies by 2010; a significant overall reduction in the volumes of waste, including hazardous waste, and in waste disposal, through waste prevention, recovery and recycling.

In addition to these priority areas, the 6EAP emphasises a number of horizontal and governance-related issues in Articles 3, 9 and 10 on 'strategic approaches', 'international issues' and 'environmental policy-making'. Examples of priorities in these areas include:

- Strategic approaches and environmental policy making: adoption, and strengthening implementation and enforcement of Community environmental legislation (including on liability); dialogue and partnership with stakeholders and the public; environmental policy integration (including in the financial sector and research); ex-post and ex-ante policy evaluation and review; monitoring and indicator development; using a mix of instruments, including economic instruments and environmental information, to encourage sustainable production and consumption, sustainable use and management of land and seas.
- International issues: integration of environmental concerns into Community external policies; adoption of coherent development and environment targets; strengthening international environmental governance; mutual supportiveness between trade and environmental protection, including the precautionary principle; cross-border environmental co-operation with neighbouring countries and regions.

Serving as an important link between the 6EAP's four priority areas and the Programme's horizontal and governance-related provisions, the 6EAP envisages the adoption of seven **thematic strategies** in the following areas: air pollution; marine environment; prevention and recycling of waste; sustainable use of resources; urban environment; soil; and pesticides. The thematic strategies serve to identify the concrete measures, which are necessary to reach the objectives of the 6EAP, and may contain quantitative and qualitative environmental targets and timetables. After some delay, the Commission adopted the thematic strategies as well as proposals for several pieces of associated Community legislation in 2005 and 2006.

With a view to measuring progress in the implementation of the 6EAP, Article 11 of the Programme requires the European Commission to submit a mid-term review to the European Parliament and Council, including a review of the thematic strategies, and a final

assessment. Having conducted an impact assessment[2] and consulted stakeholders and the public, the European Commission submitted the **mid-term review** in April 2007.[3] The Commission concluded that the priorities of the 6EAP remained valid, but that the EU was not yet on the path to sustainable development. Article 11 of the 6EAP also states that 'The Commission shall submit to the European Parliament and the Council a final assessment of the Programme and the state and prospects for the environment in the course of the final year of the Programme'. In April 2008 the European Parliament adopted a resolution[4] on the mid-term review of the 6EAP, which, among other things, calls for an overall assessment of the 6EAP to be made before the proposal for a 7EAP is finalised and takes 'the view that the final review of the Sixth EAP should be performed by an outside body independent of the Commission'.

1.2 Approach to assessment

This study provides a detailed assessment of the 6EAP, focussing primarily on the added value, which the Programme provided in terms of its contribution to the adoption of measures, which helped to achieve the main objectives set out in the 6EAP. For this purpose, the assessment analyses the main EU environmental measures and policies adopted between July 2002 and December 2009 with a view to the following more specific questions:

- What were the main drivers and barriers, which have significantly affected the attainment of the objectives of the 6EAP?
- Were the measures adopted by the EU suitable to reach the 6EAP objectives, also taking into consideration the objectives of the EU Sustainable Development Strategy?
- What was the contribution of the 6EAP to the adoption of environmental policies and the achievement of environmental goals in the EU, also taking into account the EU Sustainable Development Strategy, the Lisbon Strategy and the Climate and Renewable Energy Package?
- Was the 10-year time-frame of the 6EAP appropriate in relation to reaching the environmental objectives of the 6EAP and taking into consideration the timing and the time horizons of relevant policies and measures?

The analysis is based on two main sources of information:

- Extensive desk research of the relevant literature and documents
- Targeted consultation of key stakeholders

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[2] CEC (2007): Commission Staff Working Document, Accompanying document to the on the Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, IMPACT ASSESSMENT, SEC(2007)546/2.

[3] CEC (2007): Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007) 225 final, 30.4.2007.

[4] European Parliament resolution of the 10 April 2008 on the mid-term review of the Sixth Community Environment Action Programme (2007/2204(INI)).

Desk research

The desk research proceeded in two main steps: the analysis of relevant EU environmental measures and policies and the analysis of the contribution of the 6EAP to EU environmental policies and aims ('added value').

The EU adopted a large number of legislative and non-legislative measures which aimed at improving the state of the environment. To gain a comprehensive overview of these measures the project team assembled a detailed inventory. The project team also identified the main objectives of the 6EAP, which it then matched with the adopted measures (see inventory of measures in Annex C). However, an extensive analysis of each of the measures identified with regard to the main questions guiding the assessment would not have been possible within the scope of the project. The assessment is therefore based on an in-depth analysis of 76 priority measures, which were deemed to be particularly relevant in terms of the achievement of the objectives of the 6EAP (see Annex D for the list of priority measures). These measures were analysed in a two stage process: at the first stage each measure was analysed separately; at the second stage the measures were analysed in the context of other relevant measures, in particular those belonging to the same 6EAP priority area and sub-areas. For each stage, the analysis was based on a detailed template to ensure a common focus.

More specifically, the analysis of the measures was based on the following main questions and approach:

Were the measures adopted by the EU suitable to reach the 6EAP objectives, also taking into consideration the objectives of the EU Sustainable Development Strategy?

What were the main drivers and barriers, which have significantly affected the attainment of the objectives of the 6EAP?

- In a first step, the project team aimed to establish the degree to which the main objectives of the 6EAP were achieved. This was done on the basis of recent reports and other document analysing the state of the environment.
- The project team then assessed the degree to which the environmental measures - in particular the priority measures - adopted by the EU between 2002 and 2010 contributed to environmental trends. This was a challenging task given the multiplicity of potential causes and the complexity of causal chains and relationships. This analysis was mainly based on reports and other documents analysing environmental trends and the implementation and actual or expected effects of relevant EU environmental measures.
- In the next step, the project team identified the drivers and barriers to the achievement of 6EAP objectives. Drivers and barriers can affect environmental outcomes either directly – for example if emissions decrease as a result of an economic recession - or indirectly through their effects on EU environmental measures. Relevant factors include changing political priorities, new scientific knowledge, insufficient implementation of EU environmental measures etc. The analysis was based on similar sources as the analysis in the previous step.

- Finally, based on the degree to which 6EAP objectives were achieved, the contribution of EU environmental measures to the achievement of objectives, and the analysis of drivers and barriers to the achievement of objectives, the project team assessed the utility of the EU environmental measures adopted in relation to the achievement of the objectives of the 6EAP.

The second stage of the analysis focuses on identifying the contribution of the 6EAP to EU environmental policy and aims. As described in more detail in section 4.1, the identification of the added value of the 6EAP is challenging because of the relevance of counterfactual arguments, the complexity of the 6EAP, and the potential relevance of 'soft' influences, which may be difficult to identify. Reflecting these challenges, the approach to this part of the assessment relies heavily on a combination of desk research and the targeted consultation of stakeholders described below. The analysis of the added value comprised two stages: the first stage focussed on the contribution of the 6EAP to the adoption of individual EU environmental measures: the second stage generalises these findings to the extent possible and identifies additional effect of the 6EAP on EU environmental governance.

More specifically, the first stage of the analysis of the added value of the 6EAP was based on the following questions and approach:

What was the contribution of the 6EAP to the adoption of environmental policies and the achievement of environmental goals in the EU, also taking into account the EU Sustainable Development Strategy, the Lisbon Strategy and the Climate and Renewable Energy Package?

Was the 10-year time-frame of the 6EAP appropriate in relation to reaching the environmental objectives of the 6EAP and taking into consideration the timing and the time horizons of relevant policies and measures?

- The project team assessed the degree to which the 6EAP contributed to the formulation and adoption of important EU environmental measures, in particular the priority measures. In some cases such an assessment is relatively straightforward, i.e. if environmental measures conform to requirements set out exclusively in the 6EAP (for example the 6EAP Thematic Strategies). However, even in these cases the project team examined whether it seemed likely that similar measures would have been adopted in the absence of the 6EAP. In most cases, the assessment of the contribution of the 6EAP to the adoption of environmental measures is extremely challenging given (1) the multiplicity of potential causes and causal relationships, and (2) the lack of sufficiently comprehensive, reliable sources. In addition to the focus on the contribution of the 6EAP to the adoption of measures, the analysis looked specifically at the effects of the 10-year timeframe of the 6EAP. In addition to relevant studies and documents, the project team relied on the targeted consultation of stakeholders and experts to derive and test relevant hypotheses.
- In a second step, the project team assessed the contribution of the 6EAP to important EU environmental measures vis-à-vis other EU strategies, in particular the EU Sustainable Development Strategy (EU-SDS) and the Lisbon Strategy, but also the Climate and Renewable Energy Package (CARE). The analysis was based on similar

sources as the analysis in the previous step, but additionally included sources focussing specifically on these strategies.

- Finally, the project team related the assessment of the contribution of the 6EAP to the adoption of measures to the assessment of the contribution of the measures to the achievement of 6EAP objectives. The 6EAP created an added value to the extent to which measures were assessed positively in both respects.

The second stage of the assessment of the added value of the 6EAP focussed on the identification of positive effects of the 6EAP on EU environmental governance and policy performance more generally. It was based on the following questions and approach:

Did the 6EAP have positive effects on EU environmental governance and policy performance, which are independent of specific substantive environmental measures or problems?

- The project team assessed the extent to which the findings of the previous analyses regarding the added value of the 6EAP could be generalised across individual cases. The resulting hypotheses were further analysed in the light of the relevant literature and with the help of the targeted stakeholder consultation.

Targeted consultation of stakeholders

The consultation of stakeholders served three main purposes: 'testing' of the results of the desk research; closing of remaining knowledge gaps; and exploring the added value of the 6EAP. It relied on three techniques:

- an electronic survey
- three workshops
- 25 interviews

The electronic survey was conducted in April/May 2010. Its main purpose was to explore the added value of the 6EAP by testing the response of stakeholders and experts to relevant hypotheses. The questionnaire included 26 sections involving a mixture of closed and open-ended questions focussing on the 6EAP and its main objectives and priorities areas. With respect to the selection of participants, a great deal of attention was paid to ensuring that regional and sectoral balance was maintained as well as ensuring that a range of interests across the priority areas of the 6EAP were represented. Although the questionnaire was eventually sent to 712 participants, it was completed by only 121 respondents, resulting in an overall return rate of 17 per cent. The most likely explanation for this relatively low return rate appears to be that the circle of people who are sufficiently acquainted with the 6EAP is quite small, not least because of the time which has passed since the adoption of the Programme in 2002. Detailed information on the electronic survey can be found in Annex A, section 1.3.

Once the desk research dealing with the analysis of measures was nearing completion, the three workshops were held in September and October 2010 in Brussels, Budapest, and Berlin. The different locations were selected for a variety of reasons, including the different main themes of the workshops which focussed, respectively on the four environmental priority areas of the 6EAP (Brussels), issues related to EU enlargement (Budapest) and aspects of multi-level governance and implementation (Berlin). The main purposes of the

workshop where to test the response of policy-makers, stakeholders and experts to the results of the desk research, and to further explore the added value of the 6EAP. To enable testing of results, the project team prepared separate background papers for each workshop. Reflecting the large presence of EU-related policy-makers, stakeholders and experts in Brussels, the Brussels workshop was planned as a significantly larger event that the two other workshops. It was attended by 50 participants representing a broad range of background. The Budapest and Berlin workshops were attended by 19 and 13 participants, respectively. Summaries of the main results of the workshops are included in Annex A, section 1.4.

The project team conducted 25 interviews between August and Novembe 2010. These interviews were conducted in two waves, each of which with its own main purpose. More specifically, the first wave of interviews served mainly to fill knowledge gaps, which emerged during the desk research. Reflecting this main purpose, the interviewees were mainly chosen on the basis of their expertise. The main purpose of the second wave of interviews was to further explore the added value of the 6EAP, including related issues, which had emerged from the electronic survey. Reflecting this purpose, as far as possible within the limited scope of the study, interviewees from different EU institutions, political parties, and sectoral backgrounds were selected. A questionnaire was specifically developed for these interviews. Annex A, section 1.5 provides more information on the interviews.

1.3 Structure of report

This assessment is divided into five chapters and an annex. The main analysis and results can be found in chapters three to five. Chapter one provides an introduction to this assessment. It describes the context in which the assessment has been prepared, including some basic facts about the history and characteristics of the 6EAP. This is followed by a description of the main features of the research and assessment approach on which this study is based. Chapter one concludes with this outline of the report structure. Chapter two introduces the main types of objectives and governance approaches of the 6EAP and includes a comparison between the objectives of the 6EAP and those of the EU Sustainable Development Strategy. Chapter three contains a detailed analysis of EU environmental measures and policies under the 6EAP. The basic structure of this chapter reflects the main priorities of the Programme. More specifically, the first four sections focus on the four environmental priority areas of the 6EAP – climate change, nature and biodiversity, environment and health, and natural resources and waste. The next section deals with international issues. Each of these sections analyses the achievement of the objectives of the 6EAP in the respective area, relevant drivers and barriers, the policy mix and approach as well as the impact of the 6EAP on the adoption of measures. The final section of Chapter three on strategic approaches and instruments is based on the same type of analysis as the preceding sections, but follows a simplified structure. This reflects the somewhat unclear status of the respective provisions of the 6EAP on governance related issues (see Chapter 2.1) as well as the close links to the next chapter which begins with an analysis of the impact of the 6EAP on EU environmental governance. Chapter four provides an overall assessment of the 6EAP, which synthesises the results of the detailed analysis in Chapter three as well

as the results of the targeted stakeholder consultation. Several sections of Chapter four are devoted to the analysis of the added value of the 6EAP, including:

- the contribution of the Programme *per se* and its provisions on strategic approaches and instruments to EU environmental governance and policy performance;
- with respect to the 6EAP priority areas;
- and relative to other EU strategies, in particular the EU Sustainable Development Strategy and the Lisbon Strategy.

In addition to the added value of the 6EAP, Chapter four assesses the overall approach of the 6EAP with respect to its policy approaches and instruments, 10-year-timeframe and level of ambition of the 6EAP. It also synthesises the findings of Chapter 3 related to drivers and barriers and analyses the role of the role of the EU institutions. Chapter 5 summarises the main findings of the assessment and presents its main conclusions

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2 Objectives and governance approaches of the 6EAP

2.1 6EAP objectives

The 6EAP is structured around **three types of objectives**: overall aims, specific objectives, and priority actions. The specific objectives render the overall aims operational, and are themselves to be attained by means of related priority actions. While the overall aims and specific objectives constitute what could be called the 'true' objectives of the Programme, the priority actions can only be interpreted as objectives in the more limited sense that the 6EAP aims at their realization. However, it is not always clear which provisions of the 6EAP should be interpreted as overall aims, specific objectives, and priority actions. As illustrated below, in several cases relating mostly to horizontal issues of governance, it is difficult to determine the precise classification of certain provisions based on the terminology used, the substantive content, and structure (in relation to other provisions in the 6EAP).

The **overall aims** of the 6EAP are listed in Article 2. They describe the wider goals to which the Programme is intended to contribute in the four priority areas, climate change, nature and biodiversity, environment and health, and natural resources and waste. The definition of these wider goals is not constrained by the 6EAP's scope and timeframe. Rather, the overall aims describe certain fundamentally improved environmental conditions to which the Programme is expected to contribute. For example, with respect to climate change, the 6EAP states that it aims at 'emphasising climate change as an outstanding challenge of the next 10 years and beyond and contributing to the long term objective of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system...'.Box 1 presents the 6EAP's overall aims in the four priority areas, while the specific objectives are listed in the respective sections of Chapter 3 of this report.

Box 1: Environmental overall aims of the 6EAP

Climate change: emphasising climate change as an outstanding challenge of the next 10 years and beyond and contributing to the long term objective of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Thus a long term objective of a maximum global temperature increase of 2 °Celsius over pre-industrial levels and a CO2 concentration below 550 ppm shall guide the Programme. In the longer term this is likely to require a global reduction in emissions of greenhouse gases by 70 % as compared to 1990 as identified by the Intergovernmental Panel on Climate Change (IPCC);

Nature and biodiversity: protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting desertification and the loss of biodiversity, including diversity of genetic resources, both in the European Union and on a global scale;

Environment and health: contributing to a high level of quality of life and social well being for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment and by encouraging a sustainable urban development;

Natural resources and waste: better resource efficiency and resource and waste management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources and the generation of waste from the rate of economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment.

The extent to which the 6EAP contains overall aims beyond the four environmental priority areas - which are the only provisions in Article 2 introduced by the sentence 'The programme *aims* at' (emphasis added) - is somewhat unclear. One of the reasons for this is that, in addition to overall aims, Article 2, which is entitled 'Principles and overall aims', also contains the basic principles of EU environmental policy-making. In addition to those provisions which are clearly identifiable as principles - for example the polluter-pays and the precautionary principle - Article 2also contains several requirements which could be interpreted either as principles or as overall aims related to governance. This applies, for example, to Article 2(4) on the integration of environmental requirements into Community policies and on sustainable development, and on the 'emphasis' on extensive dialogue with stakeholders and best available scientific evidence in Article 2(3). The most likely additional overall aim can be found in the provisions of **Article 2(6) on the external dimension of EU environmental policy**. The related Article 9 on 'international issues' explicitly refers to these provisions as 'aims'. In doing so, Article 9 uses the same language as the corresponding provisions in Articles 5 to 8 on the four environmental priority areas.

Articles 5-8 on the environmental priority areas and Article 9 on international issues set out **specific objectives** which translate the overall aims of the 6EAP into more detailed operational objectives. For example, one of the Programme's specific objectives in pursuit of its overall aims for climate change is the 'realisation by 2005 of demonstrable progress in achieving the commitments under the Kyoto Protocol' (Article 5(1)).In addition to the specific objectives introducing Articles 5-9, other provisions of the 6EAP may also be interpreted as specific objectives. This applies, in particular, to the sections of Article 2(3), which relate to stakeholder dialogue, public participation, and best available scientific evidence. Although the title of Article 2 itself refers exclusively to principles and overall aims, Article 10 of the 6EAP on 'environmental policy-making' refers to these provisions as 'objectives'.[5] This interpretation is further supported by the fact that, apart from the 'objectives' in Article 2, the 6EAP does not associate any other specific objectives with the priority actions listed in Article 10.

Nevertheless, considerable **ambiguity** remains. This is not only because the title of Article 2 exclusively mentions overall aims and principles, but also because - unlike the specific objectives in Articles 5-8 and 9 – the provisions of Article 2(3) on participation and scientific input are only loosely linked to particular overall aims. Although Article 2(3) establishes a link to all four environmental overall aims, this link appears to be much less close as the link between the environmental overall aims and the respective environmental specific objectives: while the environmental specific objectives are often at least partly implied by the overall aims (after all, they are specifications of these aims), this is not the case for the provisions of Article 2(3), which specify aspects of governance, rather than the environmental overall aims themselves.

The status of the **'Strategic approaches to meeting environmental objectives' in Article 3** of the 6EAP is even more ambiguous. An argument can be made that the strategic approaches should be treated as specific objectives for two reasons. First, they resemble the provisions in Article 2(3) in that they also refer to governance in support of the 6EAP environmental priority areas (of course this, and also the argument following below, is only relevant if one assumes that Article 2(3) does indeed contain specific objectives). Second, although it might be possible to argue that the strategic approaches are somewhat more detailed than the corresponding provisions of Article 2(3), there is a strong overlap in terms of content and subject matter addressed between the two. For example, Article 2(3) states that with respect to public participation, the 6EAP emphasises 'developing European initiatives to raise the awareness of citizens and local authorities' and 'extensive dialogue with stakeholders, raising environmental awareness and public participation'. In a similar vein, Article 3(9) states that the programme's aims and objectives should be pursued by improving' collaboration and partnership with consumer groups and NGOs and [promoting] better understanding of and participation in environmental issues amongst European citizens'.

[5] Unlike Article 9, which refers to the respective provisions on the external dimension of EU environmental policy in Article 2 as "aims".

As with the provisions of Article 2(3), considerable ambiguity nevertheless remains. In fact, the differences between the strategic approaches of Article 3 and the 'standard' specific objectives in Articles 4-8 and 9 are even larger than is the case with Article 2(3). First, in contrast to Article 2(3) (more precisely: the respective provisions in Article 10), the 6EAP refers to the strategic approaches as 'means' (Article 3), rather than 'objectives'. The Programme uses the same term to describe the priority actions, which might suggest that the strategic approaches should be interpreted as priority actions rather than specific objectives. Second, as with the 'standard' specific objectives in Articles 4-8 and 9, a set of priority actions is explicitly linked to Article 2(3). This is not the case with the strategic approaches – although, as argued below, it seems possible to interpret the specific 'requirements' set out in Article 3 for each strategic approach as priority actions.

The 6EAP's **priority actions** constitute the means by which the Programme envisages the pursuit of its specific objectives. Articles 5-10 on the environmental priority areas, international issues, and environmental policy-making contain a large number of priority actions. As the term 'priority action' suggests, the respective provisions in the 6EAP describe policy measures, rather than objectives. Nevertheless, they have certain relevance from the perspective of 6EAP objectives. First, the adoption of the priority actions - including the respective specifications - is for obvious reasons an important objective of the 6EAP. Second, in terms of types of content, the priority actions are often similar to the specific objectives of the 6EAP. Consequently, the distinction between specific objectives and priority actions sometimes appears to be somewhat artificial. For example, in the nature and biodiversity priority area, Article 6(2, i) describes one *priority action* as 'aiming for swift ratification and implementation of the Cartagena Protocol on Biosafety and supporting the build up of regulatory frameworks in third countries where needed through technical and financial assistance'. In term of content, this is very similar to a *specific objective* set out in the climate change priority area which calls for 'ratification and entering into force of the Kyoto Protocol to the United Nations framework Convention on climate change by 2002 and fulfilment of its commitment of an 8% reduction in emissions by 2008-12 compared to 1990 levels for the European Community as a whole, in accordance with the commitment of each Member State set out in the Council Conclusions of 16 and 17 June 1998'. However, if both specific objectives and priority measures contain very similar types of requirements, then it is no longer possible to distinguish the two in terms of (operational) objectives as opposed to (implementing) measures, suggesting that it might be more appropriate to interpret at least some priority actions as specific objectives (and *vice versa*).

As argued above, it seems possible to interpret the strategic approaches of Article 3 as specific objectives. This then raises the question of **whether the Article 3 'requirements', which are associated with the strategic approaches, can also be interpreted as priority actions**. Given the considerable variance in terms of types of content among the different priority actions, interpreting the requirements of Article 3 as priority actions would not seem to be problematic. Article 3 'requirements', such as 'improved exchange of information on best practice on implementation including by the European Network for the Implementation and Enforcement of Environmental Law (IMPEL network) within the framework of its competencies' (Article 3(2)), seem to be perfectly in line with other priority actions in terms of types of content. However, besides terminology ('requirements' as opposed to 'priority

actions'), the typical structure of the provisions containing the Article 3 'requirements' differs from the typical structure of priority measures: while the former are not further specified, most priority actions are specified through several sub-sections.

A final question concerns the status of the requirements of Article 4 on the Thematic Strategies. Provisions on the adoption and substantive focus of individual Thematic Strategies can be found in Articles 5-8 on the environmental priority areas. These requirements have the form of priority actions. In contrast, Article 4 is more generic, setting out the general concept and procedural and governance characteristics of the Thematic Strategies. Because of the relative prominence of these provisions - the 6EAP devotes a whole separate Article to them - it might be tempting to interpret them as specific objectives similar to the governance related requirements of Article 3. However, the specific objectives are meant to render the overall objectives operational. Yet, unlike the specific objectives for the environmental priority areas, but also the governance-related provisions in Article 3, Article 4 does not directly refer to the 6EAPs overall aims. In addition, in terms of contents, Article 4 is often very specific, prescribing, for example, that the mid-term review of the 6EAP should review the Thematic Strategies and that, were appropriate, the strategies should take the form of a Decision and be adopted on the basis of Article 251 of the Treaty. The lack of a direct link to the overall aims and the high specificity of some of the provisions of Article 4 suggest that these could also be interpreted as governance-related priority actions. In the light of the prominence of the Thematic Strategy approach on the one hand, and the significant differences between the 'standard' specific objectives and the provisions of Article 4 on the other hand, it may perhaps be best to interpret the latter as 'special' priority actions to which the 6EAP gives particularly high priority.

In conclusion, much of the 6EAP - in particular the four environmental priority areas - follows a clear structure of general overall aims, operational specific objectives and priority actions which implement the objectives. However, a closer look shows that this categorisation is often blurred. Consequently, in terms of types of content, it is not always clear why a particular provision is treated as, for example, a specific objective, rather than a priority action. Perhaps more importantly, **the status of many of the 6EAP's provisions on EU environmental governance in Articles 2 and 4, but in particular in Article 3, is unclear**. While a case can be made that these provisions can also be interpreted in terms of specific objectives and priority actions, such an interpretation is far from evident, although a strong argument in favour of such an interpretation may well be that the status of many governance-related provisions in the 6EAPwould otherwise remain somewhat unclear. Given the lack of practicable alternatives, the governance-related provisions are interpreted in terms of overall aims, specific objectives and priority measures for the purpose of this study.

2.2 6 EAP objectives vs. EU SDS objectives

The following section provides a comparison between the 6EAP and the EU Sustainable Development Strategy (EU-SDS). It first outlines the main objectives of the EU-SDS and the 6EAP followed by a comparison, examining which aspects of the 6EAP contribute to the attainment of the objectives of the EU-SDS.

2.2.1 Background to the EU Sustainable Development Strategy and the 6EAP

2.2.1.1 EU Sustainable Development Strategy

At the 'Rio+5' Special Session of the UN General Assembly in 1997, the EU, along with other signatories of the Rio Declaration, committed itself to producing a Sustainable Development Strategy in time for the 'Rio+10' Johannesburg Summit in 2002. The Helsinki European Council in December 1999 invited the European Commission to 'prepare a proposal for a long-term strategy dovetailing policies for economically, socially and ecologically sustainable development'.[6] The European Council also called on the Commission to put forward proposals for a 6EAP at the same time.

The inclusion of environmental issues in the definition and implementation of other policies is an essential element in achieving the objective of sustainable development. This principle was confirmed in the Treaty of Maastricht[7] and in the Cardiff Summit of the European Council in 1998[8] which formed the cornerstone for coordinated action at EU level for the integration of environmental issues into other policy areas.

In May 2001, in response to the Helsinki request, the Commission presented a **Communication on the EU Sustainable Development Strategy** (SDS), *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development* (COM(2001)264) which identified six key challenges to sustainable development: climate change; public health; poverty; an ageing society; natural resource management; and transport and land use management. It sets out actions to be taken together with a number of objectives, targets and measures concerning the four environmental challenges.[9] This Communication was complemented by the Council's own conclusions from their meeting in Göteborg in June 2001.[10] Although the Council conclusions contained considerably less concrete targets and were broader in their recommendations than the Commission Communication, the Communication and the 6EAP are considered to be valuable documents

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6 European Council (1999): Helsinki European Council - presidency conclusions. SN 300/99. Helsinki.

7 CEC (1998): Communication from the Commission to the European Council of 27 May 1998 on a partnership for integration: a strategy for integrating the environment into EU policies (Cardiff- June 1998) [COM(1998)333).

8 Treaty on the European Union (consolidated version) EU Treaty (Maastricht 1992).

9 The themes of poverty and an ageing society were dealt with by the Lisbon Strategy and attached as an annex to the Commission's Communication.

10 Presidency Conclusions, Göteborg European Council, 15-16 June 2001.

for the implementation of the objectives set out in the Council's strategy for sustainable development. The global partnership for sustainable development, adopted by the Commission in 2002, gave it an external dimension.

In 2005, the EU Sustainable Development Strategy was revised to give it new impetus.[11] The **Renewed EU Sustainable Development Strategy** was adopted by the European Council in June 2006.[12] It provided an overarching strategy for all EU policies to set out how Europe could meet the requirements of present generations without compromising the ability of future generations to meet their own needs. The renewed SDS dealt with economic, environmental and social issues in an integrated way under the following seven key challenges:

- Climate change and clean energy
- Sustainable transport
- Sustainable consumption and production
- Conservation and management of natural resources
- Public health
- Social inclusion, demography and migration
- Global poverty

Despite the fact that no single text for the 2001 SDS was agreed upon by all parties (the Council the European Parliament and the Commission), by the time the revised Strategy was presented, there was considerably less opposition (see chapter **Error! Reference source not found.**). On 24 July 2009, the European Commission adopted the **second progress report** on the EU-SDS in response to a request from the December 2007 meeting of the European Council. The report took stock of developments at EU level and launched a reflection on how the EU-SDS could be taken into the future. The report notes that in recent years, the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in the EU in several areas and efforts need to be intensified. The review invites a reflection on how the EU-SDS could evolve in the future. Greater alignment with the Lisbon Strategy for growth and jobs and other cross-cutting EU strategies, further streamlining of the strategy and better monitoring and coordination are examples of points that are suggested for consideration.

2.2.1.2 The Lisbon Strategy

During the meeting of the European Council in Lisbon, March 2000, Heads of State and Government launched the '**Lisbon Strategy**' aimed at making the European Union the most competitive economy in the world and achieving full employment by 2010.

The Lisbon strategy rests on the following three pillars of sustainable development:

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[11] The 2005 Review of the EU Sustainable Development Strategy: Initial Stocktaking and Future Orientations COM(2005) 9 February 2005.

[12] Council of the European Union, Review of the EU Sustainable Development Strategy (EU SDS) – Renewed Strategy, Document 10917/06, 26 June 2006.

An **economic pillar** preparing the ground for the transition to a competitive, dynamic, knowledge-based economy. Emphasis is placed on the need to adapt constantly to changes in the information society and to boost research and development.

A **social pillar** designed to modernise the European social model by investing in human resources and combating social exclusion. The Member States are expected to invest in education and training, and to conduct an active policy for employment, making it easier to move to a knowledge economy.

An **environmental pillar**, which was added at the **Göteborg European Council** meeting in June 2001, drawing attention to the fact that economic growth must be decoupled from the use of natural resources.[13] The separate and later consideration of the need for an environmental pillar led to early concerns that the Lisbon process was developing without adequate consideration for the environment.[14]

2.2.1.3 Relating 6EAP, EU-SDS and the Lisbon Strategy

The first proposal for a SDS to act as the environmental pillar to complete the social and economic pillars set out in the Lisbon Strategy was put forward by the Commission in 2001. However, this was not the version of the SDS which was adopted at the subsequent meeting of the European Council in Göteborg. Thus, at that time, a single document for the EU-SDS that was agreed upon by all parties did not exist. The conclusions of the Göteborg European Council forming the EU-SDS made specific reference to the 6EAP, noting that the EU-SDS objectives were to be met based on *inter alia* the measures set out by the 6EAP.[15] So, the EU-SDS and the 6EAP developed more or less in parallel to one another and are not only linked by the reference made in the original EU-SDS but also by the role that they play in relation to the Lisbon Strategy: they have both acted as a means to balance the economic and social objectives of the Lisbon Strategy and more importantly providing environmental objectives to be achieved.[16]

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[13] The Council conclusions take note of the 6EAP and the Commission's Communication on the EU Sustainable Development Strategy (SDS), A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (COM(2001)264) and form the basis of the EU-SDS, the environmental pillar of the Lisbon Strategy.

[14] R.A. Kraemer, A. Klasing et al. (2002): EU Environmental Governance: A Benchmark of Policy Instruments; retrieved from http://eucenter.wisc.edu/OMC/Papers/Other/StudyEnvGov.pdf on 21/11/2010.

[15] Later versions of the EU-SDS did not take further recourse to the 6EAP, but it could be said that the 6EAP had an effect on the initial proposals and could be seen to have been mainstreamed into the renewed version of the EU-SDS when it was reviewed in 2005 (see chapter **Error! Reference source not found.**).

[16] Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future, IEEP, May 2010.

2.2.2 Comparative analysis of the 6EAP and the EU-SDS

2.2.2.1 Comparing 6EAP and EU-SDS Characteristics

This section provides a comparison of the main features of the 6EAP and EU-SDS including their legal character, scope, timeframe and review and monitoring process. In terms of **legal character**, the 6EAP was adopted as a Decision of the European Parliament and of the Council and went through the formal co-decision procedure. The EU-SDS was adopted as a Conclusion of the European Council. The EU-SDS can be perceived to have more high-level political weight (given its adoption by EU leaders) and its strict review process (see below). However, in a formal sense its legal foundation is not as strong as that of the 6EAP which is a formally adopted intra-institutional document.

With regards to **scope**, the 6EAP solely addresses environmental policy, while the EU-SDS has a much broader approach, taking all three pillars of sustainable development, i.e. economy, environment and society, into account.

The **timeframe** of the 6EAP is clearly defined to be 10 years while the EU-SDS covers a much longer timeframe. The 6EAP therefore has a much shorter timeframe than the EU-SDS.

Even though the EU-SDS has a less formal foundation in EU law it has a stronger review process than the 6EAP. While the 6EAP has included only one mid-term review during its 10-year timeframe, the EU-SDS is thoroughly reviewed every two years. Thus, not only are reviews undertaken more frequently but the depth of the reviews is also different. The 6EAP does not provide any detailed guidance on its review process and the mid-term review presented in 2007 maintained an overhaul of the Programme was not necessary at the time.[17] In contrast, the EU-SDS provides a detailed review mechanism based on data collection and analysis. Furthermore, the review is not only based on data for EU-level developments (delivered through EUROSTAT) but also on monitoring data at Member State level (delivered through Member State reports). In contrast to the mid-term review of the 6EAP, a comprehensive review of the SDS initiated in 2004 led to the elaboration and endorsement of a 'renewed' SDS by EU leaders in June 2006.This review resulted in a single, coherent document, clearly structured around a set of overall objectives which are translated into several operational targets and specific actions.

[17] CEC (2007):Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007) 225, 30 April 2007.

Tab.1 Summary of basic key features of the 6EAP and EU-SDS

Summary of basic key features of the 6EAP and EU-SDS		
Feature	6EAP	EU-SDS
Legal foundation	Art. 192 (3) TFEU	SD is a fundamental EU objective (Art. 3 TEU) & in view of the WSSD in Johannesburg
Timeframe	10 years	Long term (not specified)
Legal character	Decision of the European Parliament and of the Council	Conclusions of the European Council
Scope	Environmental policy	Sustainable development, thus covering environment, economic and social issues
Review & monitoring	One mid-term review, EU-level	Reviewed regularly through progress reports on implementation every two years, EU level based on EUROSTAT SD Monitoring Report & MS level based on MS reports to the Commission.

2.2.2.2 Comparison of 6EAP and EU-SDS objectives

In comparing 6EAP and EU-SDS objectives, the most striking difference between the two is the degree of detail. When the 6EAP and the SDS were created, the former was more detailed and specific in its objectives such as the inclusion of the 2oC target for limiting global average temperature rise. In comparison to the renewed EU-SDS, the 6EAP also sets a number objectives and targets of not included in the former, and indeed mentions whole issue areas which are absent from the EU-SDS (for details see Annex H). Nonetheless, following its substantial review (see above), the renewed EU-SDS, adopted in 2006, is more up-to date than the 6EAP (e.g. renewable energy objective), containing objectives and targets which are similarly detailed in some areas, especially in the case of climate change

and for some areas of nature and biodiversity. However, on the whole, the objectives of the 6EAP remain more tightly defined than those of the EU-SDS, despite its review.

For example, the specific objectives set out for the protection of the marine environment in the 6EAP include the creation of a thematic strategy for the protection and conservation of the marine environment; the promotion of integrated coastal zone management; and promotion of greater integration of environmental considerations in the Common Fisheries Policy. This specificity of required action set out in the 6EAP **helps provide greater guidance to Member States** on how to achieve the overarching goals set by the EU-SDS of 'improving management and avoiding the overexploitation of renewable natural resources such as fisheries'. In this way, although the EU-SDS and the 6EAP have similar aims, with the EU-SDS containing broad ideas on potential action,[18] it **lacks the 6EAP's 'tool kit' for action**.

In contrast to the EU-SDS, the 6EAP focuses strongly on means to achieve specific objectives. The 6EAP acts as an important policy tool, set within the well-established basis built up by previous EAPs. Since the adoption of the first EAP in 1973, EAPs have been a core part of EU environmental policy-making and programming, though their role has changed over time. The 6EAP acts as a framework to bring together existing initiatives in a holistic way, signposting areas of current environmental importance and identifying areas for action as well as governance approaches (e.g. Environmental Policy Integration). In contrast to the EU-SDS, the 6EAP places particular emphasis on methods for attaining its objectives. Accordingly, the 6EAP cites the use of **specific instruments and governance approaches to assist with achieving its objectives**: the development of new legislation and amendment of existing legislation; awareness-raising among stakeholders; increased public participation; improvement of the scientific knowledge base for decision-making; provisions on liability; provisions for increased information about the environmental impact of products and services; environmental policy integration (EPI); collaboration and partnership with enterprise; effective implementation and finally the use of the Thematic Strategy approach. The EU-SDS, although providing a number of concrete objectives and guiding principles (including for example EPI), provides less detailed provisions on the tools to be used to achieve these goals.

Regarding coverage of themes, as per its overall aims, the EU-SDS has a much broader scope, while the 6EAP focuses on environmental topics. Though the overall goals of the 6EAP are commensurate with those of the EU-SDS with both agreeing on three key areas on which environmental focus should be placed: Climate Change, Natural Resources and Waste, and Environment, Health and Quality of Living there is a clear difference in focus. While EU-SDS objectives should take social and economic factors into consideration (in keeping with the aims of sustainable development), the 6EAP seeks to provide a targeted and environmentally focused framework for action. For example, the decoupling of resource use from GDP and in particular transport growth from GDP, is a key objective of the EU-SDS

[18] For example: 'The EU welcomes civil society initiatives which aim at creating more ownership for sustainable development and will therefore intensify dialogue with relevant organisations and platforms that can offer valuable advice by drawing attention to the likely impact of current policies on future generations.'

with the aim of ensuring systemic change for sustainable development in general. Under the 6EAP, sustainable transport is however set within the larger environmental contexts of Climate Change (reduction of emissions caused by transport, promoting the development of alternative and low-fuel consuming vehicles) and Environment, Health and Quality of Living (contributions to air quality and noise reduction, reduction of link between economic growth and passenger transport demand, increased share of public transport).

In contrast, biodiversity, a theme which is more traditionally of environmental importance[19] is included by the EU-SDS under the management of natural resources, whereas the 6EAP regards this as a key priority area, separating it from other thematic areas. The reasons for this different placing of biodiversity are difficult to comprehend, but one can assume that by doing so (irrespective of the reason for this), the 6EAP focuses on providing key strategic direction and a framework for a better use and protection of the environment as an end unto itself. However, as the environment cannot be seen as a stand-alone policy issue, the broader approach of the EU-SDS fulfils the function of putting the environment into a larger socio-economic perspective. The 6EAP and the EU-SDS thus complement each other in the sense that the 6EAP prioritises specific environmental considerations, such as biodiversity; while the EU-SDS ensures that the environmental perspective remains connected to the wider context.

Finally, **the EU-SDS also includes some environmentally significant aspects not included in the 6EAP** such as the security of energy supply (mentioned under climate change and clean energy) or improving the energy efficiency of the transport sector through innovation and the use of cost-effective instruments (mentioned under sustainable transport). One can say that the EU-SDS does not go beyond the scope of the 6EAP in an environmental sense, rather it provides a broader view on topics by integrating for example, issues that are purely related to transport with environmental issues. Both, energy supply and competitiveness according to a strict understanding of environmental policy do not belong to environment but to energy policies as does energy efficiency of the transport sector (which belongs to transport policy). However, both clearly have environmental impacts which are addressed by the EU-SDS which, in the case of energy supply, adds '…and environmental sustainability' and in the case of transport by including reference to the issue of efficiency.

In summary, the mandates of the 6EAP and the EU-SDS are clearly different, as is reflected in their overall aims: the 6EAP having the more purely environmental motivation of the two and the EU-SDS attempting to place environmental issues within a broader consideration of sustainable development. In this way, both have separate value: the 6EAP for providing focused, concrete indications on how to take environmental action forward and the EU-SDS for its ability to link environmental considerations into economic growth and social wellbeing. The frequency of review based on the findings of regular monitoring and reporting, makes the EU-SDS a more up-to-date and dynamic document, whilst the 6EAP has had less renewal as the result of its single mid-term review, making it clear that a number of its

[19] Although of course, the economic valuation of ecosystem services has led to an increased understanding of the value of biodiversity beyond its environmental worth.

specific targets now need to be revisited. Nevertheless, in terms of objectives, the EU-SDS and the 6EAP are commensurate with one another, and as such are both responsible for providing the Lisbon Strategy with an environmental pillar.

In contrast to the EU-SDS, the 6EAP strongly focuses on means to achieve objectives:

The 6EAP has acted as an important policy tool, set within the well-established basis built up by previous EAPs. EAPs have been of increasing importance to EU environmental policy-making and programming and the 6EAP has acted as a framework to bring together existing initiatives in a holistic way, signposting areas of current environmental importance and identifying areas for action as well as governance approaches (e.g. Environmental Policy Integration). In contrast to the EU-SDS, the 6EAP places particular emphasis on methods for attaining its objectives. Accordingly, the 6EAP cites the use of **specific instruments and governance approaches to assist with achieving its objectives**: the development of new legislation and amendment of existing legislation; awareness-raising among stakeholders; increased public participation; improvement of the scientific knowledge base for decision-making; provisions on liability; provisions for increased information about the environmental impact of products and services; environmental policy integration (EPI); collaboration and partnership with enterprise; effective implementation and finally the use of the Thematic Strategy approach. The EU-SDS, although providing a number of concrete objectives, does not provide detailed provisions on the tools to be used to achieve these goals. It contains broad ideas on potential action,[20] but **lacks the 6EAPs comprehensive tool kit for action**.

Additionally, and most importantly perhaps, the 6EAP pushes for **binding legislation with deadlines and regular monitoring and reporting of progress** in an attempt to bring Member States together to reach similar environmental standards across the Union. This can be seen for example in the request for binding legislation in the form of a directive specifically related to Soil. Also, the pressure to establish and set up monitoring systems for the Natura 2000 network was so great that a participant from the Berlin Workshop on implementation (see Annex D) noted that it was the main focus of all regional efforts for quite some time. Instruments mentioned by the 6EAP such as the Thematic Strategy approach and environmental policy integration have had varying degrees of success. Nevertheless, they all have the potential to provide practical assistance to policy-makers and implementation bodies in Member States to help them implement EU environmental objectives.

[20] For example: 'The EU welcomes civil society initiatives which aim at creating more ownership for sustainable development and will therefore intensify dialogue with relevant organisations and platforms that can offer valuable advice by drawing attention to the likely impact of current policies on future generations.'

2.3 Governance structures to achieve the objectives of the 6EAP

Every environmental action programme of the EU reflects the thinking at the time of its adoption on relevant environmental problems and suitable problem-solving approaches. At the time of the adoption of the 6EAP, the European Commission and many EU Member States had clearly expressed their wish of having an Environmental Action Programme that is shorter, more strategic and focused on a number of key persistent environmental problems.[21] The chosen approach of prioritising strategic areas in the 6EAP partly stemmed from the observation that the progress with implementing the 5EAP had been, among other things, burdened by too many objectives.[22]

At the same time, a change in thinking about key environmental governance modes could be observed, leading to a stronger emphasis on cooperative process management, including joint problem definition and policy formulation together with experts from EU Member States and key stakeholders, as opposed to more traditional, hierarchical forms of regulating by setting quantified targets and identifying key legislative measures.[23] This change was partly brought about by the observation that persistent problems such as climate change, loss of biodiversity, natural resource consumption or environmental and health problems require a broader approach beyond environmental legislation and thus cannot solely rely on a top-down approach only.[24] It was partly brought about by the insight that previous action programmes lacked commitment by Member States and key stakeholders[25]. But it also reflected the increased relevance of concerns about economic costs of new environmental policies in many EU Member States and related calls for easing administrative burdens, resulting in the desire among many key stakeholders to be included early in the process of policy formulation. Cooperative approaches with industry, such as for example in integrated product policy, gained relevance accordingly.

Consequently the 6EAP was based on a **cooperative and procedural approach to** developing EU environmental policy. This approach is not guided by clear targets and

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21 See UK House of Commons Select Committee on Environmental Audit 1999.

22 CEC (1999): Communication from the Commission - Europe's environment: What directions for the future? The global assessment of the European community programme of policy and action in relation to the environment and sustainable development, 'Towards sustainability', (COM(1999)543).

23 Homeyer, Ingmar von (2009): "The evolution of EU environmental governance" in Scott, Joanne (ed.): Environmental Protection: European Law and Governance, Oxford: Oxford University Press, 1-26. ; Héritier, Adrienne (2002): New Modes of Governance in Europe: Policy Making without Legislating? IHS Political Science Series: 2002, No. 81.; Lenschow, A./Knill, C, (2004): Models of Regulation in the Governance of the European Union: Towards a Comprehensive Evaluation. In: J.Jordan und D. Levi-Faur (eds.): The Politics of Regulation: examining Regulatory Institutions and Instruments in the Age of Governance, London.

24 Homeyer, Ingmar von (2010): "Emerging experimentalism in EU environmental governance" In: Sabel, Charles F. and Jonathan Zeitlin (eds.), Experimentalist Governance in the European Union: Towards a New Architecture?, Oxford: Oxford University Press, p. 121-150.

25 CEC (1999): Communication from the Commission - Europe's environment: What directions for the future? The global assessment of the European community programme of policy and action in relation to the environment and sustainable development, 'Towards sustainability', (COM(1999)543).

objectives that should be achieved in a joint and cooperative manner, but rather the approach itself is meant to produce clear targets and objectives. The 6EAP concentrated on formulating a framework of general principles and objectives, but contained only few clear targets and timetables. Further refinements were left to the later phase of developing seven specific Thematic Strategies, which should set targets and define action on the basis of longer-term scientific analysis and in close negotiation with stakeholders. Concerns about the broader lack of concrete targets and underpinning indicators were initially expressed by EU Environment Ministers and European Parliament, but were dropped during the process of negotiating the final 6EAP.[26]

Furthermore, the 6EAP was the first Community environment action programme to be adopted jointly by the European Parliament and the Council in accordance with the formal **legislative co-decision procedure**. It is a formal act of the European Parliament and Council based on a Commission proposal (although legally not directly binding), embodying a commitment of all three institutions and responding to concerns of limited ownership and partial commitment of other sectors which were recognised with regard to earlier Environment Action Programmes. Initial insistence of the European Parliament that all Thematic Strategies be adopted through the co-decision procedure was dropped in the final stage of political negotiation, leaving the European Commission with a considerable degree of flexibility for shaping up the final contours of the Thematic Strategies through a network of working groups, involving a range of Commission Directorates-General, EU Member State experts and key non-state stakeholders.[27]

The governance structures of the 6EAP thus reflect the general drive towards more open, flexible and participatory approaches in EU environmental governance that was taking place during the years of its formulation. Principally, such approaches relieve the European legislator and strengthen the role of state and non-state experts in the process of further operationalising broader policy frameworks, here with regard to the formulation and adoption of Thematic Strategies.[28] Those approaches are accompanied by higher costs for political coordination among a larger group of involved actors, and the increasing need for the European Commission to function as a moderator among diverging interests, leading to concerns that high administrative costs for cooperative management and over-complexity of policy approaches could result in policy overload and come at the expense of quality of the final policy output.[29]

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[26] See Withana, S., et al.(2010): Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future, Report for the IBGE-BIM, IEEP, London.

[27] Ibid.

[28] Homeyer, Ingmar von (2007): The Thematic Strategies: Governance for Environmental Policy Integration? EPIGOV Paper No. 8, Ecologic –Institute for International and European Environmental Policy, Berlin.

[29] Pollack, Mark A. /Hafner-Burton, Emilie Marie (2010): Mainstreaming International Governance: The Environment, Gender, and IO Performance in the European Union (June 10, 2010). In: Review of International Organizations, Vol. 5, No. 3, p. 302-303.

3 Area specific assessment of the achievements of the 6EAP

3.1 Climate Change

3.1.1 Introduction

Combating climate change is the first of the four thematic areas covered by the 6EAP.

The 6EAP's **overall aim** in the climate change thematic area is set out in Article 2 paragraph 2, indent 3, which contains a commitment to the 2°C target and to a global reduction of greenhouse gases emissions by 70% as compared to 1990.

Article 5 - the main provision in the 6EAP on climate change - contains **specific objectives** which elaborate the overall aim. According to paragraph 1 of this article, the overall aim should be met *inter alia* by pursuing ratification and entering into force of the Kyoto Protocol and fulfilment of an 8% emissions reduction commitment for the period 2008-12 (compared to 1990 levels) for the European Community as a whole. Moreover, the Community is asked to place itself in a credible position to advocate for an international agreement on more stringent reduction targets for the second commitment period under the Kyoto Protocol.

Article 5 paragraph 2 specifies relevant policy fields (international commitments, adaptation, enlargement, external relations) and sectors (energy, transport, industry, other sectors) as sub-areas which are to contribute to the aim and objectives. Each sub area includes a list of **priority actions**.

There are a number of additional relevant **cross-cutting aims, objectives and priority actions** outlined in Articles 3, 9 and 10. These cross-cutting objectives address mainly international issues, integration, participation and evaluation. They do not specifically address climate policy, but are meant to facilitate and guide policy making in all thematic areas (including climate change).

3.1.2 Summary assessment of the achievement of objectives in the climate change thematic area

3.1.2.1 Implementation of international climate commitments

In the **first sub-area** of Article 5 (2) (i), the 6EAP envisages a number of priority actions to implement international climate commitments, including the Kyoto Protocol. The EU ratified the Kyoto Protocol in 2002, and supported – through diplomatic efforts – its entry into force in 2005.[30] The first important overarching European strategy to meet its related international

[30] Oberthür, Sebastian/ Pallemaerts, Marc: The EU's Internal and External Climate Policies: An Historical Overview. In Oberthür, Sebastian, Pallemaerts, Marc (eds.) (2010): The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 39.

climate commitments was laid (after the European ratification of the Protocol, but partly even before its entry into force) by the first and second phase of the **European Climate Change Programme (ECCP)** in 2000 and 2005. Although the international community has not yet been able to agree on internationally binding commitments for the post-2012 period, the EU efforts to mitigate greenhouse gases already extend beyond 2012. In 2009, the EU passed the **Climate and Renewable Energy Package** which is comprised of measures implementing the '20-20-20' by 2020 targets agreed by the Spring European Council in March 2007. This set of targets contains political commitments to reduce the EU's greenhouse gas emissions by at least 20% below 1990 levels by 2020, to increase the share of renewable energy in EU's final energy consumption to 20% by 2020 and to save 20% on the EU's projected energy consumption by 2020.

The above mentioned overarching strategic documents have provided the basis for a number of legislative and policy measures, i.e. the 2003 Directive for the **EU Emission Trading Scheme** (EU ETS) and the 2004 **Linking Directive.** [31] The latter provides the foundation for using credits obtained through the Kyoto flexible mechanisms to comply with obligations under the EU ETS. In 2008, the EU adopted the **Aviation Directive** to include aviation in the EU ETS.[32] In 2009, the EU ETS was improved by measures included in the Climate and Renewable Energy Package, such as a revised EU ETS Directive,[33] which provides for amendments of the original EU ETS Directive and more ambitious reduction targets than the Burden Sharing Agreement for the post-2012 period. It is complemented by the **Effort Sharing Decision** which contains binding reduction targets for the post-2012 period for sectors not covered by the trading scheme.[34] Furthermore, while the EU and its member states are negotiating their vision at the international level, the European Council committed to a unilateral 20% emission reduction target by 2020 in the context of the aforementioned 20-20-20 targets.[35]

To date, the global community has not shown sufficient commitment to limiting global warming to a maximum global temperature increase of 2°C above pre-industrial levels.[36] The EU, however, has contributed and is continuing to contribute to the **overall aim of Article 2 6EAP** of limiting global warming to 2°C by passing and implementing the aforementioned

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31 Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L 275, 25.10.2003, p. 32–46; Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, OJ L 338, 13.11.2004, p. 18–23.

32 Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8, 13.1.2009, p. 3–21.

33 Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJ L 140, 5.6.2009, p. 63–87.

34 Decision No 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020, OJ L 140 , 05/06/2009. P. 0136 – 0148.

35 Brussels European Council (2007). Presidency Conclusions. 8/9 March 2007. 7224/1/07.

36 CEC (2010): Commission Staff Working Document: "2009 Environment Policy Review, Part 2, 2 August 2010, COM(2010) 975 final, page 14.

measures. The EU as a whole, and most of its Member States, are on track to meet their respective Kyoto Protocol emission reduction obligations for the first commitment period.[37] Moreover, the EU has managed to place itself in a credible position in international climate negotiations to **advocate for a stringent international agreement** for the period beyond 2012, the 2°C limit (which has been integrated in the Copenhagen Accord[38] and the Cancun Agreements), and mid- and long-term targets in line with IPCC scenarios, by taking action at EU level, making the offer of an 30% reduction goal and by unilaterally committing to the 20% reduction target by 2020. In particular, when compared to the positions of other major greenhouse gas emitting countries, the EU is generally perceived as a credible player in international climate negotiations.

3.1.2.2 Reduction of greenhouse gas emissions in the energy sector

The second sub-area outlined in Article 5 (2) (ii) addresses the reduction of greenhouse gas emissions in the energy sector.

The EU adopted a number of relevant measures. The **Renewable Energy Directive** introduced binding national targets to achieve a renewable energy share of 20% of the EU's gross final *energy* consumption by 2020.[39] It actually exceeds the 6EAP's indicative target of a 12% share of gross national energy consumption. This target had built upon the former 2001 Renewable Electricity Directive, which provided for an indicative target on electricity produced from renewable energy sources in total EU *electricity* consumption of 22,1% by 2010.[40] According to the latest EEA reports on greenhouse gas emissions trends and projections up to 2009, gross *electricity* generation from renewable energy sources in Europe grew significantly, with an increase of about 60% between 1990 and 2007. However, the EEA report underlines that the contribution from renewable energy remains limited in the *energy* mix and that further substantial efforts are needed to meet the 2020 target.[41]

In contrast to the comparatively ambitious renewable energy goal, the EU could have been more ambitious with regard to **energy efficiency** measures. However, energy intensity (i.e.

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37 According to Eurostat, but also according to the latest report of the European Environment Agency and the European Commission's analyses, the EU-15 will meet their Kyoto target. EEA (2009): Greenhouse gas trends and projections. Available on http://www.eea.europa.eu/publications/eea_report_2009_9, page 84; Report from the Commission to the European Parliament and the Council - Progress towards achieving the Kyoto objectives (required under Article 5 of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, COM(2009) 630 final. Five EU 15 countries - France, Germany, Greece, Sweden and the United Kingdom – and several other Member States with individual targets under the Kyoto Protocol have already achieved average greenhouse gas emission levels below their Kyoto target/their commitment under the Burden Sharing Agreement.

38 The EU and more than 130 developed and developing countries, accounting for over 80% of global greenhouse gas emissions, have expressed their support for to the Accord, which had been only "noted" by the UNFCCC COP.

39 Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5.6.2009, p. 16–62. Furthermore, the Directive contains a 10% renewable energy target specifically for the transport sector which replaces the previous indicative targets of the 2003 Biofuels Directive.

40 Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, OJ L 283, 27.10.2001, p. 33–40.

41 EEA (2009): Greenhouse gas trends and projections, p. 56 ff.

energy consumption by gross domestic product) in EU-27 decreased between 1995 and 2008 by 24.7%.[42] According to the latest Commission Annual Environment Policy Review, further improvement of energy efficiency would cut emissions by around 800 Mt CO_2-equivalents (though details remain unclear in the review).[43]

The priority action on energy efficiency in the 6EAP is rather general and does not provide any quantitative or qualitative targets. A limited number of measures to improve energy efficiency were introduced after the adoption of the 6EAP, such as the Eco-Design Directive,[44] the Energy Performance of Buildings Directive[45] and the Energy End-Use Efficiency and Energy Services Directive.[46] An Energy Efficiency Action Plan of the EU Commission runs from 1 January 2007 to 31 December 2012 and proposes a number of measures to realize the EU energy saving potential of 20% by 2020.[47] The conclusion of the 2007 Spring European Council '*stresse[d] the need to increase energy efficiency in the EU so as to achieve the objective of saving 20% of the EU's energy consumption compared to projections for 2020, as estimated by the Commission*', making efficiency part of the 20-20-20 targets. However, unlike the targets for greenhouse gas reductions and renewable energy consumption, the efficiency target is aspirational only.

The **Cogeneration Directive** aims to create a framework for promotion and development of high efficiency cogeneration of heat and power (CHP).[48] It does not introduce any quantitative targets. In contrast, the 6EAP outlines an 18% target for CHP. Though this was not entirely new – the target was already discussed in 1997[49] - it was the first time this target was affirmed in a decision adopted through co-decision. According to the latest Commission Environment Policy Review, the EU is still far from reaching the 18% target, with GHP accumulating to only 10.3% of the overall electricity generation in 2008 for EU-15 and 11.0% for EU-27.[50]

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42 Eurostat (2010): Energy intensity of the economy - [t2020_32].

43 Commission Staff Working Document: "2009 Environment Policy Review", Part 2, 2 August 2010, COM(2010) 975 final, p. 26.

44 Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council, OJ L 191, 22.7.2005, p. 29–58.

45 Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings, OJ L 1, 4.1.2003, p. 65–71.

46 Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC, OJ L 114, 27.4.2006, p. 64–85.

47 CEC (2006): Communication from the Commission of 19 October 2006 entitled: Action Plan for Energy Efficiency: Realising the Potential (COM(2006) 545).

48 Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EECm OJ L 52, 21.2.2004, p. 50–60.

49 CEC (1997): Communication from the Commission, of 15 October 1997, on a Community strategy to promote combined heat and power (CHP) and to dismantle barriers to its development. COM (1997)514 final.

50 SEC (2010): Commission Staff Working Document: "2009 Environment Policy Review, Part 2 , 2 August 2010, COM(2010) 975 final, p. 25.

Measures (though no legislative acts) have also been taken to address **harmful subsidies** in the energy sector.[51]The EU developed an inventory of subsidies that counteract an efficient and sustainable use of energy by the relevant measures in its 2002 staff working paper. However, given the timing, the working paper was obviously not motivated by the 6EAP.[52] No concrete measures have been undertaken to phase out such subsidies since then. The 2006 Sustainable Development Strategy did call for the adoption of a roadmap to reform environmentally harmful subsidies by 2008, with a view to eliminating them.[53] However, no roadmap has been adopted as of yet, despite the fact that the Commission has released a number of exploratory studies on the subject.[54]

Fossil fuel (oil, gas and coal) extraction, transport and distribution are important sources of **methane emissions**. The 6EAP asked prevent and reduce methane emissions from energy production and distribution. The Commission proposed respective reduction measures in 1996.[55] However, these measures have not been adopted to date.

3.1.2.3 Reduction of greenhouse gas emissions in transport

The third sub-area outlined in Article 5 (2) (iii) addresses the reduction of greenhouse gas emissions in the transport sector. The EU has implemented a number, but not all, priority actions.

In 2008, the EU adopted the **Aviation Directive** to include aviation activities in the EU ETS.[56] With the **Biofuels Directive** the EU set an indicative biofuel target of 5.75% for transport fuels by 2010. This target was later replaced by a 10% renewables target for the transport sector by 2010, which was introduced by the 2009 **Renewable Energy Directive**. The 2009

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51 CEC (2007): Commission staff working paper SEC(2002)1275: Inventory of public aid granted to different energy sources and Green Paper (COM(2007)140) on market based instruments for environment and related policy purposes; (including the issue how to best reform environmentally harmful subsidies); IEEP et al (2009): Environmentally Harmful Subsidies (EHS): Identification and Assessment. Report to the European Commission, Available at: http://ec.europa.eu/environment/enveco/taxation/index.htm.

52 CEC (2007): Commission staff working paper SEC(2002)1275: Inventory of public aid granted to different energy sources and Green Paper (COM(2007)140) on market based instruments for environment and related policy purposes; (including the issue how to best reform environmentally harmful subsidies).

53 European Council (2006): Review of the Sustainable Development Strategy (EU_SDS) – Renewed Strategy. Document 10917/06, page 24; IEEP (2006): Drowning in Process? The Implementation of the EU's 6th Environmental Action Programme. An IEEP Report to the European Environmental Bureau (EEB).

54 IEEP et al (2007): Reforming environmentally harmful subsidies Final report to the European Commission's DG Environment, March 2007 and IEEP et al. (2009), Environmentally Harmful Subsidies: Identification and Assessment, Final report for the European Commission's DG Environment, November 2009. Available at http://ec.europa.eu/environment/enveco/taxation/index.htm.

55 Strategy Paper for reducing methane emissions (Communication from the Commission to the Council and to the European Parliament, COM/96/0557 final.

56 Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8, 13.1.2009, p. 3–21.

Regulation on CO_2 emissions from passenger cars[57] gradually introduces, until 2015, a fleet average of 130g CO_2/km. The Regulation's 2020 target of 95g CO_2/km is the most ambitious target announced globally to date. In response to the pending legislation, car manufacturers have reportedly already introduced a range of new emission reduction technologies in 2008.[58] The 2009 **Fuel Quality Directive** complements the Renewable Energy Directive.[59] It implements sustainability criteria for the production of biofuels and criteria for calculating the cumulative carbon savings of alternative fuels. In 2009, the **Directive on the promotion of clean and energy-efficient road transport vehicles** was adopted to reduce pollutant emissions in the transport sector.[60] EU institutions adopted a number of actions to switch to cleaner and more sustainable transport,[61] especially with a focus on implementing the 2001 White Paper on the European transport policy.[62]

However, **not all transport priority actions** envisaged in the 6EAP were taken up. The EU has not yet proposed specific actions to reduce greenhouse gas emissions from maritime shipping. The 6EAP urged 'the Commission to submit by the end of 2002 a Communication on quantified environmental objectives for a sustainable transport system'. This was not implemented. No measures were adopted to 'decouple[e] economic growth and the demand for transport with the aim of reducing environmental impact', which has been also one of the 2001 Transport White Paper's objectives. This objective was even dropped in the 2006 White Paper's review.[63]

Some measures have not yet been finalized. The priority action of 'promoting measures to reflect the full environmental costs in the price of transport' was addressed by the **Greening Transport Package** of July 2008. In this context, the Commission presented a **strategy for the internalisation of external costs**,[64] as required by the so called **Eurovignette**

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57 Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009, setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO 2 emissions from light-duty vehicles, OJ L 140, 5.6.2009, p. 1–15.

58 European Federation for Transport and Environment (2009): "Reducing CO Emissions from New Cars: 2A Study of Major Car Manufacturers' Progress in 2008", p. 11-12.

59 Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC, OJ L 140, 5.6.2009, p. 88–113.

60 Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles, OJ L 120, 15.5.2009, p. 5–12.

61 Such as Regulation (EC) No 1382/2003 of the European Parliament and of the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme), OJ L 196, 2.8.2003, p. 1–6, Regulation (EC) No 1692/2006 of the European Parliament and of the Council of 24 October 2006 establishing the second Marco Polo programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003, OJ L 328, 24.11.2006, p. 1–13; Communication from the Commission - Freight Transport Logistics Action Plan COM(2007) 607 final.

62 White Paper - European transport policy for 2010: time to decide, COM/2001/0370 final.

63 EurActiv: White Paper on Transport. http://www.euractiv.com/en/transport/white-paper-transport/article-129628.

64 CEC (2008): Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions - Strategy for the internalisation of external costs (COM (2008)435).

Directive.[65] The European Parliament adopted a first-reading opinion in 2009 and the adoption of a Directive is expected in 2011.[66]

The measures taken so far have **not lead to absolute greenhouse gas reductions in the transport sector**. While greenhouse gas trends in Europe are on the whole encouraging, the respective developments in the transport sector are alarming. Over roughly the last two decades (1990-2007), absolute $C0_2$ emissions from transport rose by 29% in the EU-27.[67] In 2008, transport accounted for 19.5% of total greenhouse gas emissions (compared to 14% in 1990)[68] Trends in air transport are particularly disturbing. Air transport is accounting for 14.5% of total energy consumption in the transport sector. Energy use in air transport increased by more than 33% while other energy use, e.g. in inland waterway transport and rail, decreased. In 2008, road transport accounted for more than 80% of total energy consumption in transport. The share of road transport has been quite stable in the last decade. Though demand for transport increased, improvements in fuel efficiency and fuel shifting have counter-balanced this trend.[69] Although absolute emission reductions could not be achieved, the measures outlined contributed to slowing emission growth and thus to the overall aim and specific objectives mentioned above.

Measures taken in the transport sector can contribute but also be in conflict with other 6EAP objectives. **The 10% biofuel target** of the 2009 Renewable Energy Directive corresponds not only with the priority action but also with the aim and objective of achieving greenhouse gas emissions reductions (Articles 2 and 5). However, the binding target for biofuels in transport can be partially in conflict with the objectives of Articles 3(10) (sustainable use of land) and 6(1) (protection of nature and biodiversity), as this target may cause (indirect) land use change.[70]

3.1.2.4 Reduction of greenhouse gas emissions in the industrial sector

The sub-area outlined in Article 5 (2) (iv) addresses the reduction of greenhouse gas emissions in the industrial sector. Relevant measures – such as EU-ETS and energy efficiency measures – overlap with other policy fields and sectors of the 6EAP (international commitments, energy). They are assessed in other sections of this report (see 3.1.2.1 and 3.1.2.2).

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65 Directive 2006/38/EC of the European Parliament and of the Council of 17 May 2006 amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures, OJ L 157, 9.6.2006, p. 8–23.

66 IEEP (2010): Manual of European Environmental Policy. Proposed Policy Development. Available at http://www.europeanenvironmentalpolicy.eu/view/meep/MEEP_0010.xml.

67 EEA (2009): Greenhouse gas emission trends and projections, p. 42.

68 EEA (2009): Greenhouse gas emission trends and projections, p. 114.

69 CEC (2010): Commission Staff Working Document: "2009 Environment Policy Review, Part 2, COM (2010) 975 final, p. 27.

70 See Bowyer, C. (2010): Anticipated Indirect Land Use Change Associated with Expanded Use of Biofuels and Bioliquids in the EU – An Analysis of the National Renewable Energy Action Plans', November 2010, Report prepared by IEEP for T&E and partners.

In addition, the EU adopted a Regulation on the establishment of a **European Pollutant Release and Transfer Register** (PRTR) in 2006 that provides environmental data (including greenhouse gas emissions) on industrial facilities in the EU for public and private purposes. The **IPPC Directive** aims to minimize pollution from various industrial sources.[71] Substantial changes were proposed by the Commission in 2007.[72] In 2009, the EU revised the Regulation on the eco-management and audit scheme (**EMAS Regulation**) in order to improve the applicability of EMAS and strengthen its visibility and outreach.[73] In the context of the Climate and Renewable Energy Package, the EU adopted a Directive to promote the development and environmentally safe use of carbon capture and storage technology (**CCS Directive**).[74]

Regarding **other emissions of fluorinated greenhouse gases**, the EU adopted measures on emissions from air conditioning systems in motor vehicles[75] and in relation to the mitigation of certain fluorinated greenhouse gases.[76] This priority action on the reduction of fluorinated greenhouse gases was challenging to the EU. According to the latest EEA report on greenhouse gas trends and projections, trends in this field are alarming. Of all greenhouse gases, hydrofluorocarbons are the only ones for which emissions have drastically increased between 1990 and 2007 in the EU, i.e. by more than 125%. This can be traced back to their use as a substitute for the ozone depleting substances which were phased out as required under the Montreal Protocol and their increased use for air conditioning.[77]

3.1.2.5 Reduction of greenhouse gas emissions in other sectors

Sub-area 5 addresses the issue of reduction of greenhouse emissions in other sectors. The EU adopted a number of relevant measures in the fields of buildings, agriculture and waste.

In 2002, the EU adopted the **Energy Performance of Buildings Directive**[78] which requires Member States to set minimum energy performance requirements for buildings, whereby they can distinguish between new and existing buildings. However, a large amount of energy

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71 Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, OJ L 24, 29.1.2008, p. 8–29.

72 CEC (2007): Proposal for a Directive of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control). COM (2007) 843 final.

73 Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC, OJ L 342, 22.12.2009, p. 1–45.

74 Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006, OJ L 140, 5.6.2009, p. 114–135.

75 Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air conditioning systems in motor vehicles and amending Council Directive 70/156/EEC, OJ L 161, 14.06.2006.

76 Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases, OJ L 161, 14.6.2006, p. 1–11.

77 EEA (2010): Greenhouse gas trends and projections, p. 19.

78 Directive 2002/91/EC on the energy performance of buildings, OJ L 1, 4.1.2003, p. 65–71.

saving potential remained unexploited due to the complexity of the sector, the limited scope of the Directive (especially on existing buildings) and the limited level of ambitious implementation by some Member States. In 2008, the building sector was still responsible for 40% of total EU energy consumption.[79] A recast of the Directive was proposed by the EU Commission in 2008. A revised version of this proposal was adopted in May 2010, which included, *inter alia*, extended requirements on new and existing buildings.[80] According to the Commission's original proposal, the minimum impact of the proposed Directive would have produced 160 to 210 Mt/year CO_2 savings by 2020, i.e. 4-5% of EU total CO_2 emissions in 2020.[81] However, these numbers can only be an indication of the actual potential of the Directive due to the above mentioned changes to the proposal. [82]

The Common Agricultural Policy (CAP) was reformed in 2003, which lead to a single farm payment linked to environmental, food safety, animal and plant health and animal welfare standards. It also includes the requirement to keep all farmland in good agricultural and environmental condition ('cross-compliance'). However, it did not include climate change issues. The **CAP 'Health Check'** and the resulting legislation adopted in 2009[83] attempted to integrate greenhouse gas emission reductions and adaptation to climate change, as well as several other environmental concerns, into the CAP. To receive additional funds for measures which address these new challenges, Member States are obliged to revise their rural development programmes (programming period 2007-2013).

The 2006 **Waste Framework Directive**[84] established the legislative framework for the handling of waste with a focus on environmental requirements. It was revised in 2008.[85] It obliges Member States to increase waste-prevention and recycling rates. The reduction of waste volumes generally leads to a decrease of waste-related greenhouse gas emissions,

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79 CEC (2008): Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast), COM/2008/0780 final.

80 Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, OJ L 153, 18.6.2010, p. 13–35.

81 CEC (2008): Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast), COM/2008/0780 final.

82 Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, OJ L 153, 18.6.2010, p. 13–35.

83 Council Regulation (EC) No 72/2009 of 19 January 2009 on modifications to the Common Agricultural Policy by amending Regulations (EC) No 247/2006, (EC) No 320/2006, (EC) No 1405/2006, (EC) No 1234/2007, (EC) No 3/2008 and (EC) No 479/2008 and repealing Regulations (EEC) No 1883/78, (EEC) No 1254/89, (EEC) No 2247/89, (EEC) No 2055/93, (EC) No 1868/94, (EC) No 2596/97, (EC) No 1182/2005 and (EC) No 315/2007, OJ L 30, 31.1.2009, p. 1–15; Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003, OJ L 30, 31.1.2009, p. 16–99; Council Regulation (EC) No 74/2009 of 19 January 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 30, 31.1.2009, p. 100–111.

84 Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste, OJ L 114, 27.4.2006, p. 9–21.

85 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives , OJ L 312, 22.11.2008, p. 3–30.

mostly methane. Major savings of emissions from waste have resulted from decreasing landfill rates of biodegradable waste according to the 1999 Landfill Directive (adopted prior to 6EAP).[86]

With regards to greenhouse gas emissions reductions, the measures discussed above contribute to the overall aim and specific objectives of Articles 2(2) and 5(1). According to Eurostat, emissions from industrial processes decreased in the EU-27 from 4840 Mt CO_2 equivalents in 1990 to 4097 Mt CO_2 equivalents in 2008.[87] Industrial processes are responsible for 8.5% of greenhouse gas emissions in the EU in 2007 compared to other sectors.[88] Emissions from agriculture have been reduced in the EU-27 from 5915 Mt of CO_2 equivalents in 1990 to 4718 Mt of CO_2 equivalents in 2008.[89] In 2007, their share of greenhouse gas emissions compared to other sectors was 9.2%. Waste emissions amounted to 2.8%.[90] Additionally, the waste sector demonstrated a remarkable reduction of 34% of greenhouse gas reductions from 1990 to 2007.[91]

3.1.2.6 Use of other appropriate instruments

Sub-area 6 in Article 5 (2) (vi) addresses the use of other appropriate instruments to tackle climate change.

In 2003, the **Community Framework for the Taxation of Energy Products and Electricity** was restructured in order to, *inter alia*, increase incentives for efficient energy use.[92]

Regarding research and development on climate change issues, a number of relevant EU programmes were started. In 2004, the Commission adopted an **Environmental Technologies Action Plan** in order to improve the development and wider use of environmental technologies. Moreover, the **European Strategic Energy Technology Plan (SET Plan)**[93] was adopted in 2007 to accelerate the development and deployment of cost-effective low carbon technologies. The **LIFE programme** was revised in 2007, which finances *inter alia* projects on energy and climate.[94] Moreover, the EU funds scientific and

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86 Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste; Official Journal L 182, 16/07/1999 p. 0001 – 0019.

87 Eurostat [tsdcc210], available at: http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdcc210&language=en.

88 EEA (2009): GHG trends and projections 2009, page 21.

89 Eurostat [tsdcc210], available at: http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdcc210&language=en.

90 EEA (2009): GHG trends and projections 2009, p. 21.

91 Ibid, p. 34.

92 Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, OJ L 283, 31.10.2003, p. 51–70.

93 CEC (2007): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions of 22 November 2007 entitled: "A European strategic energy technology plan (SET Plan) - Towards a low carbon future" [COM(2007) 723 final - Not published in the Official Journal].

94 Regulation (EC) No 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the Financial Instrument for the Environment (LIFE+) - Commission state Council Decision 969/2006/EC concerning the Seventh

technological cooperation in Europe in the context of the **7th Framework Programme for Research and Technology Development** with a budget of €53.000 million, part of which is also relevant to climate issues.[95] In 2009, the overarching priority of the environment theme of the FP7 Programme was adaptation to climate and environmental change and related issues such as sustainable cities and coastal zones.[96] Thus, EU institutions ensured that climate change was a major theme for research and technological development at the Community level.

3.1.2.7 Adaption to consequences of climate change

Sub-area 7, as framed in Article 5 (3) of the 6EAP, calls for measures aimed at adapting to the consequences of climate change.

In 2007, the Commission adopted a **Green Paper on Adaptation**,[97] followed by a **White Paper on Adaptation** in 2009. The White Paper includes a framework for adaptation measures and policies. One of the first measures to be introduced after the release of the White Paper was a Guidance Document on adaptation to climate change in water management in December 2009. In 2010, a Green Paper on Forest protection and information was adopted.[98]

Overall, the requirements of the priority actions have been met by the assessment and policies outlined in the Green and White Paper. For instance, a review of investment decisions was initiated by the White Paper which calls on the EU and its Member States to *inter alia* 'explore the possibility of making climate impact assessment a condition for public and private investment.'[99] The White Paper requests them also to 'develop methods, models, data sets and prediction tools by 2011' and to 'develop indicators to better monitor the impact of climate change, including vulnerability impacts, and progress on adaptation by 2011.'[100]

3.1.2.8 Climate change in enlargement

Sub-area 8, as framed in Article 5 (4), calls for climate change to be taken into account in the EU's enlargement process.

Overall, climate change issues were successfully linked to EU enlargement policy. All new Member States (EU-12), which joined the EU since the adoption of the 6EAP, are parties to both, the UNFCCC and the Kyoto Protocol. They achieved concrete greenhouse gas

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Framework Programme of the European Atomic Energy Community (Euratom) or nuclear research and training activities (2007-11).

95 For more information see http://ec.europa.eu/research/fp7/understanding/fp7inbrief/what-is_en.html. See also Chapter on Research.

96 See FP 7 Work Programme 2009, Cooperation, Theme 6, Environment (including Climate Change).

97 Green Paper from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Adapting to climate change in Europe – options for EU action, COM (2007)354 final.

98 Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change, COM (2010)66 final.

99 White paper - Adapting to climate change: towards a European framework for action, COM (2009) 147, p. 13.

100 White paper - Adapting to climate change: towards a European framework for action, COM (2009) 147, p. 8.

emission reductions and contributed to the overall aim and specific objectives in Article 2(2) and Article 5(1). With the exception of Cyprus and Malta, their specific international emission reduction commitments range from 6% to 8%. According to the latest EEA report, nine of the EU-12 (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia) have emission levels well below their respective Kyoto targets.[101] The EU-12 greenhouse gas emissions in 2007 were 25% lower than in 1990. However, the current level is the highest recorded since 1999.[102]

3.1.2.9 Climate change as part of the EU's external relations policy

Sub-area 9, as framed in Article 5 (5) of the 6EAP, calls for measures addressing the EU's external relations policy. Closely linked to these priority actions are those outlined in Article 9 on action on international issues.

Climate change has been an important topic in the external relations of the EU and its Member States for many years. This is reflected in a significant number of documents, speeches and policy initiatives. Furthermore, many measures taken by the Community with regard to climate protection (e.g. EU ETS), especially the Climate and Renewable Energy Package and the EU's 20-20-20 targets, have relevance for external relations and more specifically the international climate negotiations for a post-2012 climate regime. Some of these measures are also relevant for the implementation of Kyoto Protocol commitments. The EU was supportive of the operationalisation of the Clean Development Mechanism under the Kyoto Protocol regime. Through the adoption of the Linking Directive, emitters are – as mentioned above – allowed to use greenhouse gas emission allowances earned through the Kyoto flexible mechanisms in the EU ETS.[103] Moreover, the Commission began a dialogue and cooperation with developing countries in the area of climate change, focusing on the integration of climate change in development cooperation.[104]

Overall, the aim and specific objectives in Article 2 (2) and 5 (1) have been supported by the measures and initiatives taken. In the context of the international climate change negotiations under the UNFCCC and the Kyoto Protocol, the EU and its Member States have played an important role in the past and are striving (with mixed prospects for success) to take a leadership role in negotiations concerning the post-2012 international framework. However,

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101 EEA (2009): Greenhouse gas trends and projections 2009. Available at: http://www.eea.europa.eu/publications/eea_report_2009_9, p. 71.

102 EEA (2009): Greenhouse gas trends and projections 2009. Available at: http://www.eea.europa.eu/publications/eea_report_2009_9, p. 20.

103 Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanism, Official Journal L 338 , 13/11/2004. p. 0018 – 0023.

104 CEC (2006): Communication from the Commission to the Council and the European Parliament - Climate change in the context of development cooperation, COM(2003) 85 final; Communication from the Commission to the Council and the European Parliament Mobilising public and private finance towards global access to climate-friendly, affordable and secure energy services : The Global Energy Efficiency and Renewable Energy Fund , COM(2006)0583 final; CEC (2007): Communication from the Commission to the Council and the European Parliament - Building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to climate change, COM(2007)540 final.

difficulties in defining a common and ambitious European position and in communication have at times hindered the EU's leadership potential.[105] Despite these shortcomings, the EU is still perceived as a comparatively credible player with the potential to lead the international negotiations by example. Thus, the EU appears to have made some progress in achieving the 6EAP objectives to strengthen international environmental governance and the EU's positive and constructive role therein.

3.1.2.10 Summary assessment of the thematic area

A number of measures have contributed significantly to the **overall aim** in Article 2 (2) and **specific objectives** in Article 5 (1) of the 6EAP. The EU is on track to meet its international climate commitments and contributes to the global objective of stabilizing greenhouse gas concentrations to prevent global warming exceeding 2°C. The EU ratified the Kyoto Protocol which entered into force in 2005 – albeit three years later than envisaged by the 6EAP. The EU as a whole and most of its Member States are on track to meet their emission reduction obligations. All of this has contributed to strengthening not only multilateral governance (Article 9 6EAP) but also the credibility of the EU and its Member States at the international negotiations. At the international negotiations, the EU is – especially when compared to the positions of other main greenhouse gas emitter countries – a comparatively credible and ambitious player. The greenhouse gas emission reductions already achieved and projected future emission reductions have strengthened the EU's credibility in international climate negotiations. This credibility has been further strengthened by the adoption of far reaching measures, such as the emission trading scheme, the 2007 Spring European Council's 20-20-20 decision, as well as the resulting Climate and Renewable Energy Package and its ongoing implementation. However, as demonstrated by rising global emissions as well as the disappointing outcome of the 2009 Copenhagen summit, formidable challenges at the international level still lie ahead. That being said, the international Cancun Agreements of 2010 can be taken as a positive sign for the potential for further multilateral cooperation.

A great number of the **priority actions** set out in the 6EAP in relation to climate change have been implemented and have contributed to the aforementioned overall aim and specific objectives. In particular, since 2007 EU climate policies have taken on a new level of ambition. Key measures were adopted in the context of the Climate and Renewable Energy Package, i.e. a revision of the **EU Emission Trading Scheme,** the **Effort-sharing Decision**, the **Renewable Energy Sources Directive**, the **Fuel Quality Directive** and the **Regulation on CO_2 Emissions from Passenger Cars.** Furthermore, the inclusion of aviation activities in the EU ETS through the **Aviation Directive** was a measure of great relevance for the transport sector and its increasing emissions. Climate change as a 'new challenge' was also integrated into EU agriculture policies in the context of the **CAP Health Check.** There were also measures taken on issues that have not been foreseen by the 6EAP such as the **CCS Directive**. In contrast, the need for action still exists in the field of energy efficiency and the transport sector.

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[105] Oberthür, Sebastion/Pallemaerts, Marc: The EU's Internal and External Cliamte Policies: an Historical Overview. In, Oberthür, Sebastian., Pallemaerts, Marc (eds.) (2010): The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 36f.

While some of the priority actions outlined are of great political, environmental and economic relevance, others seem to lack detail and are relatively modest in scope given the ambitious aim outlined in Article 2 6EAP. Given the complexity and inter-linkages between certain issues, it is hard– even when guided by the aims outlined in Article 2, especially the 2°C limit – to determine whether measures comply with a specific priority action of the 6EAP in cases where the ambition of measures is not obvious and do not easily lend themselves to the identification of tangible emissions reductions. For example the priority action to 'promote energy efficiency' in the energy sector is very vague and it is thus difficult to evaluate its progress. In practice, however, it is evident that the EU is lagging behind in implementing its 20% energy efficiency target. Generally, most priority actions do not include targets. In the case of renewable energy or cogeneration, the targets were not all new, and have not been reached, while in the case of renewable energy the target set in the 6EAP has subsequently been overtaken by a new one.

3.1.3 Summary assessment of drivers and barriers

A number of drivers and barriers contributed to the EU's emission trends, to the design of measures and their level of ambition.

Firstly, there have been relevant **changes in the target area** (i.e. the reduction of greenhouse gas emissions) due to external events. Greenhouse gas emissions trends – especially reductions - have been influenced by **economic developments**.[106] A decrease in emissions in the 1990s can be traced back to the economic downturn affecting eastern Member States during this time. Also the economic recession of 2008-2009 with its attendant decrease in production output lead to lowered emission levels.[107] This has had a greater effect in terms of reducing greenhouse gas emissions in the EU and globally than most targeted policies.[108] Other emission reductions were achieved through: general **efficiency improvements** (in particular by industrial end users and energy industries); a shift from coal to **less polluting fuels** (in particular gas and biomass for the production of electricity and heat); and **fuel efficiency improvements** in vehicles.[109] An **increase in emissions** was observed due to a **rise in electricity and heat production** by thermal plants and industrial activity (reflecting a correlating increase in consumption).[110] Another important factor is the **increase of transport demand**, both passenger and freight. It is because of this that transport continues to be a particularly problematic sector.[111]

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106 See Bowen, Alex/ Parker, Sophia (2010): Economic Growth, Recession and Greenhouse Gas Emissions.

107 EEA (2010): Tracking progress towards Kyoto and 2020 targets in Europe, p. 9.

108 Oberthür, Sebastion/Pallemaerts, Marc.: The EU's Internal and External Cliamte Policies: an Historical Overview. In, Oberthür, Sebastian., Pallemaerts, Marc (eds.) (2010): The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 43.

109 EEA (2009): Greenhouse gas emission trends and projections in Europe 2009, p. 35-43.

110 EEA (2010): The European Environment: State and Outlook 2010 - A Synthesis, p. 22.

111 EEA (2009): Greenhouse gas emission trends and projections in Europe 2009, p. 35-43.

In some cases, **implementation deficits** at Member State level influence the achievement of specific objectives and priority actions of the 6EAP. For example, significant implementation challenges of the 2003 EU ETS Directive included delayed transposition in various Member States. The scheme was also found to lack stringency in the domestic emissions caps set out in national allocation plans.

Public opinion was a major driver contributing to the overall aims, specific objectives and priority actions in this thematic area.[112] In this context, 2007 was the turn of the tide when newspaper headlines suddenly addressed the issue and public interest in the topic grew tremendously. This public and press awareness was prompted by a multiplicity of factors, i.e. the publication of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (in 2007) and the so-called Stern report on the economic implications of mitigation and adaptation (end of 2006), media events like the Oscar-winning film 'An Inconvenient Truth' by Al Gore, and natural disasters like Hurricane Katrina. Angela Merkel, presiding over the G8 in 2007, put climate change as one of the core issues on the agenda of the G8 summit in Heiligendamm. Public and media attention in 2007 also helped to forge the success of the international climate negotiations in Bali bringing about the Bali Action Plan outlining the negotiating mandate for a future regime. Not surprisingly, 2007 was also a year of great interest in and support for climate policy in the EU. High public support allowed the EU to pursue levels of ambition enshrined in the most important measures (especially the 20-20-20 targets), which are higher than in most other industrialized nations. Additionally, this support helped in reaching agreement on the Climate and Renewable Energy Package in December 2008.

Competing and complementary EU priorities had also an impact on climate change policies. In the **mitigation area**, the policy framework in the EU was set out decisively by the 20-20-20 targets of 2007 and the Climate and Renewable Energy Package of 2009. The measures adopted in this package are the most comprehensive and ambitious climate measures taken so far. Other relevant EU strategies, such as the Lisbon Strategy and the EU Sustainable Development Strategy (EU-SDS), were of minor importance, though they also include objectives on climate change. Though the **Lisbon Strategy** goals in particular have also conflicted with the climate objectives, overall these strategies appear to have had a supportive impact facilitating compromises between economic and climate change issues. Climate change is now regularly mainstreamed into economic programmes of the EU, as in the example of 'Europe2020', the renewed strategy on growth and jobs.[113] The issue of energy efficiency and renewable energies in economic programmes is, however, most likely not primarily driven by environmental concerns, but also by issues of energy security. There is also no clear indication that the **EU-SDS** was driving EU climate change policies. No relevant measure can be traced back to this strategy, though it likely facilitated their adoption due to its political relevance. Notably, the 6EAP gained political support from the European

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[112] Confirmed by several experts, including for example Mr. Hörmandinger, former policy officer in DG CLIMA, EU Commission, currently First Counselor – Environment, Delegation of the European Union, Washington, D.C., see telephone interview of September 9, 2010.

[113] CEC (2010): Europe 2020. A strategy for smart, sustainable and inclusive growth. COM(2010)2020, published 3.3.2010; Presidency Conclusions, Brussels European Council, 25/26.03.2010.

Council when it endorsed the objectives set out in the 6EAP – including the 2°C target – in the conclusions of the EU-SDS.[114] Regarding **adaptation,** according to expert opinions, no other strategy than the 6EAP has had an influence on the adoption of policies.[115] Water, cohesion and other policies that could have had an impact were not integrated in EU adaptation policies to date.

International commitments have been a major driving force behind EU climate policies. The joint emission reduction commitment of the EU-15 under the **Kyoto Protocol** was, and is still probably, one of the most decisive drivers to develop and implement European climate policies for the time up to 2012. This commitment also constitutes the basis of the 6EAP's objectives concerning climate protection (Article 5 (1)), as the wording of the provisions underlines. Additionally, the text of the overall aim in Article 2 (2) of the 6EAP has a clear link to Article 2 of the UNFCCC ('prevent dangerous anthropogenic interference with the climate system').

3.1.4 Assessment of the policy mix and approach of the 6EAP

The mix of measures and tools adopted – especially in the context of the Climate and Renewable Energy Package – generally seem to be a good start to contributing to the aim of Article 2 6EAP. However, the challenge is much bigger and goes far beyond 2012 or 2020, and the aim of Article 2 cannot be achieved by the adopted measures alone; the EU will have to step up action and other countries will have to make ongoing and increasing contributions. While the mix of legally binding Regulations, Directives and Decisions adopted by the EU seems comparatively ambitious in many respects, areas for improvement can be identified, e.g. CHP, energy efficiency and transport. With regard to the 6EAP, a higher level of ambition and precision (e.g. with regard to more quantitative binding targets) could have been useful for achieving the climate objectives. The requirements for priority actions are often rather vague. In most cases, no specific legal guidelines are provided. Most priority actions do not formulate specific requirements or actions. Furthermore, they are often only general encouragements, as reflected in the language introducing the actions (e.g. using non-committal verbs like 'encourage' or 'promoting').

The 6EAP **abstained from introducing new quantitative targets and merely affirmed existing targets,**[116] (though admittedly the 6EAP may have strengthened the targets by their inclusion). By repeating only the 'status quo' of political will and discussion at its time, the 6EAP was not a driver of ambition. However, it might have helped to force consensus – also by the Parliament – on the status quo and thus secure the 'bottom line'. A good example is the 2°C target that had already been supported by the Environment Council in 1996, but was

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114 Göteborg European Council, 15 and 16 June 2001, p. 6, available at: http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf.

115 Confirmed by several experts, including an expert of the European Commission, Telephone Interview, September 2010.

116 Sachverständigenrat für Umweltfragen (2008): Umweltgutachten 2008. Umweltschutz im Zeichen des Klimawandels S. 14.

affirmed with the adoption of the 6EAP by all institutions in the co-decision procedure.[117]This might have helped to defend the line of ambition, and subsequently build on it.

In some cases, decision-makers **could not foresee certain developments** when adopting the 6EAP. A comprehensive 10-year programme faces mayor challenges when aiming to guide action in such a dynamic area as climate change. Especially since 2007, EU climate policies have become far more ambitious than could have been expected in 2002 and some developments exceed the 6EAP's targets. Notably, the 6EAP did not call for a measure exceeding the indicative 12% target for 2010 for the share of renewable energy. In 2009, the EU increased its renewable energy targets to a binding, 20% target for 2020. Though one might argue that 12% until 2010 was still ambitious, the quality of the target (indicative vs. binding) was certainly not. Furthermore, alternative techniques to reduce greenhouse gas concentration, such as CCS, were not yet considered by the 6EAP. If such a program wants to guide action and remain relevant over a longer time-frame, it has to deal with the difficulty of anticipating new scientific findings (e.g. the 4th Assessment Report of the IPCC), new technological options (e.g. CCS), and various political dynamics (e.g. public attention and support). Therefore, it might have been worthwhile to provide for an adjustment of the 6EAP's priority actions in the context of its mid-term review in 2007.[118]

The ambition set out in the 6EAP reflected the state of play in 2002, but did not go far beyond that and certainly did not envisage the political dynamics that have developed in the last few years. Its level of ambition was thus overshadowed by targets and actions taken a few years after its adoption. The 6EAP did not provide a framework to react to new and dynamic developments.

3.1.5 Impact of the 6EAP on the adoption of measures

As mentioned above, the impact of the 6EAP on the adoption of measures cannot be easily assessed, especially due to the lack of quantitative targets and priority measures which were often only vaguely defined in many areas, as well as a number of other important drivers and barriers which affected the adoption of measures. At the time of the adoption of the 6EAP, the two main factors responsible for ambitious EU climate change policies - the desire to exert international leadership and the EU's international commitments under the Kyoto Protocol - were already in place. The 6EAP's special emphasis on climate policy reflected the emerging political status of climate policy. The main EU climate change initiatives – the creation of the EU ETS and the EU Climate and Renewable Energy Package which aims to implement the 20-20-20-targets – were closely linked to the EU's external climate change ambitions and commitments. The EU ETS was proposed before the adoption of the 6EAP in the context of the ECCP and it seems almost certain that the same or very similar measures would have been adopted at the same time in the absence of the 6EAP.

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117 http://europa.eu/rapid/pressReleasesAction.do?reference=PRES/96/188&format=HTML&aged=1&language=EN&guiLanguage=en.

118 Stakeholder consultation, Brussels Workshop, September 2010.

Most participants in the online survey agreed that the 6EAP has not made a significant difference with respect to the implementation of relevant climate change measures, which they maintain would have been adopted regardless of the 6EAP.[119] It was felt that on the whole the climate change agenda would have evolved irrespective of the 6EAP due to the UNFCCC/Kyoto Protocol process and the relevant commitments therein, as well as scientific findings, public interest and media attention. However, the 6EAP was felt to have facilitated the adoption of market-based instruments and increased the cooperation between civil society and business.

Participants at the Brussels workshop[120] agreed that the general level of ambition of the 6EAP on climate change was not very high. It was also noted that the 6EAP did not set a new level of ambition but rather reflected the existing ambition already set out in other documents and represented a collection of existing initiatives and targets. However, the 6EAP set out and reconfirmed a path for action and strengthened it through broader institutional support. In comparison, the Lisbon Strategy and the EU-SDS appeared to have had only a supportive influence on EU climate change policy. For example, the Lisbon Strategy had a two-fold influence on EU climate change policy: it helped in lowering certain environmental ambitions by arguing about the potential for negative impacts on economic competitiveness, for example with respect to aspects of the EU ETS. However, the Lisbon Strategy also supported linking environmental and economic issues in a mutually beneficial way (though this was also driven by energy security concerns). It thereby created at least a favourable context for the 2007 European Council's 20-20-20 climate and energy goals. Similarly, the EU-SDS potentially facilitated the mainstreaming of climate change considerations into EU policy making.

3.2 Nature and Biodiversity

3.2.1 Introduction

The **overall aims** of the 6EAP in the nature and biodiversity thematic area as set out in Article 2 are:

'protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting desertification and the loss of biodiversity, including diversity of genetic resources, both in the European Union and on a global scale'.

Article 6(1) goes on to state the following **specific objectives** on nature and biodiversity:

- halting biodiversity decline with the aim to reach this objective by 2010, including prevention and mitigation of impacts of invasive alien species and genotypes;
- protection and appropriate restoration of nature and biodiversity from damaging pollution;

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119 This statement was also confirmed by Stakeholder consultation, interview of September 9, 2010.

120 Stakeholder consultation, Brussels workshop.

- conservation, appropriate restoration and sustainable use of marine environment, coasts and wetlands;
- conservation and appropriate restoration of areas of significant landscape values including cultivated as well as sensitive areas;
- conservation of species and habitats, with special concern to preventing habitat fragmentation;
- promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification.

In effect, the nature and biodiversity thematic area covered a number of fairly discrete **sub-areas**. Article 6(2) includes a number of **priority actions** relating to these different sub-areas which are set out below:

Biodiversity

- Ensuring the implementation and promoting the monitoring and assessment of the Community's biodiversity strategy and the relevant action plans, including through a programme for gathering data and information, developing the appropriate indicators, and promoting the use of best available techniques and of best environmental practices;
- promoting research on biodiversity, genetic resources, ecosystems and interactions with human activities;
- developing measures to enhance sustainable use, sustainable production and sustainable investments in relation to biodiversity;
- encouraging coherent assessment, further research and cooperation on threatened species;
- promoting at the global level a fair and equitable sharing of benefits arising from the use of genetic resources to implement Article 15 of the Convention on Biological Diversity on access to genetic resources originating from third countries;
- developing measures aimed at the prevention and control of invasive alien species including alien genotypes;
- establishing the Natura 2000 network and implementing the necessary technical and financial instruments and measures required for its full implementation and for the protection, outside the Natura 2000 areas, of species protected under the Habitats and Birds Directives;
- promoting the extension of the Natura 2000 network to the Candidate Countries.

Accidents and disasters

- promoting Community coordination to actions by Member States in relation to accidents and natural disasters by, for example, setting up a network for exchange of prevention practices and tools;
- developing further measures to help prevent the major accident hazards with special regards to those arising from pipelines, mining, marine transport of hazardous substances and developing measures on mining waste.

Soil

A thematic strategy on soil protection, addressing the prevention of, inter alia, pollution, erosion, desertification, land degradation, land-take and hydrogeological risks taking into account regional diversity, including specificities of mountain and arid areas;

Extractive industries

Promoting sustainable management of extractive industries with a view to reduce their environmental impact;

Landscape

Promoting the integration of conservation and restoration of the landscape values into other policies including tourism, taking account of relevant international instruments.

Agriculture

Promoting the integration of biodiversity considerations in agricultural policies and encouraging sustainable rural development, multifunctional and sustainable agriculture through:

- encouraging full use of current opportunities of the Common Agriculture Policy and other policy measures;
- encouraging more environmentally responsible farming, including, where appropriate, extensive production methods, integrated farming practices, organic farming and agro-biodiversity, in future reviews of the Common Agricultural Policy, taking account of the need for a balanced approach to the multifunctional role of rural communities.

Marine environment

Promoting sustainable use of the seas and conservation of marine ecosystems, including sea beds, estuarine and coastal areas, paying special attention to sites holding a high biodiversity value, through:

- promoting greater integration of environmental considerations in the Common Fisheries Policy, taking the opportunity of its review in 2002;
- a thematic strategy for the protection and conservation of the marine environment taking into account, inter alia, the terms and implementation obligations of marine Conventions, and the need to reduce emissions and impacts of sea transport and other sea and land-based activities;
- promoting integrated management of coastal zones;
- further promote the protection of marine areas, in particular with the Natura 2000 network as well as by other feasible Community means;

Forestry

Implementing and further developing strategies and measures on forests in line with the forest strategy for the European Union, taking account the principle of subsidiarity and biodiversity considerations, incorporating the following elements:

- improving existing Community measures which protect forests and implementing sustainable forest management, inter alia, through national forest programmes, in connection with rural development plans, with increased emphasis on the monitoring of the multiple roles of forests in line with recommendations adopted by the Ministerial Conference on the Protection of Forests in Europe and the United Nations Forum on Forests and the Convention on Biodiversity and other fora;
- encouraging the effective coordination between all policy sectors involved in forestry, including the private sector, as well as the coordination of all stakeholders involved in forestry issues;
- stimulating the increase of the market share for sustainably produced wood, inter alia, through encouraging certification for sustainable forest management and encouraging labelling of related products;
- continuing the active participation of the Community and of Member States in the implementation of global and regional resolutions and in discussions and negotiations on forest-related issues;
- examining the possibilities to take active measures to prevent and combat trade of illegally harvested wood;
- encouraging consideration of climate change effects in forestry.

GMOs

- developing the provisions and methods for risk assessment, identification, labelling and traceability of GMOs in order to enable effective monitoring and controls of health and environmental effects;
- aiming for swift ratification and implementation of the Cartagena Protocol on Biosafety and supporting the build up of regulatory frameworks in third countries where needed through technical and financial assistance.

A detailed assessment of the main measures adopted since 2002 and the achievement of the 6EAP objectives in relation to the Nature and Biodiversity thematic area can be found in Annex A, section 1.2. On the basis of this assessment, it is evident that the EU has undertaken a number of efforts in relation to the Nature and Biodiversity thematic area of the 6EAP and some progress has been achieved. However, as indicated, significant additional efforts are required to fully achieve the objectives of the 6EAP. A summary of the achievement of relevant 6EAP objectives is set out in section 3.2.2. Section 3.2.3 outlines the key drivers and barriers affecting the achievement of the 6EAP objectives in this thematic area. A detailed assessment of these drivers and barriers can be found in Annex A, section 1.2. An analysis of the policy mix in the thematic area is provided in section 3.2.4. This chapter concludes with an assessment of the impact of the 6EAP on the adoption of measures in the Nature and Biodiversity thematic area as well as the impact of other strategies on the adoption of measures in this area.

3.2.2 Summary assessment of the achievement of objectives in the Nature and Biodiversity thematic area

Biodiversity

Despite progress in some areas, which can mostly be attributed to the implementation of existing measures (notably the Habitats and Birds Directives) and developments in other policy sectors (e.g. certain aspects of Common Agricultural Policy (CAP) reform such as the strengthening of rural development and cross compliance provisions (see below)); the headline biodiversity objective of the 6EAP of **halting biodiversity decline by 2010** has clearly been missed. This is confirmed by the mid-term[121] and full-term assessments[122] of the Biodiversity Action Plan (BAP). This is mainly due to the fact that progress in the establishment of the Natura 2000 network, its expansion across new Member States, and supportive actions to preserve overall biodiversity has been undermined by a larger failure to reverse negative trends in key pressures, such as pollution of freshwater, land abandonment, and habitat fragmentation as explained below.

In relation to **establishing the Natura 2000 network**, there has recently been progress in designating terrestrial Natura 2000 sites under the Habitats and Birds Directives, with 17% of the EU land territory now covered, although some new Member States are behind in meeting the required designation[123]. However, Natura 2000 site establishment in the marine sphere is significantly below requirements[124] and the condition of most habitats and species of Community interest in Natura 2000 sites is of particular concern[125]. This indicates there is still significant work to be done with respect to implementation of the priority actions identified in the 6EAP both within the protected area network and in the wider environment.

In relation to **financial instruments and measures for biodiversity**, whilst it is too early to gauge the impacts on biodiversity of measures funded under LIFE+, projects established under the previous LIFE programmes have contributed to improvements in the condition of many Natura sites and habitats and species of Community interest through management and restoration efforts. The mid-term evaluation of the LIFE+ Regulation[126] reports very positively on the Nature and Biodiversity component of the programme, which in addition to being a key mechanism in the implementation of biodiversity objectives, is leading to the

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121 CEC (2008): Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions – A Mid Term Assessment of implementing the EC Biodiversity Action Plan (COM(2008)864).

122 CEC (2010): Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions -The 2010 Assessment of Implementing the EU Biodiversity Action Plan (COM(2010)548).

123 EEA (2010): Progress towards the European 2010 biodiversity target, EEA Report no 4/2009.

124 EEA (2010): Progress towards the European 2010 biodiversity target, EEA Report no 4/2009.

125 CEC (2009): Report from the Commission to the Council and the European Parliament Composite - Report on the Conservation Status of Habitat Types and Species as required under Article 17 of the Habitats Directive, (COM(2009)358).

126 Medhurst J., Franckx L. and Schoeters K.(2010): Mid-term evaluation of the implementation of the LIFE+ Regulation – Final Report. GHK, with Arcadis and VITO.

achievement of more structured and integrated projects and greater use of networking and experience sharing. However, the size and specific nature of projects funded under LIFE+ suggests that the absolute impact on biodiversity in Europe and the contribution to the 2010 biodiversity objective is likely to be slight.

In terms of action to **protect and restore nature and biodiversity from damaging pollution**, despite progress in reducing levels of acidification and freshwater eutrophication, which indicate some of the positive impacts on environmental quality from the Nitrates Directive (91/676/EEC), the Water Framework Directive (2000/60/EC) and the National Emission Ceilings Directive (2001/81/EC), terrestrial eutrophication from nitrogen deposition remains a problem.[127]

In relation to the 6EAP objective of **preventing and mitigating the impacts of invasive alien species**, policy measures and strategies on invasive species are still under development, despite being due in 2010 according to a 2008 Communication.[128] An EU Strategy on invasive alien species is now expected to be presented in 2011.

With regards to the 6EAP objective of **preventing habitat fragmentation**, natural and semi-natural land remain under pressure from abandonment and urban expansion, whilst transport infrastructure development and urban sprawl contribute to continuing habitat fragmentation.[129]

In terms of **promoting research on biodiversity**, a number of initiatives have been launched at national and international levels to assess the socio-economic importance of natural ecosystems, including in particular the TEEB (The Economics of Ecosystems and Biodiversity) initiative. The mid-term review of the 6EAP concluded that 'the scale of the challenge faced means that additional approaches are needed and most importantly a way has to be found to make it economically interesting to protect bio-diversity'.[130] In addition to providing financial support for TEEB, the European Commission has launched several supporting studies to feed into the initiative. Efforts have also been made to improve **monitoring and assessment mechanisms**[131] and a proposal for a system of environmental accounts is currently being discussed by the European Parliament and the Council.[132] These developments have resulted in an increasing recognition of the economic value of biodiversity and ecosystem services in the policy process and the newly agreed EU target

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127 EEA (2010): The European Environment: State and Outlook 2010 – A Synthesis.

128 CEC, (2008): Communication from the Commission – Towards and EU strategy on invasive species, (COM(2008)789).

129 EEA (2010): Progress towards the European 2010 biodiversity target, EEA Report no 4/2009; EEA (2010) The European Environment: State and Outlook 2010 – A Synthesis.

130 CEC (2007): Communication from the Commission on the Mid-term review of the Sixth Community.

131 EEA (2010): EU 2010 Biodiversity Baseline, Technical report No 12/2010.

132 Proposal for a Regulation of the European Parliament and of the Council on European environmental economic accounts, (COM(2010)132).

and vision on post-2010 biodiversity policy[133] clearly recognises the benefits provided by biodiversity for human well-being.

Accidents and natural disasters

A number of initiatives have been adopted that relate to the prevention of accidents and natural disasters, including Directive 2007/60/EC on the assessment and management of flood risks, measures relating to forest fires, and a series of Communications on disaster prevention and disaster response. These measures cover a number of areas that are not specifically mentioned in the 6EAP and reflect changes in policy priorities due to increased risks related to flooding, water scarcity and forest fires.

The proposals set out in the Communication on disaster prevention are likely to contribute to **improving coordination of Member State action on accidents and natural disasters.** In particular, the establishment of a network of Member State representatives should improve cooperation among competent authorities and provide a forum for the exchange of prevention practices and tools. The Communication has however been criticised for not advancing further measures that specifically aim to step up cross-border exchange of information, experience and good practices and further action has been called for by other EU institutions including proposals for legislative instruments similar to the floods Directive. Furthermore, although the 6EAP objectives fall under the nature and biodiversity thematic area, the proposals in the Communication mainly deal with threats to the environment in general and rarely specifically address biodiversity related concerns. Taking biodiversity aspects into consideration is important given that moderate natural disturbances (e.g. flooding, fire) form an integral part of the functioning of several ecosystems (e.g. the existence of several species) and the mitigation of natural hazards may also have negative effects on biodiversity.

Measures have also been adopted that relate to the prevention of **major accident hazards,** including the Seveso II Directive 2003/105/EC on the control of major-accident hazards involving dangerous substances (adopted in 1996 and amended in 2003 to cover risks arising from storage and processing activities in mining) and Directive 2006/21/EC on the management of waste from extractive industries. A proposal to revise the Seveso II Directive was presented in December 2010.[134] In relation to pipelines, the Commission had previously reviewed pipeline safety and had for example set up groups of experts in this area.[135] No EU legislative proposals for pipelines have been put forward to date, partly due to the availability of non-binding recommendations developed at the international level (UNECE[136], OECD[137])

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133 Environmental Council Conclusions 7536/10, March 2010, and CEC, (2010). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Options for an EU vision and target for biodiversity beyond 2010 (COM(2010)4).

134 CEC (2010): Proposal for a Directive of the European Parliament and of the Council on control of major-accident hazards involving dangerous substances, (COM(2010)781), 21/12/2010.

135 Commission Decision of 11 June 2003 setting up a group of experts to advise the Commission on a strategy for dealing with accidents in the transport sector (2003/425/EC).

136 UNECE Safety Guidelines and Good Practices for Pipelines ECE/CP.TEIA/2006/11), http://www.unece.org/env/documents/2006/teia/ECE_CP.TEIA_2006_11%20E.pdf.

and the fact that the pipeline sector is further developing and changing (LNG, CO_2). The Commission is expected to revisit the issue in 2011.

Soil protection

A Thematic Strategy on Soil Protection[138] was adopted in 2006 as called for in the 6EAP. The Thematic Strategy was built around four pillars for action: the integration of soil protection into national and community policies; closing recognised knowledge gaps; increasing public awareness; and the development of framework legislation aimed at protection and sustainable use of soils. The Thematic Strategy was intended to be a vehicle to deliver the 6EAP objective of **promoting a sustainable use of the soil**. The 6EAP objective has largely been met with regard to three of the four pillars of the Thematic Strategy. Under the first pillar, efforts have been made to integrate aspects of soil protection in relevant EU policies, e.g. requirements of the IPPC Directive 96/61/EC to ensure the protection of soil when an industrial operation is discontinued were too vague to enforce changes in actual practices and have been clarified in the new industrial emissions Directive 2010/75/EU. Under the second pillar, a number of studies have considerably improved the existing body of knowledge in the area of soil protection. However, a continuing concern relates to the lack of harmonised information at EU level on soil conditions.[139] Under the third pillar, a number of achievements are evident. The adoption of the Soil Thematic Strategy led to several EU-wide stakeholder conferences on soil related issues, attended by scientists, Member State representatives, civil society and other stakeholders. This rising public awareness has been one of the decisive factors in deepening stakeholder engagement in processes and leading to the above mentioned legislative changes.

The failure to adopt the proposed Soil Framework Directive[140] to date, however lessens the impact of efforts taken under the remaining pillars of the Thematic Strategy and has limited the ability of the Strategy to **stimulate a more pronounced shift in soil management practices in the EU**. The proposed Directive is meant to have a significant impact on soil protection and retention of soil functions in Europe. In particular, in its current form, it would at least require the identification of soils at the greatest risk of degradation and actions to address this. The effectiveness of action and oversight would, however, be dependent on the final form of the Directive. A number of sectoral EU policies have also had an impact on soil management practices including measures taken under industrial emissions policy, agricultural policy, and measures focused on the protection of Europe's waterways, surface and ground waters.

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137 OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response, pipeline chapter (p.170), http://www.oecd.org/dataoecd/10/37/2789820.pdf.

138 CEC (2006): COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS : Thematic Strategy for Soil Protection, (COM(2006)231).

139 For example, estimates on soil erosion under the PESERA project, soil organic matter under the JRC LUCAS projects, data on contaminated sites collected by the EEA etc.

140 CEC (2006): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for the protection of soil and amending Directive 2004/35/EC, (COM(2006)232).

Integration of biodiversity considerations in agriculture policies

The 2003 CAP reform introduced important mechanisms that contribute to **integrating biodiversity considerations in EU agricultural policies,** including cross compliance. Given the relatively recent introduction of cross compliance as a compulsory measure (which has only been applied since 2005), there is currently limited information to assess its impact on the environment. Its introduction has expanded the area of land subject to basic environmental management requirements and helped increase awareness of environmental requirements,[141] thus contributing to the 6EAP priority action on integration. However, some evaluations[142] imply that it is likely to have a relatively limited impact on the environment as it tends to require compliance with existing legislative baselines. Moreover, its contribution will differ across the EU. Until 2008, there was no earmarking of funds under the CAP for specific environmental actions. The 2008 CAP Health Check introduced the concept of earmarking funds to 'new challenges' and has been the first step towards more focused environmental action in agricultural policy. These funds are expected to make an important contribution to the 6EAP priority action on integration, there are however significant differences between Member States on the allocation of these funds.[143]

The 2003 CAP reform also introduced provisions under Article 68 of Council Regulation (EC) No 73/2009 to allow flexibility in the way Member States target direct payments. It is too early to predict the impact of Article 68 on the environment (which came into force in January 2009), however initial indications suggest that some Member States are intending to use it to introduce new agri-environment type measures or to provide support to specific types of payments important for the environment, e.g. organic farming or extensive grazing[144] and these are expected to contribute to the 6EAP priority action of **encouraging more environmentally responsible farming**. Agri-environment payments under the European Agricultural Fund for Rural Development (EAFRD) also encourage more environmentally responsible farming by paying farmers for activities that go beyond mandatory standards. It is the only compulsory measure within the EAFRD and therefore is implemented in all Member States. Although the extent of biodiversity benefits delivered through the agri-environment measure in practice is the subject of debate,[145] some studies have shown that its implementation has achieved benefits for biodiversity, or at least reduced the rate of biodiversity loss.

The abolition of set-aside as part of the 2008 CAP Health Check (due to the decoupling of subsidies from production which removed the justification for set-aside as a production

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141 Hart, K./ Baldock, B. (2010): Impact of CAP reforms on the environmental performance of agriculture, A report to the OECD from IEEP.

142 Alliance Environnement (2007): Evaluation of the application of cross compliance as foreseen under Regulation 1782/2003, Report prepared for DG Agri.

143 IEEP own calculations based on data within DG Agriculture's Press Release IP/10/102: Rural development: €5 billion in total injected into rural development programmes following last vote on Health Check and Recovery package changes.

144 Hart K, Rayment M, Lee H (2010): Achieving a Transition Away from CAP Direct Payments, Paper for the LUPG, IEEP, London.

145 See for example Kleijn, D. / Sutherland, and W.J. (2003): How effective are European agri-environment schemes in conserving and promoting biodiversity? Journal of Applied Ecology, 40, 947-969.

control measure) is likely to be unhelpful to **wider biodiversity objectives** of the 6EAP. Although mandatory set-aside was not initiated for environmental reasons, in practice it had a significant environmental impact, particularly in Member States where large areas of land were subject to set-aside obligations.[146]

No clear overall changes can be found in relation to the 6EAP objective of **conserving and appropriately restoring areas of significant landscape value**. While some cultural landscapes have been maintained, associated with an increase in the area under extensive agriculture in the EU,[147] there have been changes in cropping and livestock patterns, with increases in the share of arable land at the expense of permanent pasture and permanent crops resulting in changes to the character of the landscape. General indicators pertaining to the overall state of the landscape reveal both improvements and declines in the condition, suggesting that trends may be spatially variable.[148]

Promoting sustainable use of the seas and conservation of marine ecosystems

As a result of a number of changes made in 2002, the Common Fisheries Policy (CFP) now contains an increased commitment to ensuring **integration of environmental concerns in EU fisheries management**. Thus, the 6EAP objective of integrating environmental considerations in the CFP, capitalizing on the 2002 reform, has been achieved in part. However despite the changes made during and since the 2002 reform of the CFP, the overexploitation of marine fisheries remains a major problem and has led to a situation where 26% of fish stocks are below safe biological limits.[149] Despite an apparent improvement in the current state of stocks, there is also pressure to greatly reduce levels of by-catch, eliminate the discarding of non-target fishing species, and avoid the damage to habitats which currently arises from several types of fishing gear, in particular dredging and beam trawling.[150] The pressure to manage fisheries sustainably and responsibly is growing and the Commission's Green Paper on the reform of the CFP highlighted the shortcomings of the current CFP and the need for critical changes in the reform of the CFP in 2012.[151] Further integration of environmental principles in the CFP post-2012 are expected, including the adoption of more long term management plans and measures to ensure that fish stocks are fished to their maximum sustainable yield (MSY) by 2015.

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146 Institute for European Environmental Policy, (2008) *The Environmental Benefits of Set-Aside in the EU, A summary of evidence*. Report for the UK Department for the Environment, Food and Rural Affairs.

147 EEA (2005): IRENA Indicator fact sheet, IRENA 15 – Intensification/extensification, European Environment Agency: Copenhagen.

148 EEA (2005): IRENA Indicator fact sheet, IRENA 35 – Impact of agriculture on landscape diversity, European Environment Agency: Copenhagen.

149 Sissenwine (2010): An overview of the state of stocks. Presentation made at the "State of European Fish Stocks in 2010", European Commission, Brussels, 14 September 2010.

150 Lutchman, I, Grieve, C, Des Clers, S and De Santo, E (2009): Towards a Reform of the Common Fisheries Policy in 2012 – A CFP Health Check, 80pp. IEEP, London; Lutchman, I. Van den Bossche, K. And Zino, F. (2008) Implementation of the CFP – An evaluation of progress made since 2002. Institute for European Environmental Policy, London.

151 CEC (2009): Commission Communication - Green Paper - Reform of the Common Fisheries Policy, (COM (2009)163).

In terms of other action in relation to the **marine environment**, the Marine Thematic Strategy[152] was adopted in October 2005 as called for in the 6EAP. The Marine Strategy Framework Directive (MSFD)[153] is the main mechanism taking forward the Marine Thematic Strategy and only came into effect in July 2008, thus it is still too early to assess the impact of the Directive on the relevant 6EAP objectives. When implemented, the MSFD can be expected to make a significant contribution to meeting the relevant environmental objectives of the 6EAP. However, there are some limitations to the Directive and issues that it cannot address which will have to be addressed using other instruments, such as the CFP.

While the potential of the Recommendation on the implementation of **Integrated Coastal Zone Management** (ICZM) in Europe is not yet fully exploited (only 13 Member States are reported to have been implementing the principles set out in the Recommendation) [154], the Integrated Maritime Policy (IMP)[155] also seeks to promote the integrated management of coastal zones and has made some steps towards achieving this in practice, thus further improvements can be expected in this area in the future.

In terms of **promoting the protection of marine areas in particular with the Natura 2000 network**, while some marine protected areas have been established under the Natura 2000 network, marine sites currently only account for around 6% of Sites of Community Importance (SCIs) and 10% of Special Protection Areas (SPAs), and the marine part of the network is still under development.[156] Thus, the 6EAP objective in this regard has only partially been achieved.

Forests

The EU Forest Action Plan (FAP)[157] was adopted in 2006 and aims to provide a framework for coordinating forest-related actions at Community and Member State level. Although increased coordination seems to have taken place, forest protection measures remain spread across different policy sectors and continue to be a major point of conflict which has not been solved by the FAP.[158] This inconsistent and fragmentary approach to the forestry sector has restrained the effectiveness of the coordination and thus the ability to meet the 6EAP priority action of **encouraging effective coordination between all policy sectors**

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152 CEC (2005): Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

153 Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

154 CEC (2007): Commission Communication on the evaluation of the Integrated Coastal Zone Management (ICZM) in Europe, (COM(2007)308), 07/06/2007.

155 CEC (2007): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – An Integrated Maritime Policy for the European Union, (COM(2007)575), 10/10/2007.

156 EEA (2010): Distribution of Natura 2000 sites across EU Member States.

157 CEC (2006): Communication from the Commission to the European Parliament and the Council on an EU Forest Action Plan (COM(2006)302), 15/06/2006.

158 Winkel, G, et al. (2009): EU Policy Options for the Protection of European Forests against harmful impacts. Albert-Ludwigs Universitaet Freiburg & Ecologic, Berlin.

involved in forestry. An analysis of the uptake of funding for forest-environment measures and for the protection of Natura 2000 forests in Member States Rural Development Programmes indicates very low levels of expenditure[159] and questions the success of the FAP in integrating the protection of the multiple roles of forests into policy areas such as the CAP. Furthermore, an increased level of intensified forestry measures such as drainage of wetlands, use of fertilisers or the use of non-native tree species, and the continuing fragmentation of forest habitats[160] have restrained the achievement of relevant 6EAP priority actions.

However, a number of recent efforts can be expected to contribute to 6EAP priority actions in the future. This includes the adoption of the 2010 Green Paper on forest protection and information[161] which aims to gather relevant information for the development of future policy options and is thus likely to contribute to the 6EAP priority action of **encouraging consideration of climate change effects in forestry**. Additionally, the new Regulation laying down the obligations of operators who place timber and timber products on the market[162] which aims to enhance previous EU efforts to tackle illegal logging is likely to contribute to the 6EAP priority action to **prevent and combat trade of illegally harvested wood**.

Genetically modified organisms (GMOs)

Important steps have been taken with regard to the 6EAP priority actions on GMOs, with the adoption of several acts regulating traceability, monitoring, labelling and risk assessment. Overall, no large-scale negative impacts of GMOs on EU biodiversity have been proven to date. However, this reflects the current situation in which GMOs are not widely consumed, produced or marketed within the EU and scientific difficulties with proving such effects under other than real world conditions.

Provisions and methods for the identification and traceability of GMOs are addressed in particular by Regulation (EC) No 1830/2003 and associated implementing measures. The **labelling** of GMOs is addressed by Regulation (EC) No 1830/2003 and the Deliberate Release Directive (DRD).[163] Despite some minor problems, there does not seem to be widespread criticism of the current system for the identification, traceability and labelling of GMOs as being ineffective or inappropriate.[164,165] EU provisions in these areas appear to be

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159 CEC (2010): Communication from the Commission–Commission staff working document accompanying the 2010 assessment of implementing the EC biodiversity action plan (SEC(2010)1163), Consolidated profile.

160 EEA (2010): 10 messages for 2010' – Forest Ecosystems. Message No5, Copenhagen.

161 CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66) and accompanying staff working paper (SEC(2010)163).

162 European Parliament (EP), (2010): Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

163 See in particular Art. 4 para. 2, Annex II of the DRD.

164 Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and

appropriately designed and applied effectively, thus largely satisfying the requirements of the 6EAP.

Concerning the **effective monitoring and controls of health and environmental effects** of GMOs, although the DRD requires monitoring plans to be part of any pre-marketing notification and consent for placing GMOs on the market, the guidelines for these plans are rather broad. Moreover, there are no legal provisions harmonising GMO monitoring data between Member States. Thus, there is some doubt as to whether the current EU GMO regulatory framework is sufficient for ensuring effective GMO monitoring, as stipulated in the 6EAP.

Provisions and methods for risk assessment of GMOs are set out in the DRD and a European Food Safety Authority (EFSA) guidance document. Although there has not been widespread criticism of the legal rules on risk assessment, the way in which risk assessments are carried out and previous EFSA guidelines have been the subject of significant criticism. A revised version of the EFSA guidelines on environmental risk assessment was released in October 2010.[166] It remains to be seen whether these revised guidelines will be more acceptable.

The **Cartagena Protocol on Biosafety** was approved, and Regulation (EC) No 1946/2003 adopted for its implementation. With regard to the **build-up of biosafety regulatory frameworks in third countries**, several capacity building measures have been financed or carried out by the EU.[167]

3.2.3 Summary assessment of drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the nature and biodiversity thematic area which are set out below. A more detailed assessment of the drivers and barriers in this area can be found in Annex A, section 1.2.

Changes in the thematic area

A number of changes have taken place since the adoption of the 6EAP in 2002 that have changed the overall perception, main discourses and political profile of this thematic area, including shifts in political priorities, developments in the knowledge base and natural events.

There has been increasing recognition of the **economic value of biodiversity and ecosystem services** in the policy process driven by *inter alia* the TEEB (The Economics of Ecosystems and Biodiversity) initiative, together with financial support and studies by the

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feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM (2006) 197 final.

165 Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final.

166 http://www.efsa.europa.eu/en/scdocs/scdoc/1879.htm.

167 http://bch.cbd.int/database/activities/.

European Commission.[168] These developments in the knowledge base and the increasing recognition of linkages with other policy areas (in particular the economy) have helped to raise the political profile of biodiversity issues in recent years, thus acting as a driver for further action in this area.

Increased awareness of **soil** issues, linked to the climate change debate (e.g. carbon sequestration) and the role of soils in delivering ecosystem services have helped promote more extensive consideration of soil issues.[169] There is now greater understanding of soils interactions with the need to sequester carbon, manage land in a way that enables adaption to climate change and ensure the protection of water both in terms of quality and quantity. Integrating soil considerations into these wider priorities has acted as a driver to promote better soil protection. The increasing importance of climate change has also led to increased attention by policy makers to the role of **forests i**n climate mitigation and adaptation efforts, and may influence the type of measures adopted in this area in the future.

The increasing threats (in number and severity) to the **marine environment** have driven action relating to the sustainable use of the seas and conservation of marine ecosystems. In the area of **agriculture,** changes related to decoupling of subsidies from production during the 2008 CAP Health Check removed the justification for set aside as a production control measure and to the abolition of set aside. As discussed above, this has important consequences for biodiversity, particularly in Member States with large arable sectors. In addition, more general economic changes, such as the steep increase in price of cereals in 2008, has highlighted the vulnerability of certain agri-environment measures to fluctuating opportunity costs with a possibly negative impact on the uptake of these measures by farmers, and a potential concomitant negative impact on the actual delivery of these schemes on the intended environmental benefits.[170]

Aspects of decision-making procedures

Processes to develop policy put forward in the 6EAP, in particular the stakeholder consultation process related to the development of the Thematic Strategies, as well as the formal decision-making procedures to agree EU legislation, have been important factors influencing the final form of specific pieces of legislation and hence affecting the attainment of certain 6EAP objectives in this thematic area.

The open and extensive stakeholder engagement process to support the development of the **Soil Thematic Strategy** led to the proposal for a soil Framework Directive.[171] However, the continued blocking of the proposed Directive by a blocking minority group of Member States (on the grounds of national sovereignty and the cost of implementing a new EU law) means

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168 DG Environment (2010): The economics of ecosystems and biodiversity web pages, http://ec.europa.eu/environment/nature/biodiversity/economics/teeb_en.htm, Accessed on 06/01/2011.

169 See for example, conferences organised by DG Environment in September 2010 and in June 2008: http://ec.europa.eu/environment/soil/biodiversity_conference.htm; http://ec.europa.eu/environment/soil/conf_en.htm .

170 Defra, Natural England (2008): UK Environmental Stewardship Review of Progress.

171 CEC (2006): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for the protection of soil and amending Directive 2004/35/EC, (COM(2006)232).

that the most tangible output of the discussions on soils remains unresolved. Stakeholder processes were also important in developing the **Marine Thematic Strategy**. The Commission, in its 'towards' Communication did not indicate that a broad legislative instrument would be forthcoming. However, stakeholder consultations not only generated the idea and support for a Directive, but also elaborated much of its content. The existence of a MSFD and much of its content are thus a direct result of the processes set in place by the 6EAP and the analytical and consultation processes to develop the Marine Thematic Strategy. Negotiations during the co-decision processes helped to tighten the text amend deadlines and add further issues to the determination of good environmental status in the MSFD.

In the area of **agriculture**, decisions to limit the financing of Rural Development policy during the European Council meeting on the 2007-13 Financial Perspectives forced some Member States to scale back their intended delivery of measures. On the other hand, lobbying by environmental interest groups helped to introduce cross compliance as a compulsory measure, considerably increasing the environmental ambition of Council Regulation (EC) No 73/2009. New Good Agricultural and Environmental Condition (GAEC) standards on 'water protection and management' and 'habitats' also came out of pressure from the environmental community and various Member States during the 2008 CAP Health Check.

Calls from the European Parliament and the Council, following a series of natural disasters that affected the EU (floods, droughts, forest fires etc), led to the presentation of the Communication on **disaster prevention**. This in turn followed-up the Commission's commitment to develop proposals for an integrated European approach to disaster prevention.[172] The diverging views on **GMOs** among Member States that have led to national bans and the frequent application of the Community procedure provided for in the DRD have slowed down authorization procedures and thus influenced the formulation and implementation of the EU legislative framework on GMOs.

In certain cases, political issues have acted as barriers to progress. For instance, in the case of **forestry**, the limited competence of the Community in forest policy, together with a certain resistance amongst some policy-makers, interest groups and Member States to a more integrated approach to forest policy, and the lack of quantitative and qualitative targets and concrete legislative proposals in the Forest Action Plan (FAP) have resulted in the relatively limited contribution of the FAP to the relevant objectives and priority actions of the 6EAP.

Implementation

Effective implementation of EU environmental policy is an important factor affecting the achievement of 6EAP environmental objectives in this thematic area. There have been particular problems related to the implementation of the **nature Directives and the BAP**, including slow or incomplete identification and designation of Natura 2000 sites (especially in the marine environment), inadequate management of habitats and species within Natura sites, and especially in the wider environment. The BAP failed to outline indicators and

[172] CEC (2008): Communication from the Commission to the European Parliament and the Council on reinforcing the Union's disaster response capacity (COM(2008)130).

baselines for its targets and actions and although the monitoring procedures accompanying some legislative devices associated with the BAP provide useful data for evaluation, other targets lack the prioritisation and measurability required to provoke action and deliver results.[173] Moreover, responsibility for implementation of the BAP was delegated to the Biodiversity Expert Group and by extension to environment ministries and agencies of the EU and Member States, whose political influence is generally regarded as relatively weak.[174] This marginalises the BAP and diminishes its potential to influence other sectors. The lack of ownership of policy development on the part of Member States has undermined commitment and progress in implementation of biodiversity actions to date, with most Member States not taking steps beyond the obligated minimum.[175]

The flexibility given to Member States in terms of which **Rural Development** measures they implement (only the agri-environment measure must be implemented in all countries) and how they are implemented, allows the needs of local areas and varying agronomic, environmental, climatic and bio-physical conditions to be addressed, but simultaneously leads to varying levels of ambition and hence differences in the ways that the measure contributes to 6EAP objectives. A review of implementation of cross compliance in 2007[176] showed that only three Member States had established farmers' obligations for all relevant articles of the required legislation (i.e. for all statutory management requirements (SMRs)), with omissions in farmers' obligations in relation to some articles of at least some SMRs in all other Member States. It also demonstrated that the environmental SMRs and GAEC standards are less well checked during inspections than other standards.

Barriers to the **Marine Thematic Strategy** are not yet apparent, but these are likely to emerge with the implementation of the MSFD. The biggest barrier may be the lack of high-quality information on various components of the marine ecosystem as existing monitoring and assessment programmes are neither integrated nor complete.[177] A review of the existing knowledge base of these programmes reveals a significant number of information gaps on the state of Europe's marine environment. In addition, there is limited information on the effectiveness of existing regulatory measures, and the various threats and pressures posed by human activities.

Implementation is widely regarded as the weak part of the current EU framework for risk assessment and monitoring of **GMOs**, in particular regarding the environmental risk assessment of GMOs. Previous efforts to tackle the problem of **illegal logging** through FLEGT Voluntary Partnership Agreements proceeded slower than envisaged due to

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173 Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

174 Ibid.

175 Stakeholder consultation, Brussels workshop.

176 CEC (2007) Report from the Commission to the Council on the application of the system of cross-compliance, (COM(2007)147), Brussels, 29/03/2007.

177 CEC (2005): Communication from the Commission - Thematic Strategy on the Protection and Conservation of the Marine Environment, (COM(2005)504), 24/10/2005.

complications in the negotiation of the voluntary agreements. In addition, the bilateral approach of the FLEGT Regulation, the limited range of timber products covered[178] and the risk of circumvention suggested that the Regulation as it stood was insufficient to combat illegal logging[179] and led to the development of the proposal on a Regulation addressing illegal logging.[180] The effectiveness of the new Regulation[181] will depend on the approach adopted by Member States to the application of penalties for operators placing illegally harvested timber and timber products on the market.

EU financial resources

Adequate financial resources are an important element of effective implementation of EU legislation in Member States. The **BAP** failed to set aside a specific budget for its implementation, and the EU financial resources for effective biodiversity action as a whole are thought to be far below requirements.[182] The impact of successive LIFE programmes on the 6EAP biodiversity objectives while positive, have been limited by their relatively small budgets and narrow scope.[183] One of the major shortcomings identified with the BAP has been the failure to set aside a specific budget for its implementation and the poor level of funding for biodiversity as a whole.

The Communication on **disaster prevention** was not accompanied by specific financing proposals because as was maintained by the accompanying Impact Assessment the creation of a specific financial instrument was not appropriate and could lead to overlaps with existing instruments.[184] Although a number of the EU funding instruments explicitly address issues related to the protection against natural risks, the uptake of these funds remains limited[185]

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178 The synthesis report on the public consultation is available at: http://ec.europa.eu/environment/forests/pdf/addloptionssynthfinal.pdf.

179 EU Commission, Public Consultation on 'Additional Options To Combat Illegal Logging' - Analysis And Report, p. 3.

180 Commission of the European Communities, (2008): Proposal for a Regulation of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (COM(2008)644).

181 European Parliament (EP), (2010): Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

182 Kettunen, M., Baldock, D., Adelle, C., Cooper, T., Farmer, M., Hart, K., Torkler, P. (2009): Biodiversity and the EU Budget - an IEEP briefing paper. Institute for European Environmental Policy, London / Brussels.

183 Gantioler, S., et al. (2010): Costs and Socio-Economic Benefits associated with the Natura 2000 Network. IEEP, GHK & Ecologic; Kettunen, M., et al. (2009). Assessing Socioeconomic Benefits of Natura 2000 – a Toolkit for Practitioners (September 2009 Edition). Output of the European Commission project Financing Natura 2000: Cost estimate and benefits of Natura 2000 (Contract No.: 070307/2007/484403/MAR/B2). Institute for European Environmental Policy (IEEP), Brussels, Belgium. 191 p. + Annexes.

184 CEC (2009a): Commission Staff Working Document, Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man-made disasters, Impact Assessment, (SEC(2009)202).

185 CEC (2010): Towards a stronger European disaster response: the role of civil protection and humanitarian assistance, (COM(2010)600).

and as argued by the European Parliament, there remains a need for a suitable financial framework for disaster prevention with adequate financial resources.[186]

Rural Development policy provides the majority of financial resources to support biodiversity, soil and water protection goals associated with farmland. But it continues to suffer from insufficient funding to meet its environmental objectives and those set out within the 6EAP. Within the CAP, the budget allocated to Rural Development policy is only half that spent through Pillar 1, and of Pillar 2[187] spending only around 25% is directed towards the agri-environment measure. There are also large disparities in the proportion of the Rural Development budget that Member States choose to spend on measures with environmental objectives.

The **European Fisheries Fund** (EFF) established by Council Regulation (EC) No 1198/2006[188] provides financial support for implementation of the **CFP**, including the sustainable development of coastal and inland fishing areas. Although the EFF provides funds for environmental integration related projects,[189] the uptake of such funds by many Member States has been minimal.[190]

No specific financial resources have been dedicated to the implementation of the **EU Forestry Action Plan (EU FAP)**, although various EU funding instruments do address some of its objectives, including the Rural Development Regulation which guarantees funding to forest-related issues under the European Agricultural Fund for Rural Development (EAFRD). However, only a small proportion of the EAFRD has been dedicated to forest measures.[191] These limited financial resources might have further hampered achievement of the objective of maintaining and enhancing biodiversity in forest ecosystems.

Public opinion

Public support of action in a particular area, usually in combination with other factors, has contributed towards the achievement of certain 6EAP objectives in the nature and biodiversity thematic area. For instance, the significant increase in the number and severity of **natural and man-made disasters**, in particular the floods and forest fires in the summer of 2007, increased public support (and political will) for a more comprehensive EU approach to disaster prevention. A special Euro Barometer survey in 2009 found that there is significant public support for greater EU involvement and support for Member States in

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186 European Parliament (2010): European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI)).

187 Pillar 1 is the support provided to farmers' incomes and is in the form of market management and direct payments. It is financed from the European Agricultural Guidance Fund. Pillar 2 is the support provided for the development of rural areas and takes the form of rural development programmes. It is co-financed from the European Agricultural Fund for Rural Development. See: http://ec.europa.eu/agriculture/glossary/index_en.htm.

188 Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund.

189 Priority Axis 4 of the EFF Regulation relates to sustainable development of fisheries areas.

190 Lutchman, I./ Binet, T., (2007): Scorecard on the EFF programming and implementation up to April 2007 – A report to WWF EPO.

191 CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change - Accompanying staff working paper (SEC(2010)163).

disaster management activities. The majority of respondents surveyed felt that common measures (along similar lines to the floods Directive), standards and common warning signals should be adopted across Europe.[192] This public support, together with high-level political backing has helped push forward developments in this area.

In relation to **agriculture policy**, the strong environmental lobby in some more Northern and Western Member States has led to the introduction of more demanding environmental standards under cross compliance.[193] Stakeholder lobbies also play a prominent role in influencing the overall focus of Rural Development policy, the use of the EAFRD measures, and their design and implementation at the Member State level where there is flexibility in the measures applied. Strong environmental groups in some Member States have resulted in an increased emphasis on the environment within many of these Rural Development Programmes.

Public reticence over the use of **GMOs** has very likely had an effect on the formulation of measures in this area. It has been noted that the revision of the previous EU GMO regulatory framework was aimed at restoring public trust in GMO regulation which had been undermined by a number of scandals in the food sector, including the BSE crisis.[194] In addition, the European food and retailing industries remain reticent to market GM food and food products due to expected negative consumer reactions and as a result only a limited number of GM products are currently marketed and imported.[195]

Interaction with other EU policy priorities

Other EU policy priorities have also had an important influence on developments in a number of sub-areas in the Nature and Biodiversity thematic area. For instance, the adoption by EU leaders in 2001 of the Gothenburg target to halt biodiversity decline by 2010 and the global target agreed at the WSSD in Johannesburg in 2002 as well as the 1998 EU Biodiversity Strategy and its review were identified by stakeholders among the main drivers behind action in the **biodiversity** area, in particular in relation to the development of the BAP in 2006.[196] In relation to **agriculture policy**, cross-compliance, Article 68 and the agri-environment measure have developed out of a broader dynamic of environmental integration in agricultural policy, from an incipient concern with farmland habitats and landscapes in the

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192 Euro Barometer, (2009): Civil Protection, Full Report.

193 Hart, K., Baldock, D. (2010): Impact of CAP reforms on the environmental performance of agriculture, a report to the OECD from IEEP.

194 Paula Rey García, Directive 2001/18/EC on the Deliberate Release into the Environment of GMOs: an Overview and the Main Provisions for Placing on the Market, Journal For European Environmental and Planning Law, Vol. 2006 No. 1, p. 4.

195 Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM (2006) 197 final, p.4; Report from the Commission to the Council and the European Parliament on the implementation of Regulation (EC) No 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC, COM(2008) 560 final, p. 7.

196 Stakeholder consultation, Brussels workshop.

1980s to a fuller and more strictly legislated environmental integration after 2003. Factors driving the integration of the environment in the **CFP** include the adoption of Article 6 of the EC Treaty in 1997 which required environmental protection requirements to be integrated in the definition and implementation of Community policies, the 1998 Community Strategy on Biodiversity[197] and more specific 'Biodiversity Action Plan for Fisheries'[198], which contained concrete proposals for minimising impacts on the biodiversity of Community waters. Several fisheries measures, - for example, a ban on bottom trawling, shark finning, and the designation of closed areas - have been adopted in various EU fisheries and were taken in order to meet obligations under the Habitats and Birds Directives. Other EU policies influenced the **Marine Thematic Strategy** including the Water Framework Directive and the Integrated Maritime Policy.

International commitments

The EU also has various international commitments which have driven developments in this area. EU action in relation to **biodiversity** has been driven in part by commitments under the Convention on Biological Diversity (CBD). For instance, the 2006 Biodiversity Action Plan was adopted as a follow-up to the 1998 Biodiversity Strategy which had been introduced to *inter alia* take forward the EU's international commitments as a contracting party under the CBD. The Cartagena Protocol on Biosafety**,** a protocol to the CBD, was approved by the EU in June 2002[199] and Regulation (EC) No 1946/2003 on trans-boundary movements of GMOs[200] was adopted to implement it. EU action in relation to biodiversity has also had an influence on the formulation of certain international commitments. For instance, the commitment by EU leaders in June 2001 to halt the decline of biodiversity in the EU by 2010 influenced the international agreement reached in April 2002 among the Parties to the CBD. The EU also played an important role at the 10th meeting of the Conference of the Parties (COP 10) to the CBD in Nagoya in October 2010 where advances on a number of key areas were made including the adoption of a Protocol on Access and Benefit Sharing (ABS) and a multi-year Strategic Plan 2011 to 2020. The TEEB initiative also provided important input to this COP.

The Communication on **disaster prevention** contributes to the overall implementation of the Hyogo Framework for Action 2005-2015 and aims to complement and support the work of national platforms for disaster risk reduction. A combination of international agreements and treaties calling for marine conservation, and a growing awareness or concern for the state of fish stocks and the marine environment more generally meant that there was significant pressure to reform the **CFP** and led to greater consideration of environmental issues in this context. A number of the EU's international commitments have also affected the level of

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197 CEC (1998): Communication from the Commission to the Council and the European Parliament on a European Community biodiversity strategy, (COM(1998)42).

198 CEC (2001): Commission Communication - Biodiversity Action Plans in the areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Co-operation, (COM(2001)162), 27/03/2001.

199 See Council Decision 2002/628/EC of 25 June 2002, OJ L 31.7.2002, p. 48-49.

200 Regulation (EC) No 1946/2003 of the European Parliament and of the Council of 15 July 2003 on trans-boundary movements of genetically modified organisms, OJ L 287, 5.11.2003, p. 1–10.

ambition of the adopted **Marine Thematic Strategy**. The EU's involvement in international initiatives, such as Forest Europe, has influenced many of the measures on **forestry** undertaken at the national and Community level. International discussions on the role of forests regarding mitigation and adaption to climate change and in particular the potential of reducing emissions from deforestation and forest degradation (REDD) may influence ambitions related to future instruments in this area.

3.2.4 Assessment of the policy mix and approach of the 6EAP

A number of different policy measures and tools have been adopted in the Nature and Biodiversity thematic area since 2002. The appropriateness of the policy mix and approaches adopted and some observations on the relevance of the 10-year timeframe of the 6EAP are set out below.

Mix of measures and tools

The ambition and comprehensiveness of the targets of the BAP are on par with the **biodiversity objectives** of the 6EAP, the content of each corresponding closely with the other. However, the low delivery on these targets given the general lack of political will, inadequacy of financial commitments and consequent shortfall of the measures and actions, makes the BAP as a tool itself insufficient. The BAP failed to deliver on its and the 6EAP's main target of halting biodiversity loss by 2010 in part because the target is exceptionally ambitious, but also because action on the part of Member States has fallen short of that ambition.[201] Although the EU has a relatively strong and comprehensive biodiversity conservation framework, the BAP included too many actions, many of which were unrealistic and or ill-defined; the BAP was also inconsistent in its structure and focus (i.e. input and output targets) and lacked prioritisation among its actions. These factors have impeded its delivery.[202]

The most significant problems in terms of the policy responses to key biodiversity pressures appear to relate to gaps in policy instruments (e.g. the lack of a coordinated EU strategy and measures for the control of IAS, weak and variable controls on developments (and the absence of a general no-net loss biodiversity policy), the absence of EU legislation to protect soils); slow development of some important policy instruments (e.g. the Water Framework Directive and Marine Strategy Framework Directive); slow or incomplete implementation of existing policy instruments (e.g. designation of Natura 2000 sites (particularly in the marine environment) and implementation of the Nitrates and Urban Waste Water Treatment Directives); ineffective implementation of some existing practical measures (e.g. agri-environment schemes as a result of the use of generic management prescriptions and a lack of sufficient advice and training due to limited capacities in conservation agencies); time lags between actions and measures (e.g. responses of ecosystems to reductions in pollutant

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201 Stakeholder consultation, Brussels workshop.

202 Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

loads); information failures (e.g. incomplete monitoring of many habitats and species of Community Interest, unsatisfactory monitoring of biodiversity in the wider environment (especially for taxa other than birds and in the marine environment); inadequate monitoring of the effectiveness of conservation management measures such as agri-environment schemes, and uncertainty over the likely impacts of climate change on habitats and species; insufficient mainstreaming of biodiversity concerns and the need to contribute to the 2010 target in sectoral policies.[203]

Most of these problems arose from ineffective or slow implementation of existing measures, rather than gaps in measures. This appears to often be the result of inadequate funding for practical biodiversity measures (such as the appropriate management of Natura sites) and limited capacities of government environmental agencies and other conservation organisations to support and monitor actions. Furthermore, such problems are exacerbated by the tendency for decision makers to overlook or underestimate the full socioeconomic value of biodiversity.[204] LIFE+ funding, whilst positive in providing tangible support, is too narrow and too small in both absolute and relative terms to significantly reduce biodiversity losses. Stronger and wider measures are required to achieve the ambitious aims of the 6EAP. The economic case also has to be more fully considered and taken into account in the policy development process to make biodiversity objectives more feasible and concordant with other policy goals.

The **Communication on disaster prevention** concluded that the proposed improvements could be made within the existing legal structure for civil protection and thus no new legislative measures were put forward. The measures proposed are primarily soft tools relating to the development of the knowledge base, exchange of best practices, linking of policies and actors, and the provision of guidance. The success of this approach is reliant on the extent to which measures are taken up by Member States. According to the accompanying Impact Assessment, in the medium to long term, specific measures such as integrated instruments addressing risk mapping and disaster prevention in general or vertical instruments addressing specific disasters may be considered which might be more effective in reducing the negative impacts of disasters.[205] The Impact Assessment also recognised that further specific initiatives could be considered for other types of disasters; however the scope of such initiatives is likely to be limited to forest and other wild fires. The Parliament has subsequently called on the Commission to present a proposal for a directive, similar to the floods Directive to promote the adoption of an EU policy on water scarcity, drought and

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203 Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

204 ibid.

205 CEC (2009a): Commission Staff Working Document, Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A Community approach on the prevention of natural and man-made disasters, Impact Assessment, (SEC(2009)202).

adaptation to climate change in addition to legislative proposals and initiatives in the area of forest protection and fire prevention.[206]

The adoption of a **Soil Thematic Strategy** as a tool for exploring soil protection issues, driven by the 6EAP was appropriate. Due to the relative lack of development in this policy area at the EU level, such a strategic process was necessary to bring together those active in the field and to assess the multiple needs in terms of protecting Europe's soil. The outcome of the Thematic Strategy process is widely viewed as positive,[207] having led to a more integrated community working on these issues and a significant body of work on which the Commission was then able to draw on when developing proposals for a framework Directive. Moreover, the Thematic Strategy proposed awareness raising activities and research to improve understanding of soil issues, which would seem a key component in expanding knowledge of this subject area and ensuring its effective consideration in EU law. The proposal for a soil framework Directive as the mechanism for addressing soil issues at the EU level is viewed as appropriate by some, but, as noted above and in Annex A, section 1.2, others question the role or extent of EU law in this area. Prior to the decision to adopt an integrated mechanism to legislate in this area, it had been considered that multiple, more limited, and focused policies would be adopted, for example addressing questions of monitoring and research on soil issues. Adopting a more holistic and ambitious approach to soil issues better suits the importance of this issue in terms of delivering environmental protection in Europe. While the text of the proposed Directive highlights the need to take into consideration climate issues and to integrate soil protection needs into agricultural activities, the coverage of these issues is limited. Arguably in such a holistic measure, certain issues in particular agricultural possibilities could be better addressed.

The specific aims of the 6EAP relating to **agricultural policies** of encouraging environmentally sustainable farming, the integration of farming practices, organic farming and agro-biodiversity, are addressed mainly through the Rural Development Regulation. Cross compliance contributes to the objectives of the 6EAP in the sense of creating a more solid basis for enforcement of environmental legislation. It must be noted that the agricultural measures reviewed are regulatory in nature, and therefore binding on the Member States. Under Council Regulation (EC) No 73/2009 all Member States are required to implement cross compliance, although there is flexibility with regards to the standards of GAEC introduced. With regard to Article 68 of Regulation 73/2009,[208] the measure has a considerably lesser scale of importance due to the lower proportion of the budget allocated to it within national envelopes, the fact that it is not mandatory, and that even in cases when Member States use it, they do not have to do so for environmental purposes. With regard to Rural Development, the agri-environment measure has an important role in delivering

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206 European Parliament (2010): European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI)).

207 Stakeholder consultation, Brussels workshop.

208 Regulation 73/2009 provides the general rules for direct payments to farmers. Article 68 of the Regulation permits Member States to consider that, because of specific farming conditions, payments should be higher than they would otherwise be. In order to apply Article 68, a Member State must first be granted a derogation from the Commission. See: http://ec.europa.eu/agriculture/glossary/index_en.htm.

multiple environmental benefits as it is the only mandatory measure within the EARDF. However, as noted above, the extent of biodiversity benefits delivered through this measure in practice is the subject of much debate and there continue to be difficulties in accurately measuring the actual impacts of agri-environment schemes and other Rural Development measures on biodiversity, soil and water.

The integration of the environment in the **CFP** Regulation was the appropriate approach towards the 6EAP objective of sustainable use of the seas and conservation of marine ecosystems given that unsustainable fishing is one of the biggest threats to marine ecosystems and this is an activity under the purview of the CFP. Further integration is likely through the current reform of the CFP (2012) and is expected to lead to some major changes to the current policy to improve the sustainability of EU fisheries. The implementing Regulations of the CFP have stronger legal weight and are arguably more effective than non-binding policies through other instruments.

Of the two approaches presented in the Impact Assessment[209] accompanying the **Marine Thematic Strategy**, the option of a flexible legal instrument and Communication which would be 'ambitious in scope but not overly prescriptive in its tools' was selected (hence the proposal for the MSFD). The Commission concluded that a highly prescriptive instrument would have been the wrong approach and would have made it impossible to take into account the diversity across different regions. On the whole this appears to be the right decision due to the many challenges, such as defining and monitoring 'good environmental status', which mean that a less prescriptive legislative approach is more suited in this area. The Directive still sets timelines and targets which Member States are required to work towards. Whether the level of flexibility in the MSFD is too great or not (e.g. allowing Member States to justify little new action) will only become apparent as Marine Strategies are adopted by Member States.

The EU **FAP** lacks concrete objectives and targets, and functions as an instrument for improving coordination and coherence. The vaguely formulated key actions include non-binding recommendations which limit the achievement of relevant 6EAP objectives. The FAP relies on the voluntary coordination of national activities to ensure adequate protection of forests and implementation of Sustainable Forest Management (SFM) principles. Although no final evaluation of the FAP has taken place, it is likely that this approach has not been sufficient to address the environmental challenges in the forest sector (e.g. biodiversity, climate change) and the objectives of the 6EAP. The FAP recommends applying the open method of coordination (OMC) to national forest programmes, however this activity was scheduled for the second half of implementation of the FAP, and consequently no evaluation on its impact is available yet.[210]

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209 CEC (2005b): Annex to the Thematic Strategy on the Protection and Conservation of the Marine Environment and Proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive) - Impact Assessment, (SEC(2005)1290).

210 Pelli, P., et al. (2009): Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI-2008-EVAL-07.

Timing of measures and the 6EAP 10-year timeframe

It is difficult to draw conclusions on the effectiveness and adequacy of **biodiversity** policy measures as their actual impact on achieving improvements in the ecological state and conservation status will take time to manifest. In the case of LIFE+ projects, restoration and management activities can take a long time to generate positive conservation outcomes. This is associated with the inherent time lags in ecological systems as well as the magnitude of the actual task. It is also clear that the biodiversity objectives of the 6EAP are too ambitious relative to the timeframe.[211] This is particularly true as many of the instruments are target-centred and strategic, so will take longer to produce positive outcomes.

The timing of action under the 6EAP is considered to have been appropriate to put forward a new strategic approach to **soil** issues. Obviously establishing action in a new policy area will require ongoing efforts beyond the 10 year period of the 6EAP, i.e. it would not be possible to achieve the objective of ensuring the sustainable use of all Europe's soils in this time period; however such a time period should be sufficient to put in place the policy measures enabling action in the longer term. In reality one of the key policy measures, namely the proposed soil framework Directive, is yet to be finalised due to delays in the EU decision-making process. In addition, the question of soil protection and the importance of ensuring the quality of soils have risen in profile since the adoption of the 6EAP. Arguably, therefore, there is a need to retain a continued focus on promoting soil considerations, and their interactions with wider environmental priorities, at the EU level beyond the 10 year scope of the 6EAP. Unlike some of the other Thematic Strategies, i.e. on waste management and natural resources, the Soil Thematic Strategy does not specifically set in place a basis for its review. The only reference is that a review should take place as part of the 6EAP review itself. Arguably, a more dedicated process looking at the evolution of the debate on soils and the needs in terms of policy would be useful to consider the future strategic direction of action in this area.

While the 10-year timeframe of the 6EAP may be sensible in relation to seeing environmental effects of changes in agricultural management practices, it is a different timeframe to that which agricultural policy measures operate under. Both the **EAFRD** and **Council Regulation (EC) No 73/2009** are timed according to the EU Budget programming periods, i.e. 2007-2013. Therefore, they are somewhat incompatible with the timing of the 6EAP. This is not necessarily an issue, but has implications in terms of the data used for reporting purposes.

3.2.5 Impact of the 6EAP on the adoption of measures

3.2.5.1 Impact of the 6EAP

It is difficult to accurately establish the extent to which an overarching framework like the 6EAP has influenced specific policy developments, and apart from the adoption of the Thematic Strategies on Soil and the Marine Environment, there appears to be little concrete evidence that the 6EAP played a major role in driving forward particular developments in the

[211] Stakeholder consultation, Brussels workshop.

nature and biodiversity thematic area. Nonetheless, there are some suggestions that the 6EAP provided some added value in certain instances as set out below.

In relation to **biodiversity policy**, the 6EAP was evoked in political discussions leading up to the formulation of the BAP, such as the Message from Malahide[212] which encouraged its development and potentially raised its profile. The 6EAP is also explicitly referred to in the LIFE+ Regulation, and the BAP Communication. Both the LIFE+ and BAP built on policy foundations that were set prior to the formal adoption of the 6EAP. It is however important to note that the European Council conclusions in Gothenburg in June 2001 state that 'biodiversity decline should be halted with the aim of reaching this objective by 2010 as set out in the 6th Environmental Action Programme'.[213] Although the 6EAP had not yet been adopted at the time, the Environment Council had reached a political agreement on the 6EAP in June 2001[214] to serve as input to the Gothenburg European Council. The 2010 biodiversity target had thus been agreed by Environment Ministers, was endorsed by the European Council in the EU SDS in June 2001, and subsequently formally adopted in the 6EAP. Therefore, the inclusion of the 2010 target in the 6EAP can be seen as an important initial factor influencing subsequent developments. Certain stakeholders consulted in the context of this study also maintained that the inclusion of the 2010 target in the adopted 6EAP made it an implicit headline target for the EU and thus helped reinforce it.

Stakeholder consultation undertaken in the context of this study[215] revealed that the 6EAP's biodiversity objectives were only loosely taken into account in the development of the BAP. The BAP itself was developed following a thorough consultation process, with Member States, civil society representatives and the public, seemingly endorsing the ambition of the document, though presumably not having an impact on its specific content, much of which was based on previous policy initiatives. The eventual objectives of the BAP conform closely to the objectives and actions of the 6EAP. Although the actions and objectives of the 6EAP were not looked at in detail when the BAP was being designed, certain stakeholders reportedly used certain 6EAP commitments to justify their arguments for action in a particular area (e.g. on soil).[216] Monitoring of the BAP is specifically intended for and used as part of the assessment procedure of the 6EAP, which may have promoted implementation of BAP measures in some Member States. The 6EAP also potentially added value to biodiversity

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212 Message from Malahide – Halting the decline of biodiversity – Priority objectives and targets for 2010. 27th May 2004. Stakeholders' Conference: Biodiversity and the EU - Sustaining Life, Sustaining Livelihoods. Malahide, Ireland 25-27th May 2004.

213 Council of the European Union, Presidency Conclusions, Gothenburg European Council, 15 and 16 June 2001, http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf.

214 Council of the European Union, (2001), 2355th Council meeting - ENVIRONMENT -, Luxembourg, 7 June 2001, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/09116-Communiqu%c3%a9-1.doc.html#_Toc517083961.

215 Stakeholder consultation, Brussels workshop.

216 Stakeholder consultation, Brussels workshop.

measures, by putting biodiversity on the same level as other areas of environmental policy, in particular climate change policy, thus making it more comparable to efforts in other areas.[217]

The mid-term review of the 6EAP concluded that 'the scale of the challenge faced means that additional approaches are needed and most importantly a way has to be found to make it economically interesting to protect bio-diversity. Appealing to nature's intrinsic value is not going to be enough on its own'.[218] This reflected the growing acknowledgement of the socio-economic importance of natural ecosystems. A proposal for a study on the economic significance of the global loss of biodiversity had been put forward by the environment ministers of the G8+5 in March 2007, before the publication of the mid-term review of the 6EAP. However, the fact that the mid-term review recognised the need for further work in this regard may have influenced the Commission's subsequent financing of the TEEB initiative and the launching of related studies in this area, which have helped increase recognition of the economic value of biodiversity and ecosystem services in the policy process.

The requirement in the 6EAP for the development of a **Soil Thematic Strategy** was fundamental to raising soil issues up the EU policy agenda. Previously, EU policy had only addressed the issue of soils and their functionality in an uncoordinated manner. The specific requirement to prepare a Soil Thematic Strategy meant that there was an ongoing debate about the importance and role of soils. This led to a concerted effort to bring together experts in this field, to share ideas and develop understanding regarding the challenges associated with addressing soil issues in Europe. The stakeholder engagement process under the Soil Thematic Strategy was one of the most extensive for all the Thematic Strategies and was importantly taken up by the Commission in their subsequent development of ideas on policy this reflected the relative lack of coordinated thinking and action at EU level previously. In essence, the importance of the 6EAP is that it provided a platform under which efforts to focus on soil issues, improve understanding, and consider potential policy alternatives, could be justified. Without the strategic requirements set out in the 6EAP it is not clear how such a holistic consideration of this issue could have been undertaken. Stakeholders consulted in the context of this study noted that the Soil Thematic Strategy mobilised soil experts and increased pressure to act in the area, not only in DG Environment but also in other DGs, in particular DG Agriculture which eventually introduced changes to cross-compliance rules.[219]

On the whole, the 6EAP does not seem to have played a major role in shaping the **agriculture** measures reviewed in this study. The preamble of the EAFRD Regulation notes that support for specific methods of land management 'should contribute to the implementation of the 6th Community Environment Action Programme and the Presidency conclusions regarding the Sustainable Development Strategy. Key issues to be addressed include biodiversity, Natura 2000 site management, the protection of water and soil, climate change mitigation including the reduction of greenhouse gas emissions, the reduction of

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217 Stakeholder consultation, Brussels workshop.

218 CEC (2007): Communication from the Commission, on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007)225, 30/04/2007.

219 Stakeholder consultation, Brussels workshop.

ammonia emissions and the sustainable use of pesticides'.[220] The general aims of the Community Strategic Guidelines for Rural Development which guide the EAFRD are consistent to a certain extent with those outlined in the 6EAP. Although the 6EAP is notably absent from Council Regulation (EC) No 73/2009 and other related documents its existence does however provide a useful statement of Community objectives in this field which can be used to ensure that attention continues to be paid to the environment as the CAP evolves and is subject to future reforms. It was also noted by stakeholders that the 6EAP helped promote consideration of integration issues in inter-service consultation by providing DG Environment with a broader mandate to be involved in discussions in other sectors.[221]

The **Marine Thematic Strategy** and accompanying Marine Strategy Framework Directive were a direct result of the 6EAP. Thus frequent references to the 6EAP are made in the adopted Thematic Strategy, during the political debate on the Thematic Strategy,[222] in the accompanying Impact Assessment; and the preamble of the adopted MSFD. As noted above, the existence of a MSFD and much of its content are a direct result of the processes set in place by the 6EAP and the analytical and consultation processes to develop the Thematic Strategy. It is unlikely that similar measures would have been introduced without the Thematic Strategy process

Stakeholders consulted in the context of this study noted the progress in relation to **forestry** as an area where the 6EAP has succeeded in further promoting coordination as well as initiating new policy developments.[223] There are numerous references to the 6EAP in measures and related documents adopted in the area. For instance, the **FAP** acknowledges that 'forests play an essential role in the realisation of the Community's Gothenburg objectives on sustainable development and the targets set in the 6th Community Environment Action Programme, including relevant Thematic Strategies',[224] while the accompanying Annex[225] notes the general objectives and key priorities of the 6EAP among the main EU policy objectives taken into account in the development of the FAP. The Commission's **review of the EU Forest Strategy** describes the adoption of the 6EAP as an important development 'with implications for the forest policies of the Member States'.[226] This is also supported by the European Parliament's non-legislative resolution on implementation

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220 Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

221 Stakeholder consultation, interview.

222 European Parliament resolution on a Thematic Strategy on the Protection and Conservation of the Marine Environment (2006/2174(INI)).

223 Stakeholder consultation, Brussels workshop.

224 CEC (2006): Communication from the Commission to the European Parliament and the Council on an EU Forest Action Plan (COM(2006)302), 15/06/2006.

225 CEC (2006a): Communication from the Commission to the Council and the European Parliament - Commission staff working document Annex to the Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan (SEC(2006)748).

226 CEC (2005): Communication from the Commission to the Council and the European Parliament - Reporting on the implementation of the EU Forestry Strategy, (COM(2005)84), 10/03/2005.

of the EU Forestry Strategy.[227] Commitments in the 6EAP were also noted during the consultation process on the EU Forest Strategy and the FAP[228] and during two expert workshops on the FAP carried out in 2005.[229] The position of the European Parliament on the proposed **regulation laying down the obligations of operators who place timber and timber products on the market**[230] cites the 6EAP as having identified a priority action of 'examining the possibility of taking active measures to prevent and combat trade in illegally harvested wood'. These numerous references seem to suggest the potential influence of the 6EAP in this policy area and could perhaps reflect *inter alia* the need to justify EU intervention in an area of limited Community competence.

3.2.5.2 Impact of the 6EAP compared to other EU strategies

The EU has a number of overarching strategies which reflect broad principles and objectives of the Community, two important examples being the Lisbon Strategy and the EU Sustainable Development Strategy (SDS). The 20-20-20 climate and energy targets and the adoption of the Climate and Renewable Energy Package have been important developments in the climate change area which have also had some implications on other policy areas. The impact of these strategies in terms of influencing specific developments in the Nature and Biodiversity thematic area of the 6EAP is difficult to accurately establish, however some general observations can be made and are set out below.

At the Gothenburg summit in 2001, heads of states and government recognised sustainable development to be a 'fundamental objective under the Treaties', according to Article 3 EC (ex Article 2 TEU) which calls for a high level of protection and improvement of the quality of the environment. According to its conclusions[231], this encompasses the improvement of Europe's welfare within the limits of its ecological capacity, by *inter alia* maintaining biological diversity for the benefit of present and future generations. The loss of biodiversity was recognised as a key unsustainable trend that needs to be tackled by relevant policy measures at Community level. The Gothenburg conclusions, on which the renewed EU SDS builds, consequently was important for the agreement on a target to halt biodiversity loss by 2010 and the adoption of a detailed **Biodiversity Action Plan** in 2006. However, although biodiversity policy instruments make reference to the EU SDS, there is no evidence that the EU SDS has been crucial for their implementation.

In relation to **soil**, the question of land use change and emissions of soil carbon associated with both this and land management are increasingly on the political agenda at both the EU

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227 European Parliament resolution on the implementation of a European Union forestry strategy (2005/2054(INI)).

228 Expert Group, 2009, Report from the expert group on the Vision and Strategic objectives for the EU Forest Action Plan, October 4, 2005.

229 Workshops of invited experts in preparation of the Forest Action Plan. 5 and 16 September 2005, Brussels. Report from the expert group on the Vision and Strategic Objectives for the EU Forest Action Plan.

230 European Parliament (EP), (2010): Position of the European Parliament adopted at second reading on 7 July 2010 with a view to the adoption of Regulation (EU) No .../2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (T7-0268/2010).

231 15280/01 Council conclusions on 'European Union Strategy for Sustainable Development: follow-up to the environment-related aspects of the European Council of Gothenburg'.

and international level. Under the Climate and Renewable Energy Package, there were extensive discussions surrounding the role of carbon stores in relation to the development of land use based sustainability criteria for both biofuels and bioliquids under the Renewable Energy Directive (2009/28/EC). Moreover, at the international level Land Use, Land Use Change and Forestry (LULUCF) is an increasingly important element of negotiations under the UNFCCC. While the 6EAP has not been mentioned in the context of these debates, arguably the processes it set in motion have aided constructive engagement on these issues within Europe.

Recent policy reforms in the **CAP** have been guided in part by a number of overarching EU-level policy developments, including the 1992 Maastricht Treaty and the Cardiff integration process in 1999, which required the integration of environmental considerations into all Community policies, as well as the adoption of the EU SDS in 2001 and its subsequent revision in 2006. These have served to underpin the ambition of adopted measures. The EU SDS is mentioned in the preamble of the EAFRD which states that support for specific methods of land management 'should contribute to sustainable development... [and] should contribute to the implementation of the...Presidency conclusions regarding the Sustainable Development Strategy'.[232] The EU 2020 Strategy, in conjunction with the ongoing EU Budget Review and the imminent discussions on the next Financial Perspective, will also have an important influence on the future objectives and the structure of the CAP. The CAP is due for a major reform in 2013, and these factors are prompting a much wider debate about what the future purpose and priorities of the Commission's spending should be on the CAP. Economically rational arguments, such as the use of public funds to support public goods are gaining ground, which, if translated into suitable measures in practice, could lead to significant improvements in the way the CAP could meet relevant 6EAP objectives. In contrast, any constraints on the CAP budget could lead to significant issues for delivering environmental objectives in the future as this would reduce the already stretched financial resources available for supporting the management practices needed to promote sustainable agriculture.

The integration of environmental requirements in the **CFP** has been driven by a number of developments including the adoption of the 2001 EU SDS which called for the 2002 CFP review to 'address the overall fishing pressure by adapting the EU fishing effort to the level of available resources, taking into account the social impact and the need to avoid over-fishing'. The renewed SDS included the objective of meeting the WSSD commitment to restore fisheries to MSY by 2015 by making 'further efforts' through the reformed CFP, and to use the EFF in an 'optimum way to promote sustainable development'. The increased focus on the external dimension of sustainable development over the last decade has also had an influence on the development of fisheries policy in the EU. The objectives of the EU SDS, to promote sustainable development worldwide and ensure that the EU internal and external policies are consistent with global sustainable development and its international commitments, require that EU policies tackle several key unsustainable trends and ensure

[232] Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

the mutual reinforcement of the EU's economic, social and environmental policies. In the 2012 reform of the CFP, there is expected to be a renewed impetus to ensure that the EU's external fishing policy (through Fisheries Partnership Agreements (FPAs) and their predecessors) are in line with the global goal of sustainable development.

Considering the multiple role of **forests** and the need to address challenges that were not adequately covered by the FAP, a range of different EU policies have had an impact on the achievement of policy actions in this area. According to the Commission Staff Working Document accompanying the EU FAP[233], the EU Forestry Strategy and its implementation processes need to be put in the context of changes in the broader policy context resulting from the Lisbon Strategy and the Gothenburg SDS. The Climate and Renewable Energy Package affected the political debate particularly concerning issues such as biomass sustainability criteria, deforestation and impacts of illegal logging. Climate change objectives have already led to the publication of the Green Paper on forest protection and climate change[234] as a follow-up to the White Paper on climate change adaptation.[235] Further impact is expected with regard to biodiversity policy, the renewable energy Directive and consultations related to the question of whether land use, land use change and forestry (LULUCF) should count towards the EU's GHG emission reduction commitments.

3.3 Environment and Health

3.3.1 Introduction

The **overall aims** of the 6EAP in the environment and health thematic area as set out in Article 2 are:

'contributing to a high level of quality of life and social well being for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment and by encouraging a sustainable urban development'.

Article 7(1) goes on to state the following specific objectives on environment and health:

- 'achieving better understanding of the threats to environment and human health in order to take action to prevent and reduce these threats;
- contributing to a better quality of life through an integrated approach concentrating on urban areas;
- aiming to achieve within one generation (2020) that chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the

233 CEC (2006a): Communication from the Commission to the Council and the European Parliament - Commission staff working document Annex to the Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan (SEC(2006) 748).

234 CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66).

235 CEC (2009): White Paper Adapting to climate change: Towards a European framework for action, (COM(2009)147).

environment, recognising that the present gaps of knowledge on the properties, use, disposal and exposure of chemicals need to be overcome;

- chemicals that are dangerous should be substituted by safer chemicals or safer alternative technologies not entailing the use of chemicals, with the aim of reducing risks to man and the environment;
- reducing the impacts of pesticides on human health and the environment and more generally to achieve a more sustainable use of pesticides as well as a significant overall reduction in risks and of the use of pesticides consistent with the necessary crop protection. Pesticides in use which are persistent or bio-accumulative or toxic or have other properties of concern should be substituted by less dangerous ones where possible;
- achieving quality levels of ground and surface water that do not give rise to significant impacts on and risks to human health and the environment, and to ensure that the rates of extraction from water resources are sustainable over the long term;
- achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment;
- substantially reducing the number of people regularly affected by long-term average levels of noise, in particular from traffic which, according to scientific studies, cause detrimental effects on human health and preparing the next step in the work with the noise directive'.

In effect, the environment and health thematic area covers a number of fairly discrete **sub-areas**. Article 7(2) includes a number of **priority actions** relating to these different sub-areas which are set out below.

Research

- 'Identification and recommendations on the priority areas for research and action including among others the potential health impacts of electromagnetic pollution sources and including particular attention to the development and validation of alternative methods to animal testing in particular in the field of chemical safety;
- definition and development of indicators of health and environment;
- re-examination, development and updating of current health standards and limit values, including where appropriate, the effects on potentially vulnerable groups, for example children or the elderly and the synergies and the reciprocal impact of various pollutants;
- review of trends and the provision of an early warning mechanism for new or emerging problems;'

Chemicals

- 'Placing the responsibility on manufacturers, importers and downstream users for generating knowledge about all chemicals (duty of care) and assessing risks of their use, including in products, as well as recovery and disposal;
- developing a coherent system based on a tiered approach, excluding chemical substances used in very low quantities, for the testing, risk assessment and risk

management of new and existing substances with testing procedures that minimise the need for animal testing and develop alternative testing methods;

- ensuring that the chemical substances of concern are subject to accelerated risk management procedures and that substances of very high concern, including carcinogenic, mutagenic or toxic for reproduction substances and those which have POPs (persistent organic pollutants) characteristics, are used only in justified and well defined cases and must be subject to authorisation before their use;
- ensuring that the results of the risk assessments of chemicals are taken fully into account in all areas of Community legislation where chemicals are regulated and to avoid duplication of work;
- providing criteria for including among the substances of very high concern those that are persistent and bioaccumulating and toxic and substances that are very persistent and very bio-accumulative and envisaging the addition of known endocrine disrupters when agreed test methods and criteria are established;
- ensuring that the main measures that are necessary in view of the identified objectives are developed speedily so that they can come into force before the mid-term review;
- ensuring public access to the non-confidential information in the Community Register on Chemicals (REACH Register);'

Pesticides

- 'Full implementation and review of the effectiveness of the applicable legal framework in order to ensure a high level of protection, when amended. This revision might include, where appropriate, comparative assessment and the development of Community authorisation procedures for placing on the market;
- a thematic strategy on the sustainable use of pesticides that addresses:
    i. minimising the hazards and risks to health and environment from the use of pesticides;
    ii. improved controls on the use and distribution of pesticides;
    iii. reducing the levels of harmful active substances including through substituting the most dangerous with safer, including non-chemical, alternatives;
    iv. encouragement of the use of low input or pesticide free cultivation among others through raising users' awareness, promoting the use of codes of good practices, and promoting consideration of the possible application of financial instruments;
    v. a transparent system for reporting and monitoring progress made in fulfilling the objectives of the strategy including the development of suitable indicators;'

Chemicals and pesticides

- 'Aiming at swift ratification of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and of the Stockholm Convention on Persistent Organic Pollutants (POPs);

- amending Council Regulation (EEC) No 2455/92 of 23 July 1992 concerning the export and import of certain dangerous chemicals with the aim of bringing it into line with the Rotterdam Convention, improving its procedural mechanisms and improving information to developing countries;
- support the improvement of the management of chemicals and pesticides in developing and candidate countries, including the elimination of stocks of obsolete pesticides, inter alia, by supporting projects aimed at such elimination;
- contributing to international efforts on the elaboration of a strategic approach on international chemicals management;'

Water

- 'ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use;
- working towards ensuring full implementation of the Water Framework Directive, aiming at a good ecological, chemical and quantitative water status and a coherent and sustainable water management;
- developing measures aimed at cessation of discharges, emissions and losses of Priority Hazardous Substances, in line with the provisions of the Water Framework Directive;
- ensuring a high level of protection of bathing water, including revising the Bathing Water Directive;
- ensuring the integration of the concepts and approaches of the Water Framework Directive and of other water protection directives in other Community policies;'

Air quality

- 'Improving the monitoring and assessment of air quality, including the deposition of pollutants, and the provision of information to the public, including the development and use of indicators;
- a thematic strategy to strengthen a coherent and integrated policy on air pollution to cover priorities for further actions, the review and updating where appropriate of air quality standards and national emission ceilings with a view to reach the long term objective of no-excedence of critical loads and levels and the development of better systems for gathering information, modelling and forecasting;
- adopting appropriate measures concerning ground-level ozone and particulates;
- considering indoor air quality and the impacts on health, with recommendations for future measures where appropriate;
- playing a leading role in the negotiations and the implementation of the Montreal Protocol on ozone depleting substances;
- playing a leading role in the negotiations on and strengthening the links and interactions with international processes contributing to clean air in Europe;
- further development of specific Community instruments for reducing emissions from relevant source categories;'

Noise

- ‘Supplementing and further improving measures, including appropriate type-approval procedures, on noise emissions from services and products, in particular motor vehicles including measures to reduce noise from the interaction between tyre and road surface that do not compromise road safety, from railway vehicles, aircraft and stationary machinery;
- developing and implementing instruments to mitigate traffic noise where appropriate, for example by means of transport demand reduction, shifts to less noisy modes of transport, the promotion of technical measures and of sustainable transport planning;’

Urban environment

‘A thematic strategy promoting an integrated horizontal approach across Community policies and improving the quality of urban environment, taking into account progress made in implementing the existing cooperation framework reviewing it where necessary, and addressing:

- the promotion of Local Agenda 21;
- the reduction of the link between economic growth and passenger transport demand;
- the need for an increased share in public transport, rail, inland waterways, walking and cycling modes;
- the need to tackle rising volumes of traffic and to bring about a significant decoupling of transport growth and GDP growth;
- the need to promote the use of low emission vehicles in public transports;
- the consideration of urban environment indicators.’

A detailed assessment of the main measures adopted since 2002 and the achievement of the 6EAP objectives in relation to the environment and health thematic area can be found in Annex A, section1.3. It is difficult to comprehensively assess the extent to which the overall aims and objectives of the 6EAP in the environment and health thematic area have been met. This is partly due to the sheer number of disparate measures that have been adopted and the proliferation of thematic and strategic debates in this thematic area. These developments have been locked in their own logic and timeframe; the issue of how to increase coherence among the different measures and promote integration not only across issues, and different bureaucratic sectors, but also across policy levels has not been addressed to date[236]. In some cases, the policy measures adopted are not sufficient to meet related 6EAP objectives, while in others; the recent adoption of policy measures which are still in the process of being implemented in the Member States makes it difficult to assess their actual contribution to relevant 6EAP objectives. A summary of the achievement of relevant 6EAP objectives is set out in section 3.3.2. Section 3.3.3 outlines the key drivers and barriers affecting the achievement of the 6EAP objectives in this thematic area. A detailed assessment of these drivers and barriers can be found in Annex A, section 1.3. An analysis of the policy mix in the thematic area is provided in section 3.3.4. This chapter

[236] Stakeholder consultation, Brussels workshop.

concludes with an assessment of the impact of the 6EAP on the adoption of measures in the environment and health thematic area as well as the impact of other strategies on the adoption of measures in this area.

3.3.2 Summary assessment of the achievement of objectives in the environment and health thematic area

Research

The EU has promoted a more integrated approach to addressing environment and heath concerns through the adoption of the European Environment and Health Strategy'[237] in 2003 and the European Environment and Health Action Plan (EHAP) 2004-2010[238] which aims to develop an integrated information system on environment and health and strengthen research in the area. Since the adoption of the EHAP, the Commission has launched targeted research projects focused on asthma and allergy, neuro-immune disorders, exposure to metals and a number of other health problems linked to the environment[239] and has funded projects to develop methodological systems to analyse environment and health interactions. The Scientific Committee on Emerging and Newly Identified Health Risks adopted an Opinion on Research Needs to address the remaining knowledge gaps in electro-magnetic fields.[240] A number of EU-wide environment and health monitoring and information systems and assessment strategies to cover the range of environmental impacts expected to affect human health have also been put in place.[241]

With the exception of the work in relation to electro-magnetic fields, the priority areas pursued in various Commission funded research projects are not among those explicitly mentioned in the 6EAP. Nonetheless, the EHAP has been successful in putting in place EU-wide monitoring and information systems and launching targeted research projects, thus helping to **increase information on and awareness of the linkages between environment and health** as set out in the 6EAP. However, the European Parliament[242] and the European Economic and Social Committee (EESC)[243] have criticised the EHAP for failing to implement the objectives of the 2003 Environment and Health Strategy (which built on the priority action for research from the 6EAP). Moreover, improving research capabilities and information on environment and health is only one part of the 6EAP's objectives on environment and health. The 6EAP also calls for this **information to be used 'to take action to prevent and reduce' the threats to health linked to environmental factors**. The Commission's mid-

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237 CEC (2003): The European Environment and Health Strategy, (COM(2003)338).

238 CEC (2004): The European Environment and Health Action Plan (EHAP) 2004-2010, (COM(2004)416).

239 CEC (2007): Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

240 http://ec.europa.eu/health/ph_risk/committees/04_scenihr/scenihr_opinions_en.htm Conclusions summarised in Technical Annexes.

241 CEC (2007): Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

242 EP (2005): European Parliament resolution on the EHAP 2004-2010 (2004/2132(INI)). P6_TA(2005)0045.

243 EESC (2004): Opinion of the European Economic and Social Committee on the EHAP 2004-2010, NAT/259 – CESE 1636/2004.

term review of the EHAP acknowledged that much remained to be done in terms of translating research project results into policy action and integrating health concerns into other policy areas including transport, energy, chemicals and employment.[244] Whilst a number of other related policies (e.g. REACH, the pesticides framework Directive) contribute towards the wider 6EAP health and environment objectives, the Action Plan itself and its structure (lack of concrete legal measures and strong incentives) offer little help in stimulating the much needed changes in current practices and health standards.

Chemicals

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)[245] has been the main legal instrument adopted since 2002 that contributes to the 6EAP's chemicals objectives. To date, implementation of the Regulation has mostly been related to administrative aspects, thus it is not possible to assess evidence based outcomes that could be attributed to the legislation. Nevertheless, one can outline how REACH is likely to contribute to the relevant objectives and priority actions of the 6EAP.

The registration and evaluation stages of the REACH Regulation will increase the knowledge of an estimated 30,000 substances manufactured and imported to the order of over one tonne per year while the authorization and restriction stages will set potential restrictions for their use. Together with REACH principles such as substitution, the requirement to assess risk and share knowledge from such assessments, the implementation of the Regulation is likely to contribute to the 6EAP objectives of achieving **better understanding of the threats of chemicals to environment and human health, reducing the harmful effects of pollution on human health and the environment,** and help to **overcome current knowledge gaps on the properties, use, disposal and exposure of chemicals**.

The REACH Regulation is unlikely to meet the deadline of the 6EAP objective that by 2020 chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment. This is mainly because of the long implementation span of REACH with for instance the deadline for registration provisions for phase-in substances[246] of one tonne or more per year being 1 June 2018, exemptions for many substances (cellulose pulp, minerals, ores etc.), their coverage by other legislation (substances classified as waste, pesticides, etc), and the complex procedures associated with the Regulation.

With regards to the 6EAP objectives relating to the **authorisation and substitution of substances of very high concern**, under REACH the use of substances of very high concern can be authorised even if safer alternatives exist as long as they are 'adequately

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244 CEC (2007): Mid Term Review of the EHAP 2004-2010, (COM(2007)314).

245 Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, OJ L309, 24/11/2009.

246 A phase-in substance is a substance listed in EINECS or those that have been manufactured in the Community, but not placed on the Community market, in the last 15 years, or the 'no longer polymers' of Directive 67/548/EEC.

controlled'.[247] Thus, the substitution objective of the 6EAP is unlikely to be met fully. The 'adequately controlled' route does not apply to the most dangerous substances but can be used for endocrine disruptors, even though the 6EAP acknowledges endocrine disruptors among the substances of very high concern. The Commission is to review whether endocrine disrupters should also be excluded from the adequate control route by June 2013. Even if a substance has been identified as being of very high concern, to the degree that not even the 'adequately controlled' route is allowed, an authorisation for its use can still be granted if it is shown that socio-economic benefits outweigh the risk to human health or the environment arising from the use of the substance. This only applies in situations where there are no suitable alternative substances or technologies.

REACH transfers the burden of proof of risk assessments of substances from public authorities to industry, thus placing much more **responsibility on manufacturers, importers and downstream users** to provide relevant information about the chemicals on the market. However, in the course of the legislative process, a number of exceptions were introduced which limit the scope of industry's duty of care. The 6EAP objective of ensuring **wider public access to information on chemicals** is likely to be compromised by provisions in REACH limiting the categories of 'non-confidential information' that is freely accessible by specifying a long list of confidential information and extending the possibilities for industry to claim that certain data should be treated as confidential.

Pesticides

As called for in the 6EAP, a Thematic Strategy on the Sustainable Use of Pesticides[248] was published in July 2006. Two important legislative proposals were published alongside the Thematic Strategy which were subsequently adopted in 2009 - Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market[249] and Directive 128/2009/EC establishing a framework for Community action to achieve the sustainable use of pesticides.[250] Some stakeholders consulted in the context of this study, considered the Pesticides Thematic Strategy to have been a success in that it led to stronger legislation in the area. However, the aims of the 6EAP in relation to pesticides were considered to be vague and it was recognised that more remains to be done in this area.[251] The priority actions set out in the 6EAP are also objectives in the Pesticides Thematic Strategy with a number of measures incorporated in Regulation (EC) No 1107/2009 and Directive 128/2009/EC. Thus, progress has been achieved in terms of implementing related priority actions of the 6EAP. However, as the accompanying legislative measures are in the process

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247 Based on specific exposure levels and risk characterisation as defined in section Annex I, Section 6.4 of the REACH Regulation.

248 CEC (2006): Communication from the Commission, A Thematic Strategy on the Sustainable Use of Pesticides, (COM(2006)372), 12/07/2006.

249 Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJL 309.

250 Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309.

251 Stakeholder consultation, Brussels workshop.

of being implemented, it is only possible to infer how they are likely to contribute towards relevant 6EAP environmental objectives once they have been fully implemented.

Directive 2009/128/EC establishes a framework to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment through a number of measures. Regulation (EC) No 1107/2009 sets criteria for the authorisation of active substances in plant protection products as well as their residues. Once fully implemented and enforced, these two legislative measures are likely to contribute to the 6EAP objectives of **reducing the impacts of pesticides on human health and the environment.** However, Directive 2009/128/EC only applies to pesticides that are plant protection products as defined in the Regulation (EC) No 1107/2009. This does not include biocidal products, as defined in Directive 98/8/EC. Although it is anticipated that the scope of Directive 2009/128/EC will be extended to cover biocidal products[252], until this is achieved, the Directive only applies to plant protection products which constitute a part of all pesticides.

Regulation (EC) No 1107/2009 requires the development of a candidate list for substitution for those products that can be eliminated where safer alternatives are available, thus contributing to the 6EAP objective of **substituting pesticides which are persistent, bio-accumulative, toxic or have other properties of concern with those which are less dangerous.** Although it is likely that the candidate list for substances will encourage the substitution of harmful substances with safer alternatives, it is difficult to estimate the speed of this transition as candidate substances can still have approval periods of up to seven years.

Directive 2009/128/EC requires Member States to ensure that the use of pesticides is minimized or prohibited in specific areas after appropriate risk management measures and to adopt necessary measures to ensure that certain operations by professional users and distributors do not endanger human health or the environment. Regulation (EC) No 1107/2009 sets criteria for the authorisation of active substances in plant protection products as well as their residues. Directive 2009/128/EC also sets restrictions on aerial spraying, while the authorisation procedure of Regulation (EC) No 1107/2009 sets requirements on the use of the plant protection products. Thus, when implemented, these legislative measures are likely to **reduce the hazards and risks to health and the environment from the use of pesticides** and **improve controls on the use and distribution of pesticides**.

Under Directive 2009/128/EC, Member States are to take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods. Member States have to describe how they will ensure that principles of integrated pest management are implemented by January 2014. This approach relies on voluntary action by pesticide users together with encouragement from Member States and it is likely that the success of these measures will vary considerably between Member States. Nevertheless, the Directive contributes to the requirement in the 6EAP of **encouraging the use of low input or pesticide free cultivation**.

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[252] Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309.

Directive 2009/128/EC requires the development of a strategic guidance document on monitoring and surveying of impacts of pesticide use on human health and the environment by December 2012. It also requires Member States to establish harmonized risk indicators. However, Member States may continue to use existing national indicators or adopt other appropriate indicators in addition to the harmonized ones. Once implemented, these provisions are likely to contribute to the 6EAP's call for a **transparent system for reporting and monitoring including the development of suitable indicators**.

Sustainable use and high quality of water

In developing the 6EAP, the Commission recognized that the Water Framework Directive (WFD) 2000/60/EC had only recently been adopted (in 2000) and that this established a comprehensive assessment, objective setting, and management framework for Europe's surface (fresh and coastal) and ground waters. Thus, there was no need for a raft of detailed strategic objectives in the 6EAP on water, rather the 6EAP identified some specific remaining tasks and emphasized the wider context of the WFD. Since 2002, a number of measures have been adopted that contribute to the 6EAP objectives on water quality; however their recent or ongoing implementation makes it difficult to assess their contribution to the environmental objectives of the 6EAP.

The deadline for transposition of Directive 2006/118/EC on the protection of groundwater against pollution and deterioration[253] was January 2009, thus it is still too early to tell what the impacts of the Directive have been. However, once the Directive has been implemented, it is likely to contribute to the 6EAP objective of **ensuring a high level of protection of surface and groundwater, preventing pollution and promoting sustainable water use.**

The deadline for transposition of Directive 2008/105/EC on environmental quality standards in the field of water policy[254] (EQS) was July 2010, thus it is too early to tell what the impacts of the Directive will be. It is however likely to have important impacts in the future as it kick-starts action on **hazardous substances** that were long stalled by failure to develop further daughter Directives under Directive 76/464/EEC.[255] Nonetheless, the Directive introduces the concept of mixing zones where standards do not have to be met, which (despite Guidance being agreed between the Commission and Member States) leaves some room for possible exploitation by some Member States not to tackle certain discharges.

As called for in the 6EAP, a **revised bathing water Directive** 2006/7/EC[256] was adopted. The Directive has been transposed and Member States have until December 2014 to implement it. Recent reports indicate that although there are some compliance problems,

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253 Directive 2006/118/EC on the protection of groundwater against pollution and deterioration.

254 Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council.

255 Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, OJ L 129, 18.5.1976, p. 23–29.

256 Directive 2006/7/EC concerning the management of bathing water quality and repealing Directive 76/160/EEC.

bathing water quality continues to improve.[257] It is very likely that the revised Directive has stimulated further action to improve environmental quality. The extent to which this was already planned by the Member States is however difficult to assess.

There has been much activity to take forward the 6EAP priority action of **working towards ensuring full implementation of the WFD**. This includes work under the Common Implementation Strategy (CIS), the development of guidance documents (to date, 24 such documents have been published), the publication of implementation reports in 2007 and in 2009 by the Commission, and the presentation of the Communication on water scarcity and droughts which will be important in helping to address some of the **quantitative water objectives of the WFD** as noted in the 6EAP. The transposition of the WFD by the EU 15 (December 2003 deadline) was poorly met, although they have caught up to a large extent and the new Member States had progressed well by the date of accession in 2004.[258] The striking feature of the 2007 report was the number of water bodies which were reported to be 'at risk'. While improvements were stated to be in the pipeline, in many cases, there would need to be considerable efforts in developing programmes of measures within the river basin management plans. The 2009 report concluded that all Member States had reported on the establishment of monitoring programmes, with the exception of Greece which did not report, and Malta which did not report on surface water monitoring programmes.[259] The deadline for publishing River Basin Management Plans was 22 December 2009 and the deadline for reporting these to the Commission was 22 March 2010. The Commission is currently evaluating these plans and, therefore, an assessment of implementation is not possible at this stage. However, as of October 2010, 17 Member States and Norway had adopted their River Basin Management Plans; although consultations had been finalised in Poland, Slovenia and Romania, the plans were awaiting adoption. In seven Member States (Belgium, Cyprus, Denmark, Greece, Lithuania, Portugal and Spain), consultations were ongoing or had not even started.

Air quality

A **Thematic Strategy on Air Pollution**[260] was presented in 2005 as called for in the 6EAP. It concluded that it was not possible to achieve the 6EAP's objective for air quality even if all technically-feasible measures were implemented and proposed interim health and environmental objectives to be attained by 2020. Thus, the relevant aim and objective of the 6EAP with respect to *air quality* will not be achieved. However, a range of measures have been put in place, often building on pre-existing legislation, that should contribute to meeting the interim targets set by the Thematic Strategy and help move towards meeting the

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257 EEA (2010): Quality of bathing water — 2009 bathing season, EEA Report, No 3/2010, http://ec.europa.eu/environment/water/water-bathing/report2010/EU-wide%20report.pdf.

258 CEC (2007): Communication from the Commission to the European Parliament and the Council - Towards sustainable water management in the European Union - First stage in the implementation of the Water Framework Directive 2000/60/EC. (COM (2007)128).

259 CEC (2009): Report from the Commission to the European Parliament and the Council in accordance with article 18.3 of the Water Framework Directive 2000/60/EC on programmes for monitoring of water status. (COM(2009)156).

260 CEC (2005): Communication from the Commission to the Council and the European Parliament Thematic Strategy on air pollution, (COM(2005)446).

objectives of the 6EAP (although given the relatively recent adoption and implementation of these measures, it is not yet possible to identify their overall contribution towards this target). However, certain gaps remain including a revision of the national emissions ceilings Directive, action to address indoor air pollution and the lack of legislation on some emissions sources, such as domestic boilers and agriculture.

The deadline for transposition of the ambient air quality Directive 2008/50[261] was June 2010, thus it is still too early to assess what the concrete impacts of the Directive have been. The Directive is however an important element in meeting the objectives of the Thematic Strategy, and therefore in moving towards the objective of the 6EAP. It sets the target air quality levels that other measures will have to contribute to and will be used as a justification for other measures to limit air pollutant emissions from various sources. The Directive meets the 6EAP's call for a **review and update of air quality standards, if appropriate**, although it was decided on the basis of scientific advice not to update most of the existing limit values. The one amendment that was made was to repeal the original Stage 2 indicative limit value for PM_{10} and replace this with measures to address $PM_{2.5}$.

The industrial emissions Directive 2010/75/EU[262] is another important element in meeting the objectives of the Thematic Strategy, and therefore in moving towards the objective of the 6EAP. However, the Directive has not been in place long enough to identify its actual contribution to meeting the 6EAP objectives, although the preceding IPPC Directive will have contributed to recent improvements in air quality. The new Directive is likely to contribute to **reducing emissions from relevant source categories and reducing ground level ozone and particulates** as called for in the 6EAP. Similarly, the Paints Directive[263] also addresses a relevant source category and should contribute to reductions in ground level ozone as it targets VOC emissions due to the use of certain coatings and vehicle refinishing products. No action has been taken with regards to **indoor air pollution.**

Urban environment

In 2005 the Commission adopted the **Thematic Strategy on the Urban Environment**[264] as called for in the 6EAP. However, the contribution of the Thematic Strategy to relevant 6EAP objectives is difficult to assess, particularly as the Thematic Strategy did not contain any binding elements or deadlines by which action needed to be taken. Of the six priority actions in the 6EAP that the Thematic Strategy was meant to address, the Thematic Strategy mentioned the role of Local Agenda 21 and stated that the Commission would publish a report in 2006 'based on *indicators* describing the living conditions in a number of EU cities'.

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261 Directive 2008/50/EC of the European Parliament and of the Council on ambient air quality and cleaner air for Europe, OJ L 152, 11.6.2008, p. 1-44.

262 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJL 334/17, 17/12/2010.

263 Directive 2004/42/EC of the European Parliament and of the Council on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing produces and amending Directive 1999/13/EC.

264 CEC (2005): Communication from the Commission to the Council and the European Parliament on Thematic Strategy on the Urban Environment, (COM(2005)718).

With respect to transport, the Thematic Strategy supported the development and implementation of sustainable urban transport plans (SUTPs) and planned to produce relevant guidance and 'best' practice examples. Of the four transport related elements mentioned in the 6EAP, **the promotion of public transport, cycling and walking** was mentioned in the Thematic Strategy, as was the **need to promote the use of low emission vehicles in public transport**. However, the more strategic elements of the 6EAP, namely **the need to reduce the link between economic growth and passenger transport demand** and to **tackle rising volumes of traffic** by bringing about a **significant decoupling of transport growth and GDP growth** were not explicitly mentioned in the Thematic Strategy, although SUTPs could contribute to these in theory.

While the actions that have been taken forward in relation to the urban environment arguably contribute to the overall aim of the 6EAP of encouraging a sustainable urban development, these are not as comprehensive in terms of coverage as previous Commission documents, such as a 1998 Communication.[265] Moreover, many of the environmental issues of concern with respect to the urban environment, e.g. air quality, noise, waste, are addressed in parallel EU legislation that developed separately from the Thematic Strategy, while both URBACT II and Cohesion Policy are the responsibility of DG Regio and build on previous funding instruments, although the Cooperation Framework which operated in parallel to the Thematic Strategy between 2001 and 2004 was beneficial. Therefore, overall, it is doubtful that the Thematic Strategy played anything more than a minor role in contributing to the respective aims and objectives of the 6EAP.

3.3.3 Summary of drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the Environment and Health thematic area which are set out below. A more detailed assessment of the drivers and barriers in this area can be found in Annex A, section 1.3.

Aspects of the decision-making procedure

The stakeholder consultation process related to the preparation of the Thematic Strategies have been important factors influencing the development of specific pieces of legislation and hence affecting the attainment of certain 6EAP objectives in this area. The various studies that supported the development of the **Air** Thematic Strategy and the extensive stakeholder engagement process were important elements in the development of the Thematic Strategy and accompanying legislation. Consulting on issues as part of the **Pesticides** Thematic Strategy process made later discussions, as part of the co-decision procedure, more familiar and framed, thus making the whole legal process less confrontational. Although the Commission has originally proposed obligations for local authorities to implement environmental management plans and sustainable urban transport plans in its interim

[265] CEC (1998): Communication on Sustainable Urban Development in the European Union: A Framework for Action, (COM(1998)605).

Communication on the Thematic Strategy on the **Urban Environment**[266], stakeholders generally did not support such obligations, partly due to concerns regarding subsidiarity and the need for EU policies in this area[267], and these proposals were dropped in the adopted Strategy.

Formal decision-making procedures to agree EU legislation have also had an important influence on the final form of specific pieces of legislation. The whole **REACH** negotiation process was characterised by heavy lobbying given sensitivities concerning the competitiveness of the European chemical industry and led to substantial modifications to the original Commission proposal. In the area of **water,** the failure to agree certain issues during negotiations on the WFD provided political impetus for the adoption of subsequent measures including the groundwater Directive and the EQS Directive.

Implementation

Effective implementation of EU environmental legislation is an important factor driving or hindering the achievement of 6EAP environmental objectives. A number of measures adopted in the Environment and Health thematic area are still in the early stages of implementation, thus only some general observations can be made on the expected contribution of these measures to relevant 6EAP objectives. With regard to implementation of previous EU **air quality legislation**; despite improvements in air quality in the last 10 years resulting from reductions in emissions from various sectors, there have been problems with the implementation of earlier legislation, for instance, issues relating to compliance and enforcement were identified as problems associated with the previous IPPC Directive and the new industrial emissions Directive was designed to address some of these issues. While existing problems should be addressed to a large extent by the new Directive, given that implementation problems existed with the preceding legislation it can be anticipated that implementation of the new Directive will be an important factor in the functioning and performance of the measure, particularly where limit values are more stringent or where installations are included for the first time. Moreover, the performance and functioning of the ambient air quality Directive 2008/50/EC depends on the performance and functioning of measures introduced at the European level to reduce emissions at source and on the implementation of national, regional and local measures to ensure air quality limit values are met. The Commission has taken enforcement action against 19 Member States for failure to bring air quality within the limits specified in previous air quality legislation[268], thus in order to meet the objectives of the Thematic Strategy, the Commission's role in assessing and approving any requests for derogations submitted by Member States will continue to be important.

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266 CEC (2010): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions *Towards a thematic strategy on the urban environment*, (COM(2004)60).

267 Stakeholder consultation, Brussels workshop.

268 CEC (2010): Commission Staff Working Document - 2009 Environment Policy Review - Part 1, Part 2 and Part 3 (SEC(2010)975).

EU financial resources

Adequate financial resources are an important element of effective implementation of EU legislation in Member States. In a number of cases, the lack of adequate resources has undermined the achievement of objectives. For instance, in the case of **REACH** which places an important administrative and procedural burden, not only on public authorities, but also on the ECHA to compel industry to discharge its responsibilities, resource constraints and the need for prioritisation, has meant that there is still a long way to go before appropriate risk management measures are actually taken for many 'phase-in' substances. Failure to tackle sources of microbial inputs to **bathing waters** (mostly sewage) has historically been and remains the main problem relating to implementation of bathing water quality legislation. Although the quality of inland bathing waters in the EU has improved significantly since 1990, inadequate treatment of sewage and urban stormwater, and emissions of pathogenic micro-organisms from livestock, continue to prevent full compliance with the bathing water Directive across Europe.[269] Funding from various sources is required to improve compliance. Some of this has been supported by EU funding, some national and some private. Lack of sufficient funding at the right time has been a major cause of implementation shortcomings. In certain instances, there is a more general problem of lack of awareness of the available sources of funding, for instance, in relation to funding available for the urban environment.

Public opinion

Public support of action in a particular area, usually in combination with other factors, has contributed towards the achievement of certain 6EAP objectives in the environment and health thematic area. Although how far public pressure guided any particular detail of the measure is uncertain. For instance, with regards to the **Communication on water scarcity and droughts**, droughts have a major public profile and this may have helped form a basis for action. In the case of **REACH,** public interest groups and NGOs had an important role in counterbalancing the interests of the chemicals industry during negotiations on the proposed Regulation; however it is difficult to identify public opinion as a force in itself. It is likely that, due to the technical nature of REACH, public opinion relied on respective organisations to act on their behalf.

International commitments

International commitments have also played a role in driving forward action in relation to certain 6EAP objectives in this area. For instance, the list of substances in the **EQS Directive** was heavily influenced by developments within OSPAR and HELCOM. Future developments by the Regional Seas Conventions could affect further developments. International commitments including the World Summit on Sustainable Development in 2002, the launch of a world partnership project on 'Healthy Environment for Children - Call for a Global Alliance' launched at the WSSD by the WHO, and implementation of the UN/ECE Protocol on Persistent Organic Pollutants (POPs), are noted[270] among the factors linked to the development of the **Environment and Health Strategy.** The **EHAP** was in turn designed

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269 EEA (2010): The European Environment: State and Outlook 2010 – Freshwater quality.

270 CEC (2004): The European Environment and Health Action Plan (EHAP) 2004-2010, (COM(2004)416).

to complement existing actions at regional, national, European and international level, notably the WHO pan–European Environment and Health process, and commitments to ensuring safer environments for children.[271]

3.3.4 Assessment of the policy mix

A number of different policy measures and tools have been adopted in the environment and health thematic area since 2002, which have affected the attainment of relevant objectives set out in the 6EAP. The appropriateness of the policy mix and approaches adopted in the different sub-areas and some observations on the relevance of the 10-year timeframe of the 6EAP are set out below.

Mix of measures and tools

The objectives and priority actions of the 6EAP in relation to **chemicals** are those set out in the 2001 White Paper 'Strategy for a Future Chemicals Policy'[272] which served as the basis for the subsequent **REACH** Regulation. Consequently the objectives and aims of the 6EAP were already part of the likely structure of the REACH proposal and hence the adopted Regulation can be considered the appropriate tool to deliver the relevant objectives of the 6EAP.

The failure of the **EHAP** to implement the objectives of the 2003 Environment and Health Strategy (which built on the priority action for research from the 6EAP) has been criticised by both the European Parliament[273] and the European Economic and Social Committee (EESC).[274] Both bodies considered the EHAP to be a dilution of the approach and ambition stated in the Environment and Health Strategy and not an effective step towards implementing the objectives of the Strategy. The EESC called for a plan with quantitative objectives that would accelerate implementation. The European Parliament's resolution on the mid-term review of the EHAP acknowledges the efforts made by the Commission since the EHAP was launched but argues that the EHAP 'is bound to fail, at least in part since it is designed solely to accompany existing Community policies, it is not based on a preventive policy intended to reduce illnesses linked to environmental factors, and it pursues no clear, quantified objective'.[275] The resolution recognises that there have been a number of advances in environmental policy in recent years however it notes that the EU still lacks a comprehensive preventive strategy and does not apply the precautionary principle. These criticisms suggest the approach of the EHAP has not been the most appropriate to achieve

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271 CEC (2004): The European Environment and Health Action Plan (EHAP) 2004-2010, (COM(2004)416).

272 CEC (2001): White Paper: Strategy for a future Chemicals Policy, (COM(2001)88).

273 EP (2005): European Parliament resolution on the EHAP 2004-2010 (2004/2132(INI)). P6_TA(2005)0045.

274 EESC (2004): Opinion of the European Economic and Social Committee on the EHAP 2004-2010, NAT/259 – CESE 1636/2004.

275 European Parliament, Mid-term review of the European Environment and Health Action Plan 2004-2010 (2007/2252 (INI)), http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P6-TA-2008-0410&language=EN&ring=A6-2008-0260.

the objectives of the 6EAP in particular with regard to taking action to prevent and reduce threats to environment and human health.

The priority actions set out in the 6EAP are set out as objectives in the **Pesticides Thematic Strategy**. These objectives were given the legal enforcement through **Directive 128/2009/EC** and **Regulation (EC) No 1107/2009**. The publication of the proposal for the Regulation and the proposal for the Directive at the same time as the Thematic Strategy is likely to have given additional credibility to the Thematic Strategy. As a legal instrument, the framework Directive provides the flexibility for Member States to adopt National Action Plans to set up quantitative objectives, targets, measures and timetables to reduce risks and impacts of pesticide use and can thus be considered an appropriate instrument to achieve the relevant objectives of the 6EAP. Similarly, as a legal instrument, the Regulation is also appropriate as it deals with marketing and authorisation of plant protection products as internal market sensitivities associated with marketing and authorisation type of legislations are normally adopted as regulations.

The main factor that undermined the achievement of the 6EAP objective relating to **air quality** was that the studies supporting the development of the Air Thematic Strategy and the ambient air quality Directive concluded that the 6EAP objective could not be met by technically-feasible measures. Hence, the Thematic Strategy maintained that the level of ambition that it set was a 'policy choice' based on an assessment of the health and environmental objectives that could be achieved by 2020, taking into account relevant benefits and costs.[276] However, certain stakeholders consulted in the context of this study maintained that if the air quality benefits of climate change policy actions had been taken into account, then it would have been cheaper to meet the air quality objectives of the 6EAP. This should have resulted in more ambitious targets in the Thematic Strategy, which could in turn have led to the development of more ambitious air quality legislation.[277] In spite of this, the fact that the Thematic Strategy set interim targets for air quality was considered by stakeholders interviewed to be important, as it provides a measure against which subsequent proposals can be assessed. In this respect, the Thematic Strategy provides a good framework for air quality legislation and makes clear the aims and direction of DG Environment's policy in the area, which is beneficial for both stakeholders and other DGs.

The **process of developing the Air Thematic Strategy** was also considered to be important as it enabled stakeholders to discuss potential policy action before it reached the proposal stage. The dual focus of the Thematic Strategy, first on determining environmental limits for air pollution and then on measures to reduce emissions from specific stationery and mobile sources was also a good approach. However, the fact that the national emissions ceiling Directive has not been revised is an outstanding gap, as is the lack of legislation on some emissions sources, such as domestic boilers and agriculture. The latter are currently less important with respect to their contribution to total emissions, but will become increasingly more important as emissions from regulated sectors decline. Finally, given the

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276 CEC (2005): Communication from the Commission to the Council and the European Parliament Thematic Strategy on air pollution, (COM(2005)446), p. 5.

277 Stakeholder consultation, interviews.

fact that there are currently many infringement proceedings against Member States with respect to implementation of previous air quality legislation, it is clear that implementation has been a problem and in this respect, there could have been a greater focus in the Thematic Strategy on the facilitation of good practice in dealing with air quality problems, particularly with respect to reducing the contribution of traffic to poor air quality.

The main barrier to the **Thematic Strategy on the Urban Environment** contributing actively and transparently to the relevant 6EAP objective was that it did not include any binding measures or targets. In the Impact Assessment accompanying the mid-term assessment of the 6EAP, the Commission stated that no mandatory measures had been proposed in the Thematic Strategy as its objectives 'can be best achieved at national or regional level'.[278] Given the issues addressed by the Thematic Strategy, it is to some extent not surprising that this conclusion was reached. Many of the areas covered were arguably not evidently of EU competence and hence issues of subsidiarity came into play. Where issues were of EU competence, these were already being addressed by other legislation, e.g. air quality and noise.

There were however a number of positive elements in the **process of developing the Thematic Strategy on the Urban Environment**. For example, the engagement with stakeholders and the funding that accompanied the Thematic Strategy were well received (although many stakeholders interviewed in the context of this study doubted whether the engagement reached beyond those cities already interested in taking action on the urban environment). The cities that were involved appreciated the opportunity to engage with the Commission on urban environment issues. Since the Thematic Strategy, there have also been more initiatives to benchmark cities, e.g. the Urban Audit, and initiatives such as the Covenant of Mayors. While it is not possible to prove that the Thematic Strategy led to the development of any of these initiatives, its existence may have had an influence, although the interviewees were doubtful that this was the case. Stakeholder views on the two guidance documents produced were mixed: some thought that both documents were relatively thin; others felt that they were useful for some local authorities.[279] Overall, the utility of the documents was probably linked to the stage at which respective cities were in developing their own similar plans.

The three legislative measures discussed above that have been adopted in the area of **water quality** were uncontroversial and are all, effectively, replacements of earlier Directives. There was no debate on the type of measures chosen and, as indicated above, all had their own momentum. The Communication on Water Scarcity and Droughts was also inevitably not a legal instrument. The WFD sets quantitative objectives, but implementation was (and is) at an early stage and, therefore, it would have been inappropriate to add to the legislation. Rather the Communication needed to emphasise the importance of the WFD in this regard and address other policy areas – thus contributing to the integration objective of the 6EAP.

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[278] CEC (2007): Accompanying document to the Mid-term review of the Sixth Community Environment Action Programme – Impact Assessment. Commission Staff Working Document, page 70, (SEC(2007) 546/2).

[279] Stakeholder consultation, interviews.

Timing of measures and the 6EAP 10-year timeframe

In identifying the most appropriate timescale for the 6EAP, a balance needs to be struck between setting the long-term direction and objectives for EU environmental policy and providing the impetus for the necessary policy development in the short-term. For example, the short-term objectives of the **Thematic Strategy on Air Pollution** were considered to be an important driver of policy development and a useful measure against which to assess the ambition of legislation. However, if the timeframe was shorter than 10 years, it would be difficult to develop the appropriate strategic framework, e.g. the Thematic Strategy on Air Pollution, and then propose and adopt the necessary legislation. If the timeframe was longer than 10 years, there might be a risk that the stimulus to develop the necessary policy would not be there. With respect to the **urban environment**, one interviewee noted that a longer timeframe is needed to solve the problems of the urban environment, but that short-term targets would also have been useful.

The 10-year timeframe of the 6EAP has generally proven appropriate for the development of the Thematic Strategies and adoption of measures arising from them (although revision of the national emissions ceiling Directive is still outstanding). However, this timescale for the adoption of new measures does not take into account the implementation of these measures and thus some of the objectives of the 6EAP expressed as environmental outcomes were, in hindsight, unrealistic. In the case of **REACH**, the ten-year timeframe for achieving the relevant 6EAP objectives is not sufficient mainly because of the long implementation span of REACH, with for instance the deadline for the registration provisions for phase-in substances of one tonne or more per year being 1 June 2018. This is however more an indication of the uniqueness of REACH, with its considerable institutional requirements and complexity than necessarily the inappropriateness of the ten-year timeframe of the 6EAP. In the case of **pesticides**, although both the Directive 128/2009/EC to achieve a sustainable use of pesticides and the Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market were adopted within the timeframe of the 6EAP, the measures only came into force in late 2009 and will be transposed in 2011, thus it is too early to judge the effects of these legislative measures on the environmental objectives of the 6EAP.

3.3.5 Impact of the 6EAP on the adoption of measures

3.3.5.1 Impact of the 6EAP

The environment and health thematic area included a number of fairly discreet sub-areas on which the 6EAP has had varying degrees of influence. A number of developments in this thematic area had their own drivers and institutional points of debate which were in place prior to the adoption of the 6EAP, e.g. REACH, the Water Framework Directive, and the CAFE Programme, and thus the added value of the 6EAP in these cases was rather limited. However, there are some instances where the 6EAP played an influential role and helped push forward action which may not have happened at all or may have taken longer without the impetus provided by the 6EAP.

The **REACH** negotiation process had already started before the adoption of the 6EAP. REACH was introduced in 2001 by the White Paper on a Strategy for a Future Chemicals

Policy as a result of increasing concern that the EU's chemical policy did not provide sufficient protection of the use of existing substances. Consequently the 6EAP did not influence the White Paper, but rather the White Paper influenced the 6EAP. The objectives and actions of the 6EAP relating to chemicals (with the exception of the 2020 objective) are mentioned in the preceding White Paper. There could however be a possibility that the inclusion of these aims in the 6EAP could have had an additional political impetus in enabling the presentation of the REACH proposal in October 2003[280] and in subsequent negotiations on the proposal in the face of significant opposition (see Annex A, section 1.3).

As called for in the 6EAP, a **Pesticides Thematic Strategy** was presented by the Commission in 2006. The adopted Thematic Strategy addresses the objective of the 6EAP relating to pesticides as set out in Article 7(1) and Article 7(2), supported by the two legislative proposals presented alongside the Thematic Strategy and the adoption of subsequent legislative measures as envisaged in the Thematic Strategy (Directive 2008/105/EC on environmental quality standards in the field of water policy[281] which includes objectives for a number of pesticides, Regulation (EC) No 1185/2009 concerning statistics on pesticides[282], and a proposal[283] for legislation to set minimum standards for pesticide application equipment). These measures have improved EU legislation on the authorisation of plant protection products and particularly their use. The 6EAP has had an added value in developing pesticides policy in the EU by providing an overarching framework from which the proposals for the Regulation and the Directive evolved.

The **Air Thematic Strategy** was a direct response to a request in the 6EAP and the link between the Thematic Strategy and the 6EAP was frequently made during the preceding debate and within the adopted Strategy. Additionally, the subsequent legislation targeting emissions sources increasingly referenced the Thematic Strategy and the respective proposal's potential contribution to meeting its target, at least in its preamble. Hence, the Thematic Strategy clearly provides the Commission with policy objectives that are to be achieved through the introduction of the necessary proposals. Additionally, the objectives in the Thematic Strategy provide stakeholders with a means of understanding the rationale behind a respective proposal and provide a measure against which environmental NGOs, other members of civil society, MEPs and Member States can assess actions taken by the Commission. The policy direction set out, and indications of measures that might soon emerge also provide industry with a clear statement of the Commission's intentions, which is beneficial when planning future investments. However, it is important to note that a strategic

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280 CEC (2003): Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach), establishing a European Chemicals Agency and amending Directive 1999/45/EC and Regulation (EC) {on Persistent Organic Pollutants}, (COM(2003)644).

281 Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council.

282 Regulation (EC) No 1185/2009 of the European Parliament and of the Council of 25 November 2009 concerning statistics on pesticides, OJ L 324, 10.12.2009, p. 1–22.

283 Covered by Directive 2009/127/EC, which amends Directive 2006/42/EC with regard to machinery for pesticide application. However, pesticide application equipment already in professional use are covered by the framework Directive 128/2009/EC.

approach towards policy-making was already a developing feature of EU air quality legislation. For example, the Auto-Oil Programmes made the link between fuel quality and vehicle emissions, while the Clean Air for Europe (CAFE) Programme had been set up prior to the 6EAP with the aim of taking a more integrated approach to air quality and emissions policy more widely. The CAFE process and the accompanying stakeholder consultation that had already been set up led to the production of the Thematic Strategy. In this respect, it could be argued that the Thematic Strategy simply confirmed and strengthened processes that were already in place. Indeed, some view the CAFE process as a model for the Thematic Strategies more generally. Stakeholders interviewed in the context of this study considered the stakeholder engagement that took place in the development of the air Thematic Strategy to have been very useful in terms of enabling stakeholders, particularly the Commission, industry and environmental NGOs to come together and express their respective views and helping to improve the knowledge-base by involving a wide range of stakeholders.

Although the **Thematic Strategy on the Urban Environment** would not have been adopted without the 6EAP, the Strategy has been less useful in providing a strategic direction for EU environmental policy on the urban environment. However, some interviewees suggested that cities have been able to use the Thematic Strategy to justify actions that they have taken in order to improve their urban environment and in this respect, the Thematic Strategy does provide some strategic direction. Additionally, the Thematic Strategy was one of the many strategic documents that influenced the development and operation of the European Green Capital Award. Stakeholders interviewed in the context of this study considered the stakeholder engagement that took place in the development of the urban Thematic Strategy to have been very useful as the cities and their networks involved appreciated the opportunity of being able to engage with the Commission on the problems that they faced.

In the area of **water**, the WFD established a comprehensive assessment, objective setting and management framework for Europe's surface (fresh and coastal) and ground waters and has been the primary driver behind EU water policy over the last ten years. A number of the measures discussed above were a result of the failure to agree all issues during the Conciliation Committee leading to the adoption of the WFD. The framework for implementation of the WFD, the Common Implementation Strategy (CIS), has created a large number of working groups, analyses, stakeholder events, etc which have helped develop policies, including those analysed above, as well as others such as the floods Directive. This comprehensive process, which is a partnership between the Commission and Member States, mirrors some aspects of the Thematic Strategy process, and has been the main driver of developments in the area. It is difficult to identify where the 6EAP added any value in the adoption of the water measures analysed above. Clearly it provided a background context and added impetus for adoption. The 6EAP is also referred to in the preambles of the groundwater Directive, the EQS Directive, in the revised bathing water Directive and in related documents including the first reading positions of the Parliament and the Council's common position. However, the 6EAP was not an important driver with regard to these measures. The three legal measures assessed were all envisaged prior to the adoption of the 6EAP and had their own legal, policy and institutional processes in place for debate and adoption. The groundwater Directive was a 'leftover' of the failure to agree all

issues during the Conciliation Committee leading to the adoption of the WFD. Therefore, the need for a groundwater Directive was already identified – technically and politically before the adoption of the 6EAP. The need for an EQS Directive was identified by parties in 2000 – two years before adoption of the 6EAP Decision. The 6EAP provided an umbrella for the revised bathing water Directive, however the revision had been debated long before the 6EAP was first developed (there had been an earlier proposal for a revision, withdrawn by the Commission) and would have gone ahead in any case. For the Communication on Water Scarcity and Droughts, although there may be a case for arguing that this takes forward the integration objective of the 6EAP, the lack of acknowledgement of this by the Commission suggests that the 6EAP was not important in its development.

3.3.5.2 Impact of the 6EAP compared to other EU strategies

The EU has a number of overarching strategies which reflect broad principles and the objectives of the Community, two important examples being the Lisbon Strategy and the EU Sustainable Development Strategy (SDS). The impact of these strategies in terms of influencing specific developments in the environment and health thematic area of the 6EAP is difficult to accurately establish, however some general observations can be made and are set out below in relation to the air and urban environment sub-areas.

The EU SDS did not contain any mention of the **Thematic Strategy on Air Pollution** or its subsequent measures and while air pollution was mentioned as an issue in the context of sustainable transport, it was not likely that this had any effect on the Thematic Strategy or subsequent legislation. For example, the Regulation that tightened emission standards for cars and vans[284] made reference to the conclusions of the Thematic Strategy on Air Pollution, but made no mention of the SDS. The review of the SDS did not make any relevant references to air pollution. The Lisbon Strategy did not refer to any relevant air pollution measures, neither did its review. Although the Impact Assessment of the Climate and Energy Package assessed the implications of the measures in the package on air pollution, there are no obvious implications for the implementation and enforcement of the Thematic Strategy on Air Pollution and vice versa.

With respect to the urban environment, the only significant reference to the **Thematic Strategy on the Urban Environment** in other strategic documents was in the revised EU SDS, which quoted the Thematic Strategy in calling on local authorities to develop and implement urban transport plans taking into account the Commission's guidance (although the word 'sustainable' was not used). Additionally the revised EU SDS noted the need to build sustainable communities and, in this context, mentioned the need to strengthen and promote processes such as LA21 and other processes with broad public participation. It also noted that municipalities, towns and cities should be invited to sign the Aalborg Commitments and that networks should support these various activities. Consequently, there were statements in the EU SDS that may have contributed directly to the implementation of elements of the Thematic Strategy, or which may have led to action by various actors that

[284] Regulation (EC) No 715/2007 of the European Parliament and of the Council on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair.

would be consistent with the aims of the Thematic Strategy. However, it is difficult to identify whether there was an impact in practice, as local authorities might have taken appropriate actions in response to a range of policy drivers, including statements within the Thematic Strategy and the EU SDS.

3.4 Natural Resources and Waste

3.4.1 Introduction

The following **overall aims** are laid down for the area of natural resources and waste in Art. 2(2) point 4 of the 6EAP:

'Better resource efficiency and resource and waste management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources and the generation of waste from the rate for economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment'.

The **specific objectives** of the 6EAP in the natural resources and waste area as set out in Article 8(1) are:

- 'aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use. In this context the indicative target to achieve a percentage of 22% of the electricity production from renewable energies by 2010 in the Community is recalled with a view to increasing drastically resource and energy efficiency;
- achieving a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns;
- a significant reduction in the quantity of waste going to disposal and the volumes of hazardous waste produced while avoiding an increase of emissions to air, water and soil;
- encouraging re-use and for wastes that are still generated: the level of their hazardousness should be reduced and they should present as little risk as possible; preference should be given to recovery and especially to recycling; the quantity of waste for disposal should be minimised and should be safely disposed of; waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations'.

Article 8(2) includes a number of **priority actions** in the following sub-areas:

Sustainable use and management of resources

The main priority action is the development of a thematic strategy on the sustainable use and management of resources, including *inter alia*:

- ‘an estimate of materials and waste streams in the Community, including imports and exports for example by using the instrument of material flow analysis;
- a review of the efficiency of policy measures and the impact of subsidies relating to natural resources and waste;
- establishment of goals and targets for resource efficiency and the diminished use of resources, decoupling the link between economic growth and negative environmental impacts;
- promotion of extraction and production methods and techniques to encourage eco-efficiency and the sustainable use of raw materials, energy, water and other resources;
- development and implementation of a broad range of instruments including research, technology transfer, market-based and economic instruments, programmes of best practice and indicators of resource efficiency;’

Waste prevention and management

- ‘developing a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010. The Commission is invited to prepare a proposal for such targets by 2002;
- encourage ecologically sound and sustainable product design;
- raising awareness of the public's potential contribution on waste reduction;
- the formulation of operational measures to encourage waste prevention, e.g. stimulating re-use and recovery, the phasing out of certain substances and materials through product-related measures;
- developing further indicators in the field of waste management;’

Waste recycling

Development of a Thematic Strategy on Recycling including inter alia:

- ‘measures aimed at ensuring source separation, the collection and recycling of priority waste streams;
- further development of producer responsibility;

- development and transfer of environmentally sound waste recycling and treatment technology;’

Development of legislation

Development and revision of waste legislation including inter alia:

- ‘construction and demolition waste, sewage sludge, biodegradable wastes, packaging, batteries and waste shipments, clarification of the distinction between waste and non-waste and development of adequate criteria for the further elaboration of Annex IIA and IIB of the framework directive on wastes’.

3.4.2 Summary assessment of the of the achievement of objectives in the natural resources and waste thematic area

3.4.2.1 Resources

The 6 EAP requires ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environmental and breaking the linkages between economic growth and resource use.

When assessing the **trends of resource use** and the **extent of decoupling** of resource consumption from economic growth, it can be said that EU economies have become more efficient in many respects. Efficiency gains can be observed for a number of indicators, from the consumption of raw materials and energy to the generation of waste and greenhouse gas emissions. The Sustainable Consumption and Production (SCP) Action Plan (2008) maintains that resource productivity (measured by GDP per resource use, €/kg) in the EU has improved by 2.2% per annum in real terms over the past 10 years.[285] This means that the EU has been able to stabilise resource use whilst the economy has been growing, largely due to efficiency improvements in production and the increasing importance of services in the economy. Improvements in resource productivity should continue at least at the same pace as this EU average. However, the most recent EEA report (2010)[286] confirms that in Europe, resource use continues to rise although there are considerable national differences in per person resource use, driven mainly by different social and economic conditions. Moreover it states that while resource extraction within Europe has been stable over the past decade, dependence on imports is increasing and is among the highest in the world, more than 20% of all resources consumed in Europe are imported.[287]

Although a very important objective, the decoupling of the use of resources from the rate of economic growth has, thus, only been achieved to a very limited extent. Better resource efficiency per unit of products produced has however been achieved given that there has been relative decoupling between resource use and economic growth, e.g. resource use is increasing more slowly than economic growth.

The main **priority action** of the 6EAP with regard to sustainable resource use was the development of a **Thematic Strategy on Sustainable Use and Management of Resources**. This Thematic Strategy[288] published in December 2005 lays the basis for further research and the establishment of institutions that can help to increase data on resources issues, and monitor and document resource use, rather than setting concrete objectives or developing policy options.

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285 CEC (2009): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, p. 9. (COM(2008)397).

286 EEA, Draft-report 2010, 11 June 2010, The European Environment: State and Outlook 2010.

287 EEA, Draft-report 2010, 11 June 2010, The European Environment: State and Outlook 2010 p. 47.

288 CEC (2005): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Thematic Strategy on the sustainable use of natural resources. (COM(2005)670).

The TS has only very partially delivered on the concrete issues and requirements enumerated in the 6EAP aimed to further resource efficiency and decoupling resource use from economic growth. In the following the features of the TS are compared with the 6 EAP requirements.

- An estimate of materials/waste streams in the Community was carried out in support of the TS[289], and the data centre on natural resources and products was created in Eurostat. Thus, the TS delivered on the 6EAP requirement of **estimating material and waste streams in the Community**.
- The TS did not review or analyze the efficiency of resource policies and subsidies related to natural resources and waste, thus not fulfilling this requirement of the 6EAP.
- The TS is principally based on research considerations and does not establish goals or targets for resource efficiency or decoupling or a process for setting these in future, nor does it review or propose concrete policy measures, although this was called for in the 6EAP. However, the TS proposes that each EU Member State develop national measures and programmes on the sustainable use of natural resources to achieve the strategy's objectives. These measures and programmes should focus on resource use which has the most significant environmental impacts. Member States should also include mechanisms to monitor progress and, where possible, develop targets.
- The TS does not address the **promotion of extraction and production methods and techniques** to encourage eco-efficiency and the sustainable use of raw materials, energy, water and other resources.
- The 6EAP also called for the '**development and implementation of a broad range of instruments** including research, technology transfer, market-based and economic instruments, programmes of best practice and indicators of resource efficiency.' The adopted TS merely provides a framework for further attempts to meet this requirement in the future, through institutional mechanisms such as the High Level Forum, data centre and international panel. The Commission put much effort into the creation of the international panel, the UNEP Resource Panel, launched in late 2007, and as stated earlier has created the data centre on natural resources and products in Eurostat. However, the creation of a High Level Forum is still under discussion.[290]
- The TS called for the development of **indicators** to measure progress in resource productivity. The EU Commission commissioned studies to assess potential indicators, and the environmental impacts of key natural resources. The study 'Potential of the Ecological Footprint for monitoring environmental impacts from natural resource use' [291] assessed the potential of the Ecological Footprint and related tools and indicators to measure negative environmental impacts related to natural resource use. Two studies on specific natural resources, 'Significant Natural

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289 Resource use in European countries - An estimate of materials and waste streams in the Community, including imports and exports using the instrument of material flow analysis, http://scp.eionet.europa.eu/publications/zero (11 July 2010).

290 http://www.eeb.org/EEB/?LinkServID=D00F0EA1-09C3-5DF1-D6D7AEF4CAC16BCC&showMeta=0 (11 December 2010).

291 http://ec.europa.eu/environment/natres/pdf/footprint_summary.pdf (11 November 2010).

Resource Trade Flows into the EU'[292] and 'Environmental Impacts of Significant Natural Resource Trade Flows into the EU'[293] were also undertaken.

When assessing the effects of the TS, no direct changes in environmental or other conditions can be attributed to or expected from the TS, given its rather theoretical character and its emphasis on data generation and institution-building. The TS itself is rather modest in formulating impacts, limiting itself to stating that it will create the conditions for improved eco-efficient resource use and incentives for moving towards more sustainable production and consumption patterns. One positive impact of the TS is the establishment of the Environmental Data Centre on Natural Resources and Products.

The overall effects of the other adopted measures that relate to resource efficiency are that resource and most importantly energy efficiency have been addressed for certain products, such as through single requirements of the Ecodesign Directive[294], and criteria in the European Ecolabel[295] and Green Public Procurement.[296] It is difficult to gauge the practical influence of these requirements given their very recent entry into force, e.g. the implementing measures to the Ecodesign Directive. To date, these measures have however mostly been targeted on energy efficiency aspects.

As a consequence, even if we take into account the fact that the effects of many of the product-related measures will only be evident in a few years' time, there is no trend that would justify the assumption that EU resource use does not and will not surpass the carrying capacity of the environment.

3.4.2.2 Waste

Overall reduction in the volumes of waste

Over the last 10 years, waste generation has not reduced in Europe; rather it has continued to grow at a slower rate than GDP or stabilized in some Member States (albeit at high levels).[297] As a consequence, waste prevention efforts undertaken to date have not been adequate to achieve a significant overall reduction in the volumes of waste generated. This failure is assumed to be mostly due to the preference of policy makers to encourage economic growth (and consumption) instead of resource efficiency and waste reduction. Nevertheless some encouraging signals appear from recent data showing some decrease in waste generation – even if this might be partly linked to the economic downturn - and some relative decoupling between consumption/GDP growth and overall and municipal waste

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292 http://ec.europa.eu/environment/natres/pdf/nat_resources_trade_flows.pdf (27 November 2010).

293 http://ec.europa.eu/environment/natres/pdf/env_impact.pdf (27 November 2010).

294 Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy related products.

295 The revised Ecolabel Regulation lays down rules for the establishment and revision of criteria to be used to award the EU Ecolabel covering the whole life cycle of products, including resource use, generation of waste, the substitution of hazardous substances and other aspects relevant for sustainable management and use of resources.

296 The Communication Public procurement for a better environment (GPP) sets out a process for setting common GPP criteria at European level to promote goods that reduce negative environmental impacts, inter alia resource use.

297 See graphs on the development of waste generation in the Annex A, section 1.4.2 .

generation can be observed, indicating that less waste is generated for the same level of consumption or GDP.

The revised **Waste Framework Directive** (WFD)[298] as the fundamental law on waste management includes concrete articles on waste prevention. The Directive requires Member States to draw up waste prevention programmes by 2013 enumerating waste prevention objectives and measures. The WFD says *expressis verbis* in Article 29 that the aim of such objectives and measures shall be to break the link between economic growth and the environmental impacts associated with the generation of waste. Member States shall determine appropriate specific qualitative or quantitative benchmarks for waste prevention measures adopted in order to monitor and assess the progress of the measures, and may determine specific qualitative or quantitative targets and indicators for this purpose. As a result, the revised WFD is much more concrete on waste prevention than the former Directive, and lays the basis for concrete measures and criteria for waste prevention and its monitoring. The WFD also requires the Commission to produce certain reports to the European Parliament and the Council, including on the setting of possible prevention and decoupling objectives by 2014 to be valid for 2020[299] (see Article 9). This requirement of the WFD is quite unclear with a view to its wording, thus it is also unclear if 'binding prevention objectives' can be expected to be set at a European level.[300] [301] Yet, the new provisions can be expected to compel Member States to pay more attention to waste prevention.

The **WEEE[302] and RoHS[303] Directives**, the **Packaging Directive[304]** and **Batteries Directive[305]** include qualitative waste prevention measures.[306] Other legal instruments that can contribute to waste prevention are the Ecodesign Directive, which lays down requirements for the eco-design of energy-related products, the European Ecolabel and GPP

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298 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

299 As for the development of quantitative and qualitative waste reduction targets to be achieved at Community level by 2010 as required by the 6 EAP, this date was not respected.

300 In the Thematic Strategy on Waste Prevention and Recycling (year 2005) the Commission had decided against concrete waste prevention targets.

301 It is controversial whether concrete (quantitative) prevention and decoupling objectives are the best way of tackling the issue of waste prevention. The EU Commission has concluded in the TS Thematic Strategy on the prevention and recycling of waste that such global objectives were not appropriate. See TS, p. 1.

302 Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE), last amended by Directive 2008/112/EC of the European Parliament and of the Council of 16 December 2008.

303 Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

304 European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste Last amended by Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009.

305 Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC.

306 Also the End-of-life Vehicles Directive includes such measures, however this directive was issued before the 6 EAP.

via their product criteria, and the IPPC Directive[307] (*now revised to the Industrial Emissions Directive*[308]), which lays down requirements for the permitting of industrial installations.

The 6 EAP also required the development **of a set of quantitative and qualitative reduction targets** covering all relevant waste, to be achieved at Community level by 2010. This requirement has not been fulfilled. Some Directives targeted at specific waste streams have concrete qualitative prevention targets by simply banning or limiting the use of certain substances (see above).

As regards the **formulation of operational measures to encourage waste prevention**, no specific operational measures at EU level to encourage waste prevention have been developed apart from the requirement for Member States to develop waste prevention programmes, as required by Article 29 of the revised **WFD**. In terms of product-related measures contributing to the phasing out of certain substances and materials, the **RoHS Directive**, **Batteries Directive**, **End-of-Life Vehicles Directive**[309] and the **Ecodesign Directive**[310] contain relevant text in this regard.

Significant reduction of volumes of hazardous waste

Concerning the generation of hazardous waste, rather than shrinking, the overall volume of hazardous waste up to 2006[311] has increased in EU27.[312]

Having absorbed the former Hazardous Waste Directive, the revised **WFD** contains the basic requirements for hazardous waste. The WFD's definition of prevention includes 'measures taken before a substance, material or product has become waste, that reduce the content of harmful substances in materials and products', providing a lever in the WFD to reduce hazardous waste. In addition, Article 9 requires the Commission, by the end of 2011 to produce an interim report on the evolution of waste generation and the scope of waste prevention, including the formulation of a product ecodesign policy addressing both the generation of waste and the presence of hazardous substances in waste, with a view to promoting technologies focusing on durable, re-usable and recyclable products.

In a more concrete fashion, the **RoHS** and **Batteries Directives** in particular can be cited as drivers to limit hazardous waste by preventing or dramatically limiting the use of a series of heavy metals formerly used in EEE and batteries. Very promising results have been

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307 Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control.

308 The Council adopted the European Parliament's position in 2nd reading on the Directive without amendments on 8 November 2010.

309 The ELV Directive was enacted and went into force before the 6 EAP.

310 Impact of these will depend much on the Ecodesign Directive's implementation.

311 EEA (2010): European Environment State and Outlook (SOER) Report, Draft for Consultation April-May 2010.

312 No data yet available for 2008, for further information, please refer to the graphs in the Annex, section 1.4.

demonstrated by the car industry which has reduced the presence of the substances banned by the **End-of-Life Vehicles Directive** by 96% to almost 100%.[313]

In a more expansive manner, the **REACH Regulation** subjects certain substances of very high concern (SVHCs) to an authorisation procedure that aims to replace hazardous substances with less hazardous alternatives.

The combined effects of these instruments will only be evident in a few years' time.

Significant reduction in the quantity of waste going to disposal

The share of waste that is disposed of in landfills is decreasing. In 1995 an average 62% of Municipal Solid Waste in the EU-15 was sent to landfill. By 2007, this figure had fallen to 42%.[314] For the EU-27, Eurostat calculated a fall in per capita landfilling of MSW from 293kg to 207kg between 1997 and 2007.[315]

The **Landfill Directive**[316] resulted in an important shift away from the landfill of waste, although the Directive did not precisely specify what methods of waste management would then come into play. This Directive was introduced before the 6EAP, but was also fostered by the **Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills** pursuant to Article 16 and Annex II to Directive 1999/31/EC, which introduced *inter alia* leaching limit values of waste destined for landfills thereby reducing the hazardousness levels of waste eligible for landfilling.

Evidently, the Landfill Directive has had the greatest impact in countries and locations where the process of shifting away from landfill was not already under way. There are huge differences between Member States in terms of waste management indicating that a significant margin for progress in sustainable waste management on the ground still exists beyond the current EU minimum collection and recycling targets.

The drive away from landfill to more sustainable waste management methods has been importantly bolstered by the revised WFD, which institutes in its Article 4 a binding five-step waste management hierarchy, under which waste disposal in landfills is the absolute last resort. Another major step in improving waste management is the concrete recycling targets for household and construction and demolition waste set in Article 11. These new requirements, to be met by 2020, will likely lead to a considerable decrease in the volume of waste going to landfill at least in some EU Member States, provided that the new provisions are consistently implemented and enforced.

Additional waste-related directives or modifications to directives such as the Packaging Directive, Batteries Directive and WEEE Directive, have also helped to divert waste from

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313 Study on analysis of costs and environmental benefits of heavy metal ban, and proposal for better regulation, Oko-Institut, November 2010.

314 EEA (2009): EEA Report No 7/2009, Diverting waste from landfill – Effectiveness of waste-management policies in the European Union.

315 Eurostat (2010): Environmental Data Centre on Waste, Landfill and incineration.

316 COUNCIL DIRECTIVE 1999/31/EC of 26 April 1999 on the landfill of waste, Regulation (EC) No 1137/2008 of the European Parliament and of the Council of 22 October 2008.

landfills by setting or tightening minimum targets for separate collection and/or recycling and recovery of the waste streams concerned.

Encouraging re-use

With regards to the **promotion of reuse**, the provisions in waste-related directives, such as the Waste Framework Directive, the ELV Directive, the Packaging Directive and the WEEE Directive, encourage reuse. The WEEE and ELV Directive include reuse in their recovery targets. The revised Waste Framework Directive puts 'preparation for re-use' on the top of the waste management hierarchy (below prevention) and includes preparation for re-use in its own recycling/reuse targets.

Proximity of waste disposal to the place of waste generation

The 6 EAP stated that waste intended for disposal should be treated as closely as possible to the place of its generation, to the extent that this does not lead to a decrease in the efficiency in waste treatment operations.

Article 16 of the revised **WFD** calls on Member States to establish an integrated and adequate network of waste disposal installations and installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers. Member States may also limit incoming shipments of waste destined for incinerators that are classified as recovery where it has been established that such shipments would result in national waste having to be disposed of or treated in a way that is not consistent with their waste management plans. The revised **Waste Shipment Regulation**[317] contributes to the objectives of self-sufficiency and proximity by laying down limits and justifying objections to waste for disposal and for certain waste to be recovered (definition corresponds to the definition in the Waste Framework Directive) being shipped out of or to be imported into a country.

Development and revision of EU waste law

Waste legislation has developed very dynamically since the adoption of the 6EAP. Consequently, one specific objective of the 6EAP, which has for the most part been attained, was the development or revision of legislation on wastes (Art. 8(iv)), including on:

- **construction and demolition waste:** recycling/recovery targets for construction and demolition waste were included in the new WFD; there is no specific directive for construction and demolition waste;
- **sewage sludge:** the European Commission is currently examining whether a review of the sewage sludge Directive is needed;
- **biodegradable waste:** an article on biowaste has been included in the WFD, encouraging Member States to separately collect biowaste. Apart from this, the Commission has so far rejected calls for a stand-alone directive on biowaste, arguing

317 Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

that that there are no policy gaps at EU level that prevent member states from taking stronger action at present;[318]

- **packaging:** revision of the original Directive was adopted in 2004;
- **batteries:** a new Directive was adopted in 2006;
- **waste shipments**: a revision of the Waste Shipment Regulation was adopted in 2006.
- clarification of the **distinction between waste and non-waste and development of adequate criteria** for the further elaboration of Annex II A and II B of the Waste Framework Directive: This is included in the new WFD;

Moreover, proposals for **revised WEEE and RoHS Directives** were issued in 2008. A directive on extractive **waste**[319] was published in 2006. In addition to these 6EAP requirements, a revised **WFD** was adopted at the end of 2008, integrating the former Waste Oil and Hazardous Waste Directives.

Thematic Strategy on Waste Recycling

The 6EAP required the development of a thematic strategy on waste recycling, including inter alia: (a) measures aimed at ensuring source separation, the collection and recycling of priority waste streams; (b) further development of producer responsibility; (c) development and transfer of environmentally sound waste recycling and treatment technology;

The **Thematic Strategy on Waste Prevention and Recycling**[320] published in December 2005 reflected not only on recycling but also on waste prevention, and more importantly on the streamlining, better implementation and enforcement of existing waste law, which to a significant extent also favours recycling and recovery. The TS elaborates on the following issues:

- A renewed emphasis on full implementation of existing legislation. Simplification and modernisation of existing legislation
- Introduction of life-cycle thinking into waste policy.
- Promotion of more ambitious waste prevention policies
- Better knowledge and information
- Development of common reference standards for recycling

On the other hand, the TS did not concentrate on the following specific requirements laid down by the 6EAP:

- The TS does not develop concrete measures aimed at ensuring source separation, collection and recycling of priority waste streams. Thus it does not reflect on **source**

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318 See EurActiv, 7 July 2010, Parliament calls for EU biowaste directive: http://www.euractiv.com/en/sustainability/parliament-calls-for-EU-biowaste-directive-news-496052 (11 December 2010).

319 Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC.

320 CEC (2005): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Taking sustainable use of resources forward - A Thematic Strategy on the prevention and recycling of waste. (COM(2005)666).

separation in contrast to the requirements of the 6EAP. The only concrete measure that the TS refers to as 'next steps' is the review of the collection target in the WEEE Directive.

- References to producer responsibility in the TS are in general very limited and by no means **develop further the concept of producer responsibility** as called for in the 6EAP.
- The TS does not include a conclusive chapter on the **development and transfer of environmentally sound waste recycling and treatment technology**. It does however elaborate on the development of common reference standards for recycling, which it suggests should be based on amendments of the WFD and the IPPC Directive.[321] This approach would be applied to bio-waste as a priority.

As a result, the TS prepares the revision of legislation and highlights the need for better implementation but does not in itself outline concrete measures for source separation or the further development of producer responsibility. It develops some ideas on the development or rather the fostering of environmentally sound recycling technology by demanding common recycling standards.

Other issues

The issue of **encouraging ecologically sound and sustainable product design** was addressed primarily by the **Ecodesign Directive** which subjects various energy-related products to specific ecodesign requirements, and the **Ecolabel Regulation**, which addresses 26 consumer products.[322] The **WEEE Directive, the ELV Directive**[323] and the **Packaging Directive** also contain certain clauses about **sustainable product design** (with a view to promoting recyclability and reusability). The **Batteries Directive** requires Member States which have manufacturers established on their territory to promote research and encourage certain improvements in the design of batteries and accumulators also with regard to certain hazardous substances.

With regard to **awareness raising campaigns**, the European Commission has contributed to various such campaigns, such as the European Week of Waste Reduction (funded by the LIFE-programme).[324]

With regard to the **development of further indicators** in the field of waste management, Article 29(4) of the revised **WFD** states that indicators for waste prevention measures may be adopted. By this stipulation, the priority action can technically be considered to have been covered by EU legislation, although the indicators are yet to be developed.

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321 These common recycling standards have not yet materialised. Yet, the proposal for the review of the IPPC Directive extends its scope to recycling installations.

322 http://ec.europa.eu/environment/ecolabel/about_ecolabel/facts_and_figures_en.htm#evolution (15 December 2010).

323 Adopted before the 6EAP.

324 For further information please refer to: http://www.ewwr.eu/presentation-week (11 November 2010).

3.4.3 Summary assessment of drivers and barriers

Changes in the target area

As regards the overall generation of waste, the economic crisis may have influenced waste generation given that overall waste generation decreased in 2008 with regard to 2006 after it had consistently been growing over the years, see above. More recent data is not available.

In the recent years, interest for resource efficiency and sustainable consumption and production has increased leading to enhanced research activities in the field of sustainable resource management and resource efficiency.

Conformity/lack of conformity

The conformity of measures with the aims and objectives of the 6EAP differed depending on the specific aim and objective concerned. For instance, the improvement of waste management (reduction of landfilling and increase of waste recovery and waste recycling, better management of landfills and the banning of certain hazardous materials) was pursued with significant determination and conformed with the requirements of the 6EAP. Other developments (decoupling of resource use from economic growth, concrete targets for waste prevention or resource use/efficiency, development of producer responsibility) did not conform with the 6EAP's requirements. These latter short-comings appear to be largely due to the higher priority given to economic growth and consumption rather than decoupling, but also to the fact that resource policy is a rather new policy field that often lacks well-developed and implemented methodologies to deal with the problems at hand, such as resource monitoring and the reduction of resource use. The development of the waste-related directives follow almost completely the requirements set out in the 6EAP.

Decision making

The EU decision making procedures, concretely the co-decision procedure involving the European Parliament, have influenced the achievement of the overall aims and specific objectives of the 6EAP. The Commission's initial proposal of the new WFD was significantly altered through the co-decision procedure; in particular by the European Parliament which raised the level of ambition of the legislation. In particular, it reclaimed a 5-step waste hierarchy and made it legally-binding. Furthermore, the Parliament included *inter alia* concrete recycling targets for household waste (50%) and C&D waste (70%), an issue that was not envisaged by the Commission's original proposal. This certainly contributes to better waste management and more sustainable consumption patterns, especially if treatment of waste by recycling replaces disposal of waste by landfilling. In this way, the Parliament enhanced the contribution of the new WFD to the 6EAP objectives in comparison to the Commission's original proposal. The same is true for the requirements relating to waste prevention, where Parliament required the Commission to report on different aspects of waste generation and prevention in the EU including on the possible setting of waste

prevention objectives (Article 9). In turn, a concrete EU waste prevention goal was not included into the finally adopted directive.[325]

Another example of the influence of the co-decision procedure is the Batteries Directive. The Council and the European Parliament had different views on the level of ambition of the proposed Directive compared to the Commission; in particular the European Parliament suggested stricter measures. The conciliation procedure resulted in a cadmium ban but granted derogations from the ban of cadmium in cordless power tools. To reduce unnecessary administrative burden, an exemption for small producers of batteries from the requirement to finance the collection and treatment of batteries was introduced in line with the Commission's Better Regulation objectives.

Implementation problems

There are several problems of implementation in waste legislation. The most recent reports from Member States for the 2004-2006 period show that implementation and enforcement of EU waste law remain poor, particularly regarding the WFD, the Landfill Directive, and the Waste Shipment Regulation.[326] In many cases, adequate waste treatment infrastructure is missing in Member States and waste is not collected separately. This results in reuse, recycling and recovery targets for waste streams such as WEEE, ELVs or packaging being missed.[327]

There are also a high number of cases of illegal shipments of waste due to the lack of adequate controls and inspections. Thus, the problems of poor implementation or enforcement have doubtless hampered the attainment of relevant 6EAP objectives.

Financial resources

Given that waste and resource policy is still mostly based on command-and-control measures, financial resources in the sense of subsidies or tax favours do not play an important role in the waste[328], products or natural resources areas.

Public opinion

Public opinion plays a considerable role in waste policy. Media coverage of illegal hazardous waste exports and illegal dumping of such waste raised awareness of the problems related to waste shipment, and might well have contributed to tightening the limits to waste shipment in the Waste Shipment Regulation. Public opinion polls regularly also put recycling at the top of environmentally-related activities being done.

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325 See EurActiv, 18 June 2008, Watered-down waste directive gets MEPs' green light.

326 Waste management: Commission calls for better implementation of EU waste law by Member States, Press Release EU Commission, 20 November 2009, http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1795&format=HTML&aged=0&language=EN&guiLanguage=en (11 December 2010).

327 Ibid.

328 They come into play on the municipal level when waste collection fees are levied and a reduction of generated waste might be rewarded by a fee discount.

Competing/complementary EU priorities

A few other strategies and policy papers support the aims laid down in the 6EAP for natural resources and waste. For example, the 2001 EU Sustainable Development Strategy mentioned as an objective to break the links between economic growth, the use of resources and the generation of waste. The renewed EU Sustainable Development Strategy (SDS) of 2006 chose another wording. It included amont its resource- and waste-related aims: decoupling economic growth from environmental degradation; improving resource efficiency; avoiding overexploitation of natural resources; avoiding the generation of waste and enhancing efficient use of natural resources by applying the concept of life-cycle thinking and promoting reuse and recycling. In many aspects, the SDS forms an additional basis for current resource and waste policy development; however, it cannot be said to what extent the SDS has directly affected the debates in waste policy. The **Lisbon Strategy** emphasised the importance of decoupling waste generation and resource use from economic growth. The 2005 review of the Lisbon Strategy in turn, narrowed the priorities of the Strategy to promoting growth and jobs, focusing primarily on ways to increase the EU's competitiveness.[329] The issue of decoupling of resource use/waste generation and economic growth therefore did not seem to be of primary importance any more. According to stakeholders interviewed in the context of this study, the Lisbon Strategy did not have an effect on waste policy developments.

International Commitments

International commitments play a certain role when it comes to the issue of waste shipment. The adaptation of the Waste Shipment Regulation was *inter alia* called for by the amendments to the Basel Convention and an OECD Decision.[330]

3.4.4 Assessment of the policy mix and approach of the 6EAP

Policy mix

The 6EAP lays down rather vague qualitative objectives for the issue of resources and waste, e.g. reducing waste, increasing recycling, and more sustainable production and consumption patterns. In general, no quantitative targets were laid down in the 6EAP for natural resources and waste, therefore the assessment of the policy mix and the approach of the 6EAP can only be assessed with a view to whether policy measures have been developed to contribute to the objectives of the 6EAP.

The measures taken to achieve the aims of the 6EAP were in part suitable to fulfil its overall aims and specific objectives, especially in the field of improving resource efficiency and waste management to bring about more sustainable production and consumption patterns.

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329 See EU Parliament, Directorate General for internal policies, Welcome Package Environment, p. 11 http://www.europarl.europa.eu/meetdocs/2009_2014/documents/envi/dv/environment_welcome_package_/environment_welcome_package_en.pdf (11 December 2010).

330 See George Kiayias, The EU Waste Shipment Regulation – Enforcement and Implementation, 2008, http://www.bipro.de/waste-events/doc/events08/hu_pres_1_eu_gk.pdf (11 July 2010).

The measures taken include legislation (Directives, Decisions and Regulations), Thematic Strategies and Strategy Papers/Action Plans. The **binding measures** such as directives and regulations can be identified as having had the strongest impact bringing about the desired changes, especially in the field of reducing disposal of waste in landfill, improving management of landfills, and increasing the recycling and recovery of waste.

The measures taken on the issue of waste recycling are the most promising and concrete, whilst the measures taken in the field of waste prevention or decoupling resource use from economic growth are rather weak. As a consequence, there are clear success stories in the field of product-related measures and waste recycling, whereas no real progress can be observed in waste prevention and the decoupling of waste generation and resource use from economic growth.

The **Thematic Strategies** were helpful in devising programmatic steps to be taken in the corresponding policy fields, but were not far-reaching enough. The Strategies had the benefit of making the vision and plans of the Commission in certain policy fields transparent, but their contents were rather vague. The Thematic Strategy on Waste did however clearly serve as an intermediate vehicle between the 6EAP and the concrete proposals of new directives or regulations, thus acting as a driver for legislation.

Stakeholders have emphasized that while the binding measures based on the 6EAP may have had the most profound impact in directing Member States' and citizens' actions towards achievement of the 6EAP aims/objectives, binding instruments alone cannot guarantee the evolution of policies and legislation in favour of the 6EAP's aims. The issue of awareness raising and synergies e.g. between environmental and economic issues is a vital issue to convince Member States and policy makers to support the 6EAP's waste and resource management aims. The link between resources and waste management, i.e. the potential of high-quality processing of waste into secondary products, is a very important driver instituted by the 6EAP to motivate Member States and citizens/business to make progress towards the aims of the 6EAP.

Timing of measures and the 6EAP 10-year timeframe

Given that the 6EAP mostly formulates broad and qualitative objectives, the period of 10 years appears to have been an ideal time span for policymakers to design and enforce measures to approximately achieve the objectives. The 10-year timeframe has allowed policymakers to set more concrete objectives on the basis of the 6EAP's aims, and to develop measures to direct the development of waste management as well as resource use in a direction compatible with these aims. Thus, the 10-year timeframe allowed sufficient time for policy makers to develop policy measures, for Member States to implement those measures set at the European level, and to gauge their initial effects with regard to the objectives of the 6EAP.

3.4.5 Impact of the 6EAP on the adoption of measures

3.4.5.1 Impact of the 6EAP

In relation to **waste**, the 6EAP is not the only, nor even the most decisive, reason why measures have been adopted in this area. For example the WEEE and RoHS Directives adopted in 2003 foresaw their own review in 2008, obliging the Commission to take action; the review of the Waste Shipment Regulation was necessary as a result of amendments to international agreements and decisions; and the Directive on Waste needed to be updated *inter alia* in order to react to rulings of the European Court of Justice.

In the field of waste management, the 6EAP principally builds on and perpetuates policy choices that had been made prior to its adoption – e.g. prioritising waste prevention and recycling over the disposal of waste, and reducing hazardous waste. The objectives laid down in the 6EAP continue and intensify these approaches, without adding any completely new policy options, approaches or targets. Bearing this in mind, while the measures adopted after the 6EAP could potentially have been taken without the 6EAP, it can be argued that the 6EAP provided one further motivation to take action in a certain direction. The 6EAP served to solidify a specific direction that European waste policy had taken since the 1990s, and also defended these choices against ideas to liberalise waste policy and water down the high environmental standard of waste management. One indication of the relevance of the 6EAP is that many of the adopted directives refer to it in their preliminaries. Stakeholder interviews concluded that negotiators of waste legislation were well aware of the 6EAP and that it was useful as it spelled out the details and directions that EU waste policy should take.

The 6EAP also clearly provided the basis of the Thematic Strategies on Resources and Waste, which in turn acted as transparent documents offering an insight into the position of the Commission on various waste- and resource-related issues. In this way, the Thematic Strategies act as a linking instrument between the 6EAP and the final adopted directives and regulations. In this context, it can be observed that while the Thematic Strategies were not closely aligned with the 6EAP's requirements (see above), the legislation that stems from the Strategies (e.g. the final WFD) tend to better take the 6EAP's objectives into account. At least with regard to the example of the new WFD it can be argued that it was the European Parliament to have ensured that some of the objectives of the 6EAP were adequately taken into account in concrete policymaking (e.g. with regard to waste recycling targets and waste prevention).

In the **resources** field, the 6EAP did not lay down particularly concrete objectives for resource use or resource policy. Given that resource policy is a rather new policy field, the 6EAP could not build on existing policy choices, which it might have been able to reinforce. Given the absence of concrete objectives, the 6EAP did not succeed in shaping European resource policy to a considerable extent. The 6EAP was clearly the basis for the development of the TS on Resource Use, which in turn did not fulfil most of requirements set by the 6 EAP, in particular the setting of targets. The creation of new institutions has been achieved by the TS on Resource Use. A series of Action Plans and product-related directives that could contribute to improving resource efficiency have been published contributing to the resource-related objectives of the 6EAP.

3.4.5.2 Impact of the 6EAP vis-à-vis other EU strategies and international commitments

Waste prevention and the efficient use of natural resources by applying the concept of lifecycle thinking and promoting reuse and recycling is mentioned in the EU SDS (2006), breaking the links between economic growth, the use of resources and the generation of waste figured in the EU SDS 2001, thus the different editions of the SDS support key objectives of the 6EAP. However, the extent to which the SDS significantly affected the ambition of EU waste and natural resource policy cannot be measured. The Lisbon Strategy included different aspects of resource use and natural resource management. The original Lisbon Strategy issued in 2000 included the aspect of decoupling resource use and waste production from economic growth, but this issue was not repeated in the revised Lisbon Strategy in 2005. This exclusion can be interpreted to imply that resource efficiency and waste prevention were no longer priority issues in the context of the Lisbon Strategy.

3.5 International Issues

3.5.1 Introduction

The overall aims of the 6EAP in relation to international issues as set out in Article 2(6) are to stimulate:

- 'the positive and constructive role of the European Union as a leading partner in the protection of the global environment and in the pursuit of a sustainable development;
- the development of a global partnership for environment and sustainable development;
- the integration of environmental concerns and objectives into all aspects of the Community's external relations'.

Article 9(1) set out **specific objectives** for action on international issues:

- the pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment;
- the further promotion of sustainable consumption and production patterns at the international level;
- making progress to ensure that trade and environment policies and measures are mutually supportive'.

Article 9(2) also includes a number of **priority actions** relating to different sub-areas.

Integration of environment protection in Community's external policies

- Integrating environment protection requirements into all the Community's external policies, including trade and development cooperation, in order to achieve sustainable development by inter alia the elaboration of guidelines.

Environment and development targets at the World Summit on Sustainable Development in 2002

Establishing a coherent set of environment and development targets to be promoted for adoption as part of 'a new global deal or pact' at the World Summit on Sustainable Development in 2002.

International environmental governance

- Work towards strengthening international environmental governance by the gradual reinforcement of the multilateral cooperation and the institutional framework including resources.

International conventions and agreements

Aiming for swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment where the Community is a Party.

- Promoting better policy coherence by linking the work done within the framework of the different conventions, including the assessment of inter-linkages between biodiversity and climate change, and the integration of biodiversity considerations into the implementation of the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

Foreign investment and export credits

- Promoting sustainable environmental practices in foreign investment and export credits.

Evaluation of risks to environment and health

- Intensify efforts at the international level to arrive at consensus on methods for the evaluation of risks to health and the environment, as well as approaches of risk management including the precautionary principle.

Trade and environment

- Achieving mutual supportiveness between trade and the needs for environmental protection, by taking due account of the environmental dimension in Sustainability Impact Assessments of multilateral trade agreements to be carried out at an early stage of their negotiation and by acting accordingly.
- Further promoting a world trade system that fully recognises Multilateral or Regional Environmental Agreements and the precautionary principle, enhancing opportunities for trade in sustainable and environmentally friendly products and services.

Cross-border environmental cooperation

- Promoting cross-border environmental cooperation with neighbouring countries and regions.

It should be noted that although the 6EAP includes the aim of integrating environmental concerns and objectives into *all* aspects of the Community's external relations, the analysis in this report focuses in particular on integration in the EU's development, trade and neighborhood policies. A comprehensive assessment of integration in all the Community's external policies is beyond the scope of this report.

It should also be noted that, in addition to the explicit objectives and priority actions relating to international issues in the 6EAP, there are a number of **internal environmental objectives of the 6EAP which have an implicit external dimension**. For example, the 6EAP includes the objective of ensuring that the consumption of resources does not exceed the carrying capacity of the environment. While this objective does not explicitly refer to the global environment, the interlinked nature of ecosystems and the world's resources implies that this objective refers not only to the EU's use of its own resources but also its use of global resources. Thus, a number of internal EU policies have implicit external consequences, most notably in relation to the consumption of natural resources, e.g. the Common Agriculture Policy, Common Fisheries Policy, but also in terms of encouraging different production patters, e.g. through EU product standards. The external consequences of internal policies have an effect on the achievement of the EU's international objectives as set out in the 6EAP. However, a detailed consideration of the external impact of the EU's internal policies is beyond the scope of this report.[331]

A detailed assessment of the main measures adopted since 2002 and the achievement of the 6EAP objectives in relation to international issues can be found in Annex A, section 1.5. This assessment indicates that the EU has had mixed success in reaching the objectives of the 6EAP and implementing priority actions in the international area. A summary of the achievement of relevant 6EAP objectives is set out in section 3.5.2. Section 0 outlines the key drivers and barriers affecting the achievement of the 6EAP objectives in this area. A detailed assessment of these drivers and barriers can be found in Annex A, section 1.5. An analysis of the policy mix / approach adopted in relation to integration of environmental considerations in EU development cooperation policy is provided in section 3.5.4. This chapter concludes with an assessment of the impact of the 6EAP on the adoption of measures in the international area as well as the impact of other EU strategies and processes on the adoption of measures in this area.

3.5.2 Summary assessment of the achievement of objectives in the international area

Integrating environmental protection requirements in the EU's development cooperation policy

The EU has adopted an overarching policy framework and a number of tools and procedures for integrating the environment in the EU's development cooperation policy. The elaboration of guidelines on integrating the environment and climate change in development policy (as called for in the 6EAP) as well as the provision of *ad hoc* support services and training seek to facilitate the uptake of these tools and procedures. EU funding for environment programmes has increased and a specific thematic programme dedicated to the environment

[331] For a discussion on this issue, see Adelle, C., Fajardo del Castillo, T., Pallemaerts, M., Withana, S., (2010): The External Dimension of the Sixth Environmental Action Programme: An Evaluation of Implementing Policy Instruments, Report for the IBGE-BIM, IEEP, London.

and natural resources (ENRTP) under the Development Cooperation Instrument (DCI) was created in 2006.

However, despite an increasing emphasis on the environment in EU development cooperation policy, this has not been translated into environmental programmes and projects in beneficiary countries and is only rarely reflected in actual budgetary allocations. According to a 2009 Commission report, funding for environment programmes represents approximately 4.3% of EC external assistance.[332] According to assessments by the Commission and the Court of Auditors, despite a number of tools to promote integration, only limited use is made of these tools in shaping strategies, programmes and projects in beneficiary countries and their recommendations are often not implemented in practice. For example, despite evidence of a 'modest increase' in the use of EIAs and SEAs, in general they remain underutilized, have had limited influence on the policy formulation process, and their recommendations are often not followed-up.[333,334] An independent assessment also indicates that despite the increasing numbers of Country Environmental Profiles (CEPs) developed, in the majority of cases CEPs have had limited influence on the programming process, their findings are often not incorporated in adopted Country Strategy Papers/National Indicative Programmes, and they contain numerous and significant gaps in the analysis and coverage of environmental issues.[335] It is important to note that the extent to which the environment is successfully mainstreamed in EC development cooperation policy is dependent on how high a priority both beneficiary countries and the Commission attach to addressing environmental issues raised by the CEPs/REPs in CSP/RSPs and subsequent NIPs/RIPs. At the programme level, beneficiary countries and regions are required to concentrate funding on one or two focal sectors.

According to a 2009 Commission report, 'overall, lessons learned show that the EC and other donors have not been consistent or effective enough in mainstreaming environmental issues'.[336] To a large extent, this can be explained by the fact that, in the majority of cases, partner countries do not select the environment as a focal area for support (see section below on drivers and barriers for further discussion on this issue). Thus, as concluded in assessments by the Commission and the Court of Auditors, only limited progress has been made towards the 6EAP objective of integrating the environment in EC development cooperation policy.[337] The extent to which this objective will be better achieved under the

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332 CEC (2009a): Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC (2009)555). Brussels. 21/04/2009.

333 Ibid.

334 Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P. 1-39.

335 WWF, Fern, Birdlife International. (2008). Environmental tools in EC development cooperation: An analysis of country and regional environmental profiles, FERN. April 2008. Brussels.

336 CEC (2009b): Improving environment integration in development cooperation, Issues paper, March 2009.

337 See Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39 and CEC. (2009a). Commission Staff

revised EU-Member State environment integration strategy[338] currently under development remains to be seen. Furthermore, it should be noted that the increasing political attention to climate change is creating momentum for 'climate-proofing' development cooperation as well as 'development-proofing' environmental policies[339] and is likely to have a significant impact on the extent to which the environment integration objective can and will be met in the future.

Establishing a coherent set of environment and development targets as part of 'a new global deal or pact' at the 2002 WSSD

The 2002 World Summit on Sustainable Development (WSSD) resulted in the Johannesburg Plan of Implementation.[340] The Plan set out a number of vaguely worded objectives rather than a coherent set of targets or 'a new global deal or pact' and contained only few quantified, time-bound measurable targets (e.g. on sanitation) with no specific commitments by individual governments. Thus, it appears that the 6EAP priority action in this area has been achieved. However, it should be kept in mind that the WSSD was not mandated with developing a new convention, but rather with implementing existing commitments.[341] Moreover, it should be noted, that the EU was not the only or main party responsible for this outcome and that the EU had in fact proposed more ambitious targets to be included in the Plan, e.g. a target of halting and reversing the current loss of natural resources and biodiversity by 2015[342], however, these proposals were not acceptable to some other countries and consequently did not feature in the final plan.

Multilateral environmental agreements and international environmental governance

The EU has made consistent efforts towards the 6EAP objective of strengthening international environmental governance by the gradual reinforcement of multilateral cooperation and the institutional framework including resources. The number of environmental agreements approved, the EU's active role in environmental negotiations, and the EU's consistent support for a specialised UN environment agency are indicators of the EU's commitments in this area. However, despite the EU's efforts, progress in this regard is dependent on a number of factors beyond the control of the EU, in particular the political priorities/interests of other parties involved in international negotiations and other processes. The level of funding for many MEAs has been described as insufficient[343], however, this is by

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Working Document – Improving environmental integration in development cooperation. (SEC (2009)555). Brussels. 21/04/2009.

338 Council of the EU (2009): Council Conclusions on Integrating Environment in Development Cooperation, 11474/09, Brussels, 26/06/2009.

339 Wolff, S., Seters, J. (2010): European Development Cooperation. Brokering environmental knowledge beyond Lisbon, Maastricht/The Hague, ECDPM and Clingendael Institute, Discussion Paper No. 102, September 2010.

340 http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter1.htm.

341 La Viña, Antonio G. M/ Hoff, Gretchen/ DeRose, Anne Marie (2003): The Outcomes Of Johannesburg: Assessing The World Summit On Sustainable Development, p. 2, http://pdf.wri.org/wssd_sais_outcomes.pdf.

342 See Lightfoot, Simon/Burchell, Jon (2005): The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?, Journal of Common Market Studies, Vol. 43:1, p. 75-95, 84.

343 Tadanori Inomata, Management Review of Environmental Governance within the United Nations System, UN Joint Inspection Unit, JIU/REP/2008/3, UN, Geneva, 2008, p. iii.

no means the responsibility of the EU alone, which has for example made substantial contributions to financing UNEP.

The EU has demonstrated serious commitment to the 6EAP objective of swift ratification, effective compliance and enforcement of international conventions and agreements relating to the environment where the EU is a Party. The EU has worked towards the implementation of existing conventions by endorsing supplementing protocols although the pace of ratification has not increased considerably.

The EU has promoted better policy coherence by linking the work done within the framework of the different conventions through active support and contributions to international processes to coordinate MEAs, including biodiversity and climate change policies at the international level[344] and the simultaneous extraordinary meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions (ExCOPs).[345] To what extent the implementation of these joint activities will contribute to better policy coherence in practice remains to be seen in the future process.

These activities imply that the EU has made progress towards the 6EAP objectives of pursuing ambitious environmental policies at the international level, stimulating the positive and constructive role of the EU as a leading partner in the protection of the global environment, and the development of a global partnership for environment and sustainable development. However, this does not mean that these objectives have been fully reached at the international level as international efforts have not yet been successful in reducing environmental pollution and the use of natural resources to the carrying capacity of the global environment[346], while the outcome of the Copenhagen climate change conference in 2009 revealed that the EU's leadership on environmental issues in the global context may not always be apparent.

Integrating environmental protection requirements in the EU's trade policy

The EU has promoted the integration of environmental concerns into its trade policies procedurally, notably through Sustainability Impact Assessments (SIAs) of trade agreements. The EU has also taken measures to achieve mutual supportiveness between trade, promoting a world trade system that fully recognises Multilateral or Regional Environmental Agreements and enhancing opportunities for trade in sustainable and environmentally friendly products and services by playing an active role in WTO negotiations on the environment. The EU has undertaken efforts to promote sustainable consumption and production patterns at the international level by regulating trade in specific products of

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344 See IISD, Earth Negotiations Bulletin. Vol. 9 No.280, http://www.iisd.ca/download/pdf/enb09279e.pdf.

345 See: *ad hoc* joint working group on enhancing cooperation and coordination among the Basel, Rotterdam and Stockholm conventions, First Meeting, Helsinki, 26-28 March 2007, *Comments received on the* supplementary *report on cooperation and coordination between these three conventions*, BC-RC-SC/AHJWG.1/3, http://ahjwg.chem.unep.ch/documents/stmeeting/03a1e.pdf; for proposals on key procedural questions and on funding and on nomination of experts, see IISD, *Earth Negotiations Bulletin*, Vol 15. Nr. 147, http://www.iisd.ca/download/pdf/enb15147e.pdf.

346 One prominent indicator to measure global consumption in natural resources compared to the world's carrying capacity it the ecological footprint. Currently, humanity uses the equivalent of 1.5 earth annually, see World – Footprint, Do we fit on the planet, http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/.

environmental significance, e.g. through the negotiation of Voluntary Partnership Agreements (VPAs) under the FLEGT licensing scheme for imports of timber into the EU and more recently through the Regulation laying down the obligations of operators who place timber and timber products on the market.[347]

However, it is doubtful whether the EU has fully achieved its objective of taking 'due account' of the environmental dimension in multilateral trade agreements as it has been maintained that trade SIAs have mostly had little direct impact on the EU's position in trade negotiations.[348] Some SIAs have also been criticised for not fully taking account of the environmental impacts of trade agreements.[349] Despite the EU's efforts, little progress has been made in reaching agreement on outstanding environmental issues in the Doha Round of WTO negotiations. Moreover, it is not evident that the EU has been active in promoting the precautionary principle in relation to trade policies or more generally at the international level during the 6EAP period. Furthermore, the framing of trade policies and strategies as can be seen in the Global Europe Strategy continues to focus on securing the EU's access to natural resources worldwide rather than addressing the issue of reducing the use of resources. In terms of promoting sustainable consumption and production patterns at the international level, the bilateral VPA approach of the FLEGT Regulation and the limited range of timber products covered have been assessed to be insufficient to combat illegal logging[350] and the Regulation does not specifically address sustainable production/management aspects (with the exception of prohibiting the import of species protected under Regulation (EC) No 338/97) or outline necessary environmental standards on top of fulfilling legality requirements. Although it is still too early to assess the effectiveness of the new Regulation laying down the obligations of operators who place timber and timber products on the market,[351] EU efforts to improve the current system can be considered a positive step.

Promoting sustainable environmental practices in foreign investment and export credits

The EU's legislative framework governing the foreign direct investment of EU companies is still weak and little action has been taken to date beyond the adoption of non-binding declarations and voluntary mechanisms within the wider field of corporate social responsibility (CSR). An important element of the EU's overall investment policies are the practices of the European Investment Bank (EIB). The EIB has publically committed to prioritizing environmental considerations in its lending objectives and requires all projects to

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347 Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market , OJ L 295, 12.11.2010, p. 23–34.

348 Clive George and Colin Kirkpatrick, Creation of processes: sustainability impact assessments, in: Diana Tussie, The Politics of Trade - The Role of Research in Trade Policy and Negotiation, Republic of Letters/Brill/IDRC, 2009, http://www.idrc.ca/en/ev-141041-201-1-DO_TOPIC.html.

349 See Hall for the EPAs final trade SIA, Hall, Ronnie (2008) Undercutting Africa: Economic Partnership Agreements, Forests and the European Union's Quest for Africa's Raw Materials. Friends of the Earth, London, p. 18, http://www.foe.co.uk/resource/reports/undercutting_africa.pdf.

350 EU Commission, Public Consultation on 'Additional Options to Combat Illegal Logging' - Analysis and Report, p. 3.

351 Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market , OJ L 295, 12.11.2010, p. 23–34.

pass certain environmental and social standards.[352] The EIB also finances projects that aim to directly protect and enhance the natural environment and / or promote sustainable environmental practices in local communities.[353] However, despite efforts by the EIB to promote sustainable environmental activities through its lending practices, some funded projects have been criticised for their detrimental effect on the environment and in certain cases public campaigns have led the Bank to withdraw from projects with a questionable environmental record.[354] Thus, despite some efforts, limited overall progress has been made in relation to promoting sustainable environmental practices in foreign investment.

In relation to the promotion of sustainable environmental practices in export credits, since 2003, export credit agencies (ECAs) of OECD countries have committed themselves to common environmental assessment procedures and standards, known as the OECD 'Common Approaches on Environment for Officially Supported Export Credits'.[355] In 2006, the Commission issued a Proposal for a Council Decision on the application of certain guidelines in the field of officially supported export credits[356] which would make the OECD Common Approaches to the Environment applicable in EU law. However, this proposal has yet to be adopted. Moreover, as pointed out in the Draft Report by the European Parliament's Committee on International Trade, 'Half of all CO_2-emission-intensive industrial projects in developing countries have some form of ECA support'[357], which casts doubt on the extent to which environmental concerns have been fully integrated in the lending practices of ECAs in Member States. Thus, only limited progress has been made in relation to the promotion of sustainable environmental practices in export credits.

Promoting cross-border environmental cooperation and integrating environmental considerations in the EU's neighbourhood policies

The main emphasis of the European Neighbourhood Policy (ENP) is on political reform and economic cooperation, nonetheless, environmental protection, nature conservation and sustainable management of natural resources are among the priority areas of cooperation with the EU's neighbouring countries. According to the Commission's 2010 report on the ENP, many neighbouring countries are showing an increasing interest in EU experiences and are ready to converge with key elements of the EU's environmental legislation and the ENP has contributed to greater openness and accountability in environment policy by

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352 EIB (2009): The EIB Statement of Environmental and Social Principles and Standards, p.10, http://www.eib.org/about/publications/environmental-and-social-principles-and-standards.htm .

353 See http://www.eib.org/projects/topics/environment/index.htm.

354 See ENDS Europe DAILY, Friday 23 July 2010, EIB drops controversial Ethiopian dam project.

355 See http://www.oecd.org/department/0,3355,en_2649_34181_1_1_1_1_1,00.html.

356 Proposal for a Council Decision on the application of certain guidelines in the field of officially supported export credits, COM(2006)456, Brussels 10.08.2006, as amended by the Corrigendum of 12.09.2006, COM(2006)456 final/2, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2006)0456(cor1)_/com_com(2006)0456(cor1)_en.pdf.

357 Draft Report on the proposal for a decision of the European Parliament and of the Council on the application of certain guidelines in the field of officially supported export credits (COM(2006)0456), p. 13, http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+COMPARL+PE-452.514+01+DOC+PDF+V0//EN&language=EN.

facilitating the involvement of NGOs in policy making processes.[358] The environment is also a key area for cooperation in various regional and multilateral cooperation initiatives including the Union for the Mediterranean and the EU has pushed forward regional cooperation on trans-boundary environmental problems through several ad hoc initiatives such as the Black Sea Synergy.

Although the environment and sustainable development are included among the priorities of the Action Plans, according to some commentators few specific proposals in this area are made[359], commitments in the Action Plans are often not implemented in practice, and only limited support has been provided to environmental projects and programmes to date.[360] It has also been noted by NGOs that investments and technical and development cooperation under the ENPI in the energy sector has been dominated by infrastructure projects, notably highways and pipelines.[361] The ENPI Regulation does not contain strict requirements for the environmental evaluation of ENP programmes/projects[362] and while the EU cannot impose requirements on the neighbouring countries, there is some degree of indirect conditionality in the allocation of funding given the objective of gradual convergence with EU policies, including on the environment.[363] Despite some noteworthy initiatives focusing on environmental problems such as renewable energy (Mediterranean Solar Plan), de-pollution (Horizon 2020 initiative) and environmental governance (under the Eastern Partnership), it has been noted that with the exception of Horizon 2020, these initiatives are developing very slowly and un-transparently with little or no civil society involvement.[364] Moreover, it has been noted that these initiatives are designed to tackle specific problems and insufficient attention is afforded to other environmental issues such as forests, biodiversity in general, climate change adaptation, fisheries and marine protected areas.[365]

Thus, despite the adoption of a number of strategies and tools, there remains a gap between what is set out in these documents and their implementation in practice. This in part reflects the fact that it is mostly up to the partner countries themselves to define specific national priorities and the EU has a limited role in this selection process. Thus, certain issues such as energy security and infrastructure tend to receive more attention than others (e.g. biodiversity), reflecting the underlying political priorities of partner countries. This is perhaps somewhat unsurprising given that the main emphasis of the ENP is on political reform and

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358 CEC (2010c): Communication from the Commission to the European Parliament and the Council - Taking stock of the European Neighbourhood Policy. (COM(2010)207). 12/05/2010.

359 WWF (2005): Greening the European Neighbourhood Policy (ENP). WWF Briefing. April 2005.

360 WWF (2009): WWF position on the ENPI mid-term review. March 2009.

361 NGO Representatives (2007): Letter from representatives of several non-governmental organisations from the EU and neighbouring countries who participated in the conference on 'Working Together – Strengthening the ENP' held in Brussels on 3 September 2007. Brussels. 8/10/2007.

362 WWF (2006): WWF Proposals for the European Neighbourhood and Partnership Instrument (ENPI) Implementation.

363 Stakeholder consultation, interview.

364 Quintet Group of Brussels-based NGOs, (2010), Joint Memorandum to Štefan Füle, European Commissioner for Enlargement on Concerns and Recommendations on European Neighbourhood Policy, September 2010.

365 WWF (2010): Is the Union for the Mediterranean paving the way for sustainability? - Discussion Paper -Revised October 2010.

economic cooperation. These factors undermine the achievement of the 6EAP objectives of promoting cross-border cooperation on environmental issues and integrating environmental considerations in its neighbourhood policies.

3.5.3 Summary assessment of drivers and barriers

A number of different factors have affected the achievement of the aims, objectives and priority actions of the 6EAP in the International area. Some factors have helped achieve objectives (drivers) whereas other factors have undermined or prevented progress (barriers). A summary of the main drivers and barriers that have affected the attainment of 6EAP objectives in this area, as identified through our research and stakeholder consultation, are set out below. A more detailed assessment of the drivers and barriers in this area can be found in Annex A, section 1.5.

The **integration of environment protection requirements in EU development policy** is dependent on the extent to which beneficiary countries and regions prioritize the environment in their planning and programming activities. Beneficiary countries and regions are required to concentrate funding on one or two focal sectors, given that the environment is rarely considered an urgent priority by beneficiaries it is often not picked as a focal sector and thus EU funding at the country level is rarely focused on the environment.[366,367] According to the Commission, the environment remains a lower priority on the agenda of many beneficiary countries due to the relatively low policy profile and the lack of information[368] or understanding of the links between the environment, development and poverty[369], thus acting as a barrier to achieving the 6EAP objective of integrating the environment in EU development policy. The 2006 Court of Auditors Report also criticized the Commission for the limited progress in building up environmental awareness and mainstreaming capacity in beneficiary countries and for the limited resources and capacity within the Commission services to ensure implementation of environmental integration activities[370] which have acted as further barriers in this area. Despite some improvement, there is still a lack of awareness in beneficiary countries and there is a need for more discussion at the national level. Calls have been made for the public availability of CEPs/REPs, EIAs and SEAs to allow civil

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366 It should be noted however that the environment is a more common intervention sector in regional programmes such as the ACP regional programmes for Central Africa and the Pacific and SWITCH-Asia given the trans-boundary nature of many environmental issues. CEC (2009b), Improving environment integration in development cooperation, Issues paper, March 2009.

367 Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39.

368 Although an increasing number of studies examining the economic costs of environmental degradation are available, the results of these studies are often not widely shared.

369 CEC (2009a): Commission Staff Working Document – Improving environmental integration in development cooperation. (SEC(2009)555). Brussels. 21/04/2009.

370 Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39.

society organizations to participate in programming and implementation of activities.[371] The limited use of the tools and procedures for integrating environmental protection requirements in the EU's development cooperation policy in practice including EIAs and CEPs have also been another barrier to effective integration. According to stakeholders interviewed in the context of this study, the main drivers behind the integration of the environment into the EU's development cooperation activities include the integration requirement in the Treaty, critical oversight (for example the 2006 report by the European Court of Auditors), the EU's commitment to Policy Coherence for Development, support from certain Member States and a number of international developments including the 1992 Rio Conference, the adoption of the Millennium Development Goals in 2000, the 2002 World Summit on Sustainable Development and the adoption of the Paris Declaration on Aid Effectiveness in 2005.[372]

In relation to **international environmental governance**, it should be noted that the EU emerged as a global 'green leader' in the second half of the 1980s.[373] Observers have identified, among other factors, the withdrawal of the US as a leader in international environmental policy making,[374] the EU's (competitive) interest in promoting its own rather stringent environmental standards at the international level,[375] and the EU's desire to shape its identity as a civilian world power[376] as possible reasons for the active role of the EU in international environmental policy making. Thus, these more general factors are likely to have played a significant role in the EU's approach towards international environmental governance throughout the 6EAP period. Nonetheless, a number of factors have played a role in further promoting this role including favourable public opinion, e.g. in relation to the EU's role in the adoption of the Cartagena Protocol on Biosafety and its later approval and in international climate negotiations. Competence for environmental agreements is frequently shared between the EU and the Member States, and in some cases only Member States had full standing in international negotiations. In certain cases where the Commission was not the sole negotiator on behalf of the EU, the EU has nonetheless been observed to have been a relatively influential[377] and coherent[378] actor in international negotiations. However, in some

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371 WWF, Fern, Birdlife International (2007): Environmental tools in EC development cooperation: Transparency and public availability of documentation - A review, September 2007, Brussels.

372 Stakeholder consultation, interview.

373 See e.g. Vanden Brande, Edith (2006): *The role of the European Union in global environmental politics: green civilian power Europe?* Ghent University. p. 7, http://www.keele.ac.uk/research/lpj/ecprsumschool/Papers/E.BrandeGnCivPower.pdf.

374 Ibid.

375 See Kelemen, R. Daniel (2010): Globalizing European Union environmental policy, *Journal of European Public Policy Vol.* 17, No. 3, pp. 335–349.

376 See the references in Kelemen, R. Daniel (2010): Globalizing European Union environmental policy, *Journal of European Public Policy Vol.* 17, No. 3, pp. 335–349, 338.

377 Chaban/Elgström/Holland also made a similar observation for three international trade or environment negotiation processes for which the distribution of competences between the EU and the member states was different. They observe that "the EU was seen as one actor, and as an extremely important actor, regardless of its forma position.", Natalie Chaban/Ole Egström/Martin Holland (2006). The European Union As Others See It, European Foreign Affairs Review, Vol 11, pp 245-262, 251.

instances the fact that competence is split between Member States and the EU has been noted to have had a negative impact on the EU's attainment of its objectives, e.g. during the 2002 WSSD.[379] External factors have also contributed to the extent that certain EU policy objectives were attained, e.g. EU proposals for UNEP reform have to date not been agreed given the reluctance of some other key parties.

In relation to **trade and investment,** in certain instances, decision-making procedures have led to the adoption of more ambitious legislative measures, e.g. the changes introduced by the Parliament to the Commission's proposal on illegal logging. In certain areas, public scrutiny has also influenced EU decisions, e.g. the conclusion of certain trade agreements in particular with developing countries and investment decisions by the EIB.[380] Stakeholder interests may also have influenced the level of ambition of certain measures**,** e.g. in relation to CSR, enterprises generally emphasize the voluntary nature of CSR and NGOs and trade unions stress the need for binding rules.[381] External factors arguably beyond EU control have also played a role in this area. In WTO negotiations, the most important factor preventing progress to date is the failure to reach consensus among WTO members in the negotiations. This is related to different economic and political interests of the members, in particular developed and developing countries. The fact that the Doha Round follows a unified approach, i.e. consensus needs to be reached on all of the negotiation items identified in the Doha agenda, does not facilitate the conclusion of the negotiations. A similar picture may be drawn with regard to the EU's own trade negotiations, where the interests and positions of the parties involved and the resulting compromises largely determine outcomes. The EU's position is, in turn shaped by many factors, including the negotiating mandate given to the Commission by Member States, the views of the European Parliament, Member States, civil society, and business actors.[382]

Despite the existence of several **ENP/regional** initiatives and tools dealing with the environment according to commentators, a major problem remains the lack of implementation of these measures which 'may be undermined by lack of awareness, weaknesses within environmental administrations, and competition with other priorities'.[383] This in part reflects the fact that it is mostly up to the partner countries themselves to define specific national priorities, and given that the main emphasis of the ENP is on political reform and economic cooperation, the environment is often not considered a key priority by partner countries. Improved capacity and participation of environmental civil society organisations would help reduce some of these implementation gaps; however the procedures and

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378 Vogler, John, Hannes Stephan (2007): The European Union in global environmental governance: Leadership in the making? *International Environmental Agreements* (2007) 7: 389-413, p. 408.

379 See Lightfoot, Simon/Burchell, Jon (2005): The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?, Journal of Common Market Studies, Vol. 43:1, p. 75-95, 82f.

380 Stakeholder consultation, interview.

381 Bernhard Perchinig (n.y): Antidiscrimination: A European Perspective, EIF Working Paper No. 10, p. 6.

382 Stakeholder consultation, interview.

383 WWF (2006): WWF Proposals for the European Neighbourhood and Partnership Instrument (ENPI) Implementation.

timeframes under the ENPI remain burdensome for civil society organisations and local authorities.[384]

3.5.4 Assessment of the policy mix and approach

As is evident from the analysis in Annex A, section 1.5, a number of different policy measures and tools have been adopted in the international area since 2002 which have contributed to the attainment of relevant objectives set out in the 6EAP. With regards to international development cooperation, the 6EAP did not propose a specific instrument or policy approach to implement its objective on integrating the environment into the EU's external policies. The 2006 Court of Auditors report on the Commission's approach to environment integration in development policy recognized the need for a more comprehensive framework to address the EU's obligation in this area. The 2005 European Consensus on Development goes some way to addressing this by providing an overarching framework for EU development policy and highlighting the EU's increased prioritization to funding environmental programmes and projects. However 'there remains the need to make the policy operational by establishing a clear strategy' in particular addressing the issue of *how* the Commission will seek to ensure that this particular policy priority (which is one of nine possible focal sectors in country and regional programmes) is actually translated into environment programmes and projects in adopted CSPs/RSPs and NIPs/RIPs.[385] This is an important consideration given that in most beneficiary countries the environment is often not the highest national priority and thus risks not being allocated sufficient funding despite the increased emphasis in the Commission's approach to development cooperation activities – as has proved to be the case (see above). This also arises in relation to the ENP, where despite the adoption of a number of strategies and tools there remains a gap between what is set out in these documents and their implementation as partner countries are responsible for defining specific national priorities and thus certain issues tend to receive more attention than others in practice.

3.5.5 Impact of the 6EAP on the adoption of measures

3.5.5.1 Impact of the 6EAP

It is difficult to accurately establish the extent to which an overarching framework like the 6EAP has influenced specific policy developments. Some general observations based on our research and stakeholder consultations are set out below.

The 6EAP reiterated the requirement for **environmental integration in EU development policy** which had been instigated prior to the adoption of the 6EAP in response to requirements in the Treaty and the Cardiff integration process as well as developments in the

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[384] EP (2009): European Parliament resolution of 19 February 2009 on the review of the European Neighbourhood and Partnership Instrument (2008/2236(INI)).

[385] Court of Auditors (2006): SPECIAL REPORT No 6/2006 concerning the environmental aspects of the Commission's development cooperation, together with the Commission's replies (pursuant to Article 248(4), second subparagraph, EC) (2006/C 235/01). Official Journal C235 29/09/2006. P 1-39.

international agenda (see below). The 2001 Environment Integration Strategy[386] was meant to complement among others the 6EAP (which was being discussed at the time) and the EU SDS. The Strategy mentions the Commission's proposal to include the integration of environmental concerns and sustainable development in all the EU's external policies as a priority action in the 6EAP; thus using the 6EAP as a means of providing further justification for the approach set out in the Strategy. According to a stakeholder interviewed in the context of this study, the 6EAP has not been mentioned in forums or discussions in relation to integrating the environment in development cooperation policy and has not been a major policy driver or vehicle for EU action in this area.[387] With regard to **international environmental governance**, it is not evident that the 6EAP played a role in the EU's decision-making process relating to relevant actions and measures analysed above. The 6EAP is, however, mentioned in the ENRTP as part of the relevant policy framework. The 6EAP does not appear to have played a significant role in the discussions leading to the adoption of most of the **trade or investment related measures** assessed above. In the context of negotiations on trade agreements, according to a stakeholder interviewed in the context of this study, the 6EAP has not had any influence on either the trade SIAs or EPAs.[388]

However, there are a few examples where the 6EAP appears to have played a role. For example, in relation to the **FLEGT Regulation**, the original Communication from the Commission on the FLEGT proposal for an EU Action Plan[389] outlines the intent to build on the commitments made in the 6EAP to combat illegal logging and the associated trade. The European Parliament resolution on speeding up the implementation of the EU Action Plan on FLEGT[390] also refers to the 6EAP in its first paragraph. However, the 6EAP does not seem to have influenced the adoption of the new timber Regulation (see section 3.2). The **EIB**'s Statement on Environmental and Social Principles and Standards stipulates that the EIB 'aims to allocate a significant proportion of total lending to environmental protection and sustainable communities. Projects that qualify in this sense are those that make a significant contribution to the Priority Areas and Thematic Strategies of the EU Sixth Environment Action Program (EAP)...'.[391] In relation to funding within the EU, the 6EAP is viewed as a cornerstone of the EIB's environmental lending practices.[392] Funding priorities for EU

386 CEC (2001): Commission Staff Working Paper, Integrating the Environment into EC Economic and Development Co-operation, (SEC(2001)609). Commission of the European Communities. 10/04/2001.

387 Stakeholder consultation, interview.

388 Stakeholder consultation, interview.

389 CEC (2003): COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT: forest law enforcement, governance and trade (FLEGT) - proposal for an EU action plan, (COM(2003)251), 21/5/2003.

390 European Parliament resolution on speeding up implementation of the EU action plan on Forest Law Enforcement, Governance and Trade (FLEGT), 7 July 2005.

391 EIB (2009): Statement on Environmental and Social Principles and Standards, p. 4, http://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf.

392 Stakeholder consultation, interview.

external actions are set by mandates given to the EIB by competent EU bodies and the 6EAP does not have a direct influence on EIB activities in this area.[393]

Thus, it appears that, with some noteworthy exceptions, the 6EAP has not been a major driver or vehicle for EU action in this area. As can be seen from the assessment in the rest of this Chapter and in Annex A, section 1.5, objectives and policy priorities relating to the international dimension were to a large extent integrated in the framework of the EU's environmental policy, including the Treaties, before the adoption of the 6EAP. Commitments towards the external dimension in the EU SDS, various developments in the international agenda, and the EU's interests in terms of promoting its reputation as a 'green' leader in the international arena, have been among the main factors driving forward action in the international area. As noted in the introduction to this Chapter, a number of internal EU policies have implicit external consequences, most notably in relation to the consumption of natural resources, e.g. the Common Agriculture Policy, Common Fisheries Policy, but also in terms of encouraging different production patters, e.g. through EU product standards. The external consequences of internal policies have an effect on the achievement of the EU's international objectives as set out in the 6EAP. While one could argue that setting out the EU's international commitments alongside its wider environmental objectives could help to reduce the possibilities for incoherence between its internal and external actions, this does not seem to have been the case given the seemingly limited awareness of the 6EAP among the majority of actors involved in this context. Where the 6EAP may have played a role has been in reiterating certain commitments of the EU, in particular the requirement to integrate environmental considerations in all the EU's external relations, thus acting as a further justifying factor for action in this regard.

3.5.5.2 Impact of the 6EAP vis-á-vis other EU strategies

The requirement to integrate the environment in the definition and implementation of all EU policies is set out in Article 11 of the TFEU (ex Article 6 TEC). The systematic consideration of environmental aspects in EU **development cooperation** was part of the Cardiff process, launched in 1998 by the European Council.[394] This was followed by a Commission Communication in 2000 which outlined elements of a strategy for integrating environment and sustainable development in the EU's economic and development cooperation policy (COM(2000)264). The Development Council further endorsed the concept of environmental integration at a meeting in May 2000 and called on the Commission to prepare a specific strategy in consultation with Member States. In April 2001, the Strategy on Integrating the Environment into EC Economic and Development Cooperation (SEC(2001)609) was presented and subsequently endorsed by the Council which stressed that environmental considerations should be systematically incorporated in the preparation of all strategic plans and programmes of EC development co-operation. The focus on mainstreaming and the increased prioritization of the environment is also reflected in the 2005 Consensus on

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393 Stakeholder consultation, interview.

394 CEC (2010): Accompanying Document to the Report from the Commission to the Council and the European Parliament, Annual Report on the European Union's development and external assistance policies and their implementation in 2009, SEC(2010)773), 28/06/2010.

Development. The renewed EU SDS included an explicit external dimension and the SDS is sometimes raised in the context of discussions on integrating environment in development cooperation policy.[395] The more recent focus on integrating climate change in development cooperation activities reflects the shifting policy priorities of the EU and the increased attention afforded to climate change in recent years. Thus, the rationale for environmental integration in the EU's development cooperation policy was instigated prior to the adoption of the 6EAP and a number of initiatives were already underway to include environmental considerations in the policy and legal framework for EU development cooperation by the time the 6EAP was adopted.

The renewed SDS set targets on **international environmental governance** stating that 'the Commission and Member States will explore specific actions to bring about more sustainable consumption and production patterns at EU and global level, in particular through the UN Marrakech Process and the Commission for Sustainable Development'. It also committed the EU to contributing 'to improving international environmental governance (IEG), in particular in the context of the follow-up to the 2002 World Summit outcome, and to strengthening multilateral environmental agreements (MEAs)'. A specific action envisioned in this context is that 'Member States and the Commission should cooperate to promote the EU position on transforming the UN Environment Programme (UNEP) into a UN specialised agency or UNEO, based in Nairobi with a strengthened mandate and stable, adequate and predictable financing'. These objectives are somewhat similar to those set out in the 6EAP. However, it is difficult to assess which of the two strategic documents has had a greater impact, if any at all, on specific developments. The EU's role in relation to international environmental governance has of course also been influenced by developments in the international context and commitments that have subsequently arisen.

The renewed EU SDS set the objective of **promoting sustainable development in the context of WTO negotiations**, in accordance with the preamble to the Marrakech Agreement establishing the WTO which sets sustainable development as one of its main objectives. The Commission and Member States commit to 'increase efforts to make globalisation work for sustainable development by stepping up efforts to see that international trade and investment are used as a tool to achieve genuine global sustainable development.' More specifically, according to the renewed EU SDS 'investments through the **European Investment Bank** and the EU-Africa Partnership for Infrastructure should support sustainable development objectives. The European Investment Bank should assess its lending against the contribution to achieving the Millennium Development Goals and sustainable development'. The renewed SDS also set an objective for the EU to 'explore specific actions to bring about more sustainable consumption and production patterns at EU and global level, in particular through the UN Marrakech Process and the Commission for Sustainable Development.' There is, thus, a certain degree of overlap and complementarity with the 6EAP objectives. Some of the objectives of the renewed SDS are, however, more specific, e.g. concerning the role of the EIB. The relative impact of the SDS compared to the

[395] Stakeholder consultation, interview.

6EAP on specific policy developments in the trade and investment areas is however difficult to determine.

The main factor driving the development of the **ENP** was the 2004 enlargement and the need to build good relations with the EU's newly acquired neighbours so as to prevent the emergence of new dividing lines. It is important to keep in mind that while the ENP Action Plans include consideration of several environmental related issues, the underlying objectives of the process remain primarily political and economic. Issues relating to human rights, democracy, and good governance as well as greater economic integration tend to take priority. The Lisbon Treaty commits the EU to the development of a special relationship with neighbouring countries aiming at establishing an area of prosperity and 'good neighbourliness' (Article 8 TEU). It is likely that without the 2004 enlargement, EU cooperation with neighbouring countries and regions would have continued along the lines of pre-existing regional and multilateral cooperation initiatives such as the UfM and regional cooperation on trans-boundary environmental problems through *ad hoc* initiatives such as the Black Sea Synergy.

3.6 Strategic approaches and instruments

3.6.1 Introduction

The assessment of the strategic approaches and instruments presented in this Chapter is based on the same approach as the assessment of the environmental priority areas of the 6EAP and international issues. However, the results of the analysis are presented in a simplified form in this Chapter. The main reason for this is that in the context of the assessment of the 6EAP, which ultimately aims to lead to improvements in environmental quality, horizontal measures, i.e. strategic approaches and instruments, must be assessed in the context of the environmental aims. Such an assessment is presented in Chapter 4. Nevertheless, there are good pragmatic reasons why the 6EAP also contains horizontal objectives regarding governance. This Chapter assesses the degree to which these objectives were achieved.

3.6.2 6EAP aims with respect to strategic approaches and instruments

The 6EAP clearly attaches great importance to horizontal issues of governance as illustrated by the large number of relevant provisions in the Programme. However, the status of these horizontal issues within the 6EAP is not clear. Whereas the specific objectives and priority actions for the 6EAP's four environmental priority areas as well as for international issues can be found in a separate Article for each of these areas, the 6EAPs horizontal governance provisions are spread over Articles 2-4 and 10. Certain relevant provisions can also be found in Articles 5-9 on the environmental priority areas and international issues. While it might be argued that the presence of certain relevant provisions in Articles 5-9 reflects their horizontal character, the fact that the main horizontal governance provisions are spread over four, mainly horizontal articles is somewhat confusing. In addition, as argued in Chapter 2.1, the status of many provisions on strategic approaches and governance is ambiguous. It is often

not clear whether particular provisions are principles, overall aims, specific actions or priority actions. This chapter therefore merely distinguishes between ‘main aims’, which are listed below, and additional ‘objectives’ which can be found at the outset of each section of this Chapter.

The main aims of the 6EAP with respect to strategic approaches and instruments as set out in Article 2 are:

- ‘ensuring a high level of protection, taking into account the principle of subsidiarity and the diversity of situations in the various regions of the Community, and of achieving a decoupling between environmental pressures and economic growth. It shall be based particularly on the polluter-pays principle, the precautionary principle and preventive action, and the principle of rectification of pollution at source;
- The Programme shall form a basis for the environmental dimension of the EU SDS and contribute to the integration of environmental concerns into all Community policies, inter alia by setting out environmental priorities for the Strategy;
- The Programme shall ensure that environmental objectives, which should focus on the environmental outcomes to be achieved are met by the most effective and appropriate means available, in the light of the principles set out in paragraph 1 and the strategic approaches set out in Article 3. Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instruments, taking into account regional and local differences, as well as ecologically sensitive areas, with an emphasis on
- developing European initiatives to raise the awareness of citizens and local authorities extensive dialogue with stakeholders;
- raising environmental awareness and public participation;
- analysis of benefits and costs, taking into account the need to internalise environmental costs;
- the best available scientific evidence, and the further improvement of scientific knowledge through research and technological development;
- data and information on the state and trends of the environment.
- The Programme shall promote the full integration of environmental protection requirements into all Community policies and actions by establishing environmental objectives and, where appropriate, targets and timetables to be taken into account in relevant policy areas. Furthermore, measures proposed and adopted in favour of the environment should be coherent with the objectives of the economic and social dimensions of sustainable development and vice versa.
- The Programme shall promote the adoption of policies and approaches that contribute to the achievement of sustainable development in the countries which are candidates for accession (‘Candidate Countries’) building on the transposition and implementation of the acquis’.

The field of strategic approaches and instruments covers a number of discrete **areas and measures** which are analysed in the following sections.

3.6.3 Public participation

3.6.3.1 6EAP objectives

Article 2(3):

'Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instruments… with an emphasis on:

- extensive dialogue with stakeholders, raising environmental awareness and public participation'.

Article 3(9):

'To improve collaboration and partnership with consumer groups and NGOs and promote better understanding of and participation in environmental issues amongst European citizens requires:

- ensuring access to information, participation and justice through early ratification of the Aarhus Convention (1) by the Community and by Member States;
- supporting the provision of accessible information to citizens on the state and trends of the environment in relation to social, economic and health trends;
- general raising of environmental awareness;
- developing general rules and principles for good environmental governance in dialogue processes'.

Article 10 (priority action):

- 'development of improved mechanisms and of general rules and principles of good governance within which stake- holders are widely and extensively consulted at all stages so as to facilitate the most effective choices for the best results for the environment and sustainable development in regard to the measures to be proposed;
- 'strengthening participation in the dialogue process by environmental NGOs through appropriate support, including Community finance'.

3.6.3.2 Achievement of objectives

Most of the aims and objectives of the 6EAP in the area of public participation were achieved, in particular ratification of the Aarhus Convention and the adoption of corresponding legislation. However, some of the objectives are formulated in general terms, using relatively open formulations such as 'supporting' or 'strengthening'. In these cases goal achievement provides little information about the extent of improvements.

Ratification by the Community of the 1998 Aarhus Convention was a critical objective which led to the adoption of various pieces of legislation both before and after ratification occurred in 2005. All Member States except Ireland also ratified the Convention. Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and Directive 2003/4/EC on public access to environmental information amended pre-existing legislation to prepare the EU for the ratification and implementation of the Aarhus Convention. In this context, the European

Commission also tabled a proposal for a Directive on access to justice in environmental matters[396] which, however, has so far not been adopted.

Although the Aarhus Convention was modelled on earlier EU legislation, it went beyond this earlier framework in several respects. Ratification and implementation of the Aarhus Convention therefore led to further improvements in the EU. Among other things, the Public Participation Directive provided for the introduction of procedures for public participation in respect of certain plans and programmes and improved existing procedures in the Environmental Impact Assessment and the Integrated Pollution Prevention and Control Directives. The Access to Environmental Information Directive strengthened access through, for example, introducing a 'right' to access and requiring systematic availability and dissemination of environmental information. While the two Directives on public participation and access to environmental information mainly apply at Member State level, the EU adopted Regulation (EC) No 1367/2006 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 Community institutions and bodies following the ratification of the Aarhus Convention. Subsequently, additional decisions adopted in 2008 laid down detailed procedures for the application of this Regulation and adapted the Commission's rules of procedure accordingly. Among other things, these procedures conform to the requirements laid down in the Commission's more general (i.e. not specific to the environment) Communication Towards a reinforced culture of consultation and dialogue - General principles and minimum standards for consultation of interested parties by the Commission[397] of 2002.

As required by the 6EAP the EU provided financial support to environmental NGOs. Until 2007 this happened on the basis of Decision No 466/2002/EC laying down a Community action programme promoting non-governmental organisations primarily active in the field of environmental protection. Since then - and until 2013, that is after the end of the 6EAP - the LIFE+ programme (Regulation (EC) No 614/2007) has taken over this function.

While most of the objectives of the 6EAP relating to public participation were met, in particular two problems persist. First, as mentioned above, the Commission's proposal for a Directive on access to justice in environmental matters has so far not been adopted. A group of Member States uses the co-decision procedure to block the adoption of the Directive. Similarly, the Commission's proposals for improving access to justice at EU level in its legislative proposal for Regulation (EC) No 1367/2006 were rejected during co-decision. Second, the ECJ issued judgements against several Member States for incomplete or incorrect transposition of the 2003 Public Participation Directive, indicating that implementation at Member State level negatively affects the achievement of 6EAP goals in this area.

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396 CEC (2003): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on access to justice in environmental matters. (COM(2003)624).Brussels.24.10.2003.

397 CEC (2002): COMMUNICATION FROM THE COMMISSION. Towards a reinforced culture of consultation and dialogue - General principles and minimum standards for consultation of interested parties by the Commission. Brussels. (COM(2002)704). 11.12.2002.

Arguably, the co-decision procedure strengthened support for environmental NGOs, among other things by preventing decentralised management of the LIFE+ Programme.

3.6.3.3 Impact of the 6EAP

The 6EAP emphasises the importance of stakeholder consultation and public participation with references in all three 'horizontal' articles (Articles 2, 3, and 10) and as a key element of its characteristic Thematic Strategy approach (Article 4). However, with the exception of the Thematic Strategy approach discussed in more detail in Chapter 4, the 6EAP's contribution to improving public participation was small. The 2003 Public Participation and Access to Environmental Information Directives as well as the respective Regulation and Decisions concerning the Community institutions adopted in 2006 and 2008 were prompted by the (prospect of) ratification of the Aarhus Convention which, in turn, had been signed by the Community already in 1998 - that is long before the 6EAP was adopted.

3.6.4 Improvement of the process of policy making through evaluation

3.6.4.1 6EAP objectives

Article 2(3):

'The Programme shall ensure that environmental objectives, which should focus on the environmental outcomes to be achieved, are met by the most effective and appropriate means available… ensuring that the Community's environmental policy-making is undertaken… with an emphasis on:

- analysis of benefits and costs, taking into account the need to internalise environmental costs;
- the best available scientific evidence, and the further improvement of scientific knowledge through research and technological development;
- data and information on the state and trends of the environment'.

Article 10(c) (priority action):

'improvement of the process of policy making through:

- ex-ante evaluation of the possible impacts, in particular the environmental impacts, of new policies including the alternative of no action and of the proposals for legislation and publication of the results;
- ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives'.

3.6.4.2 Achievement of objectives

The 6EAP objectives concerning the improvement of the process of policy making through evaluation have mostly been met with respect to ex-ante evaluation and, though perhaps to a lesser extent, also ex-post evaluation. Although the 6EAP to some extent qualifies the general phrase 'improvement of the process of policy making' by, for example, requiring evaluations to be made public, the respective 6EAP objectives still remain highly general.

Consequently, a positive assessment of the achievement of the objectives in itself provides relatively little information on the extent to which the policy making process has been improved.

Since the adoption of the 6EAP in 2002 the main progress achieved relates to ex-ante evaluation, i.e. the Commission's impact assessment procedure. An early version of the present procedure was developed in parallel to the 6EAP and set out in two Commission Communications on Simplifying and Improving the Regulatory Environment[398] and on Impact Assessment[399] in December 2001 and June 2002. The impact assessment system, which is administered by the Commission's Secretariat General, is not a specifically environmental measure, but along with economic and environmental aspects, environmental impacts form one of its three main dimensions. The first impact assessments were conducted in 2003, but the system was not expected to be fully operational until 2004/2005. At about the same time, the Commission updated the impact assessment system with a document entitled Impact Assessment: Next steps in support of competitiveness and sustainable development[400] and the Communication Better Regulation for Growth and Jobs in the European Union.[401] A revised set of impact assessment guidelines[402] were also published in June 2005. The Commission adopted the latest revision of the guidelines in 2009.[403] In November 2006 the Commission created the Impact Assessment Board which, among other things, oversees the implementation of the system within the Commission, offers support, and ensures quality control.

In general, the Commission services have adhered to the impact assessment procedure and, according to the Impact Assessment Board's 2010 annual report, the quality of impact assessments has improved[404] – a finding that was confirmed in a 2010 special report by the Court of Auditors.[405] The increasing level of ambition of the impact assessment guidelines over time has contributed to positive developments regarding the choice of most effective means; increasing use of cost-benefit-analysis and best available scientific evidence especially the set-up of the IA board. As required by the 6EAP, all impact assessments are made public.

Although, overall, impact assessment has improved EU decision-making, certain problems remain. The quality of the impact assessments frequently suffers from lack of personnel and

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398 CEC (2002): Action plan "Simplifying and improving the regulatory environment" (COM(2002)276).

399 CEC (2002): Communication from the Commission on impact assessment (COM(2002)276).05.06.2002.

400 CEC (2004): Commission Staff Working Paper, Impact Assessment: Next Steps - In support of competitiveness and sustainable development, (SEC (2004)1377). 21.10. 2004.

401 CEC (2005): Communication from the Commission to the Council, the European. Better Regulation for Growth and Jobs in the European Union, (COM(2005)97).16.03.2005.

402 European Commission (2009): Impact Assessment Guidelines, (SEC(2005)791).15.06. 2005.

403 European Commission (2009): Impact Assessment Guidelines (SEC(2009)92).15.02.2009.

404 European Commission (2010a): Impact Assessment Board Report for 2009, Brussels, 29.01.2010, (SEC(2009)1728 final).

405 European Court of Auditors (2010): Impact assessments in the EU Institutions: Do they support decision-making? Special report no 3. Luxemburg.

financial resources. There is also room for further improvement of inter-service consultation and effective co-ordination with the Council and Parliament. In their December 2003 Inter-Institutional Agreement on Better Lawmaking, the three EU institutions acknowledged that impact assessment was a shared responsibility and, in 2005, agreed on a 'Common approach to impact assessment'. According to EU officials interviewed, the uptake of the Commission's impact assessment and the quality of inter-institutional consultation varies strongly between individual files.

Beyond impact assessment, the EU's overall approach to evaluation is spelled out in the Communication Responding to Strategic Needs: Reinforcing the use of evaluation (SEC(2007)213). Next to IA it also includes ex-ante evaluation and ex-post evaluation of expenditure programmes and non-spending activities. Responsibility for the evaluation system is with the Secretariat General (formerly with DG Budget). The communication also includes a set of standards for conducting evaluations.

Core to the EU's evaluation system for spending activities is the Financial Regulation.[406] It requires all programmes and activities involving significant spending to be evaluated both ex-ante and ex-post. The requirements are set out in more detail in the Financial Regulation's implementing rules. Two other major evaluation initiatives were set up in the context of EuropeAid projects and investment projects co-financed by ERDF, CF and IPA in the framework of EU Cohesion Policy. A forward looking evaluation plan is available on the EU's evaluation website.[407]

As regards the 6EAP requirement 'Ex-post evaluation of the effectiveness of existing measures in meeting their environmental objectives', it is harder to say whether the EU has met this requirement. Though ex-post evaluation is part of the elaborate EU evaluation system they are not explicitly designed to evaluate the effectiveness of existing measures in meeting their environmental objectives, though their application also includes environmental measures such as the LIFE+ Programme.

However, EU environmental legislation frequently includes review clauses, which in effect require an ex-post assessment of effectiveness. The Commission is committed to systematically include review clauses in its proposals with the aim of, among other things, promoting better assessment of the benefits and costs of legislation.

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406 Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 27 and Commission Regulation (EC, Euratom) No 2342/2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities, Article 21.

407 http://ec.europa.eu/dgs/secretariat_general/evaluation/docs/evaluation_plan_2010_2015_en.pdf.

3.6.4.3 Impact of the 6EAP

The better regulation initiative which is closely linked to the Lisbon Strategy, but also the EU Sustainable Development Strategy (EU-SDS) were main drivers for establishing the Commission's impact assessment system and have shaped its evolution. Although the features of the EU's overall evaluation and impact assessment systems broadly correspond to the 6EAPs requirements, the desk research and interviews suggest that there was no influence of the 6EAP on the process of setting up these systems

3.6.5 Environment in Community Research Programme

3.6.5.1 6EAP objectives

Article 2(3):

'Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instruments… with an emphasis on:

- the best available scientific evidence, and the further improvement of scientific knowledge through research and technological development'.

Article 10(d) (priority action):

- 'ensuring that environment and notably the priority areas identified in this Programme are a major priority for Community research programmes. Regular reviews of environmental research needs and priorities should be undertaken within the context of the Community Framework Programme of research and technological development. Ensuring better coordination of research related to the environment conducted in Member States inter alia to improve the application of results;
- 'development of bridges between environmental and other actors in the fields of information, training, research, education and policies.'

The promotion of research is also included as a priority action in each of the four thematic areas of the 6EAP.

3.6.5.2 Achievement of objectives

Given the limited availability of suitable aggregate data and the partly highly general way in which 6EAP objectives relating to the environment in Community research are formulated, it is difficult to assess whether 6EAP objectives have been achieved in this area. It seems reasonable to conclude that environment is a priority of recent Research Framework Programmes (FPs); however, it is far less clear whether it is a 'major priority' as required by the 6EAP – not least because the 6EAP does not specify the term 'major priority'. Similarly, the activities of the FPs cover the environmental priority areas of the 6EAP, but there is little evidence that they are a major priority. While the 6EAP calls for regular reviews of environmental research needs and priorities, the FPs themselves do not provide for a systematic mechanism to do this. Finally, the FPs provide tools and mechanisms which could be used to enhance co-ordination of environmental research in Member States and develop

research related bridges between environmental and other actors as required by the 6EAP. However, the extent to which these tools have been used for environment-related purposes remains unclear.

Ensuring environment and the priority areas are a major priority for Community research

Although figures exclusively for spending on environment-related research are often missing, the numbers below suggest that under FP6, FP7, and the Competitiveness and Innovation Framework Programme the budget share of environment-related research was significant, though not necessarily indicative of a 'major priority'; It appears to have been small under the relevant budget lines of the Structural Funds:

- Decision No 1513/2002/EC[408] concerning the **6th Framework Programme (6FP) of the European Community for research, technological development and demonstration activities** for the 2002 to 2006 period was adopted in August 2002. The 6FP had a total budget of €16.7 billion and was structured around three headings. The major part of research efforts focused on activities under the heading of 'focusing and integrating Community research' which included sustainable development, global change and ecosystems as one of seven thematic priorities. This priority area was allocated a budget of €2.12 billion, representing almost 19% of the total budget for this heading. The 6FP also included a budget of €555 million for specific activities which included support of EU policies and anticipating scientific and technological needs in areas such as 'sustainable development, in particular the Community policy objectives relating to environment (including those set out in the sixth environment action programme), transport and energy'.[409]
- Decision No 1982/2006/EC[410] concerning the **7th Framework Programme (7FP) of the European Community for research, technological development and demonstration activities** for the 2007 to 2013 period was adopted in December 2006. The total budget of the 7FP is €50.5 billion. The majority of funding (€32.4 billion, 64%) is allocated to the Cooperation Programme which has ten themes including: Energy (€2.35 billion, 7% of the Cooperation programme); Environment (including climate change) (€1.89 billion, 6%); Transport (€4.16 billion, 13%); and Food, Agriculture and Fisheries, and Biotechnology (€1.94 billion, 6%). The 6EAP's four priorities of climate change, environment and health are addressed under the Environment Theme.[411]

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408 Decision No 1513/2002/EC concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006), OJ L 232, 29.8.2002.

409 Ibid.

410 Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), OJ L 412/1, 30/12/2006.

411 see Annex I, Decision No 1982/2006/EC.

- Decision 1639/2006/EC establishing a **Competitiveness and Innovation Framework Programme (2007-2013)**[412] was adopted in November 2006. The CIP supports innovation activities (including eco-innovation) in the EU. It runs from 2007-2013 and has an overall budget of around €3.6 billion. The CIP contributes to the EU's Environment Technologies Action Plan by supporting innovation and small and medium enterprises in the area of eco-efficient innovative products, services and technologies, with nearly €200 million. The Intelligent Energy Europe Programme (IEE) is concerned with energy management and energy efficiency and has a budget of €727 million. Different strands have been adopted under the IEE programme: SAVE focuses on energy efficiency and a rational use of resources, in particular for the building and industry sectors; ALTENER is designed to help promote new and renewable energy resources in the production of electricity, heat and cooling; and STEER is directed toward the promotion of energy efficiency and renewable energies in the transport sector.
- RTD and innovation are also supported by the 2007-2013 **Structural Funds**, particularly the European Regional Development Fund (ERDF). Although the Community Strategic Guidelines (CSG) for Cohesion, establishing the strategic orientations of the current Policy, highlight the need to find synergies between environmental investments and economic growth, there has not been much focus granted to environmental research and eco-innovation.

It is worth noting that according to data from DG Research, environment-related research funding peaked at around 10% of overall funding under 4FP, then fell to around 8% under 5FP and fell further to around 6% under 6FP.[413] The declining share of environment-related research suggests that it may not have been a 'major priority' – at least not under FP6.

The activities under FP6 and FP7 cover the four environmental priority areas of the 6EAP. For example, specific achievements of projects in the global change and ecosystems sub-priority area of FP6 with particular relevance to the 6EAP environmental priorities include the following:

On **climate change**, projects addressed important emerging issues including marine aerosols, the role of ocean biology in the variability of the tropical climate system, carbon sequestration and storage in forest and grassland systems, new knowledge on climate variability and change, and research that contributed to the International Panel on Climate Change (IPCC);

On **environment and health**, new and scientifically sound approaches for test methods for chemicals and micro-biological agents, strong links were identified with the implementation of the EHAP and various Directives, and project results were put forward with the view to adoption of new OECD test methods for endocrine disruptors;

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412 Decision No 1639/2006/EC establishing a Competitiveness and Innovation Framework Programme (2007 to 2013), OJ L 310/15, 9/11/2006.

413 CEC (2005b): COMMISSION STAFF WORKING PAPER Annex to the Proposal for the Council and European Parliament decisions on the 7th Framework Programme (EC and Euratom) Main Report: Overall summary IMPACT ASSESSMENT AND EX ANTE EVALUATION, SEC (2005)430), 6/4/2005.

On **nature and biodiversity**, large projects were seen as particularly beneficial in assessing biodiversity and ecosystems at a larger scale and furthering the management of comprehensive databanks on ecosystems, strong linkages and relevance to policy were observed, notably to the BAP and the CBD; and

On **natural resources and waste**, Europe has emerged as leader in the area of water and soils; a large number of new scientific methods and new knowledge have been discovered, and good examples of how research and policy can interact were observed, including projects that played a large role in the formulation and implementation of the WFD.[414]

Regular reviews of environmental research needs and priorities

The **system of evaluation and monitoring** of the FPs focuses mainly on programme implementation and ex-post evaluation of achievements and, therefore, does not allow for a systematic evaluation of environmental research needs and priorities as required by the 6EAP. For example, the ex-post evaluation of the 6FP[415] was designed to provide an assessment of the rationale, implementation and achievements of the 6FP. Similarly, under the 7FP, an annual monitoring report provides an indicator-based assessment of programme implementation, a progress report was presented in 2009, and an interim evaluation is to be carried out with the help of external experts by 2010.

However, the design of FP7 was influenced by the **mid-term review process** of FP6 and an **impact assessment**. The need for research to help Europe face its environmental challenges was a central element in the debate and ex-ante evaluation of the 7FP.

Better coordination of research related to the environment conducted in Member States

The 6FP **ERA-NET scheme**, launched in 2002, was designed to develop and strengthen the cooperation and coordination of research activities carried out at national and regional level through the networking of research activities, including mutual opening and the development of joint activities. The scheme is considered to have helped overcome barriers to the coordination of national and regional research activities.[416] 70 ERA-NET actions were launched under FP6. Under FP7 31 ERA-NET actions and eight ERA-NET Plus actions have been selected, a further 11 ERA-NETs and one ERA-NET Plus are expected in response to the 2009 calls.[417] While it seems reasonable to assume that some of these activities have an environmental research component, the number and significance of such activities remains unclear.

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414 Technopolis, Ex-post Impact Assessment of the FP6 Sub-priority 'Global Change and Ecosystems', London: EPECs, 2008.

415 Rietschel, E. et al (2009): EVALUATION OF THE SIXTH FRAMEWORK PROGRAMMES FOR RESEARCH AND TECHNOLOGICAL DEVELOPMENT 2002-2006: Report of the Expert Group, February 2009.

416 Horvat, M., et al. (2006): ERA-NET Review 2006: The Report of the Expert Review Group, December 2006.

417 CEC (2009): Commission staff working document accompanying Commission Communication on the progress made under the 7th European Framework Programme for Research, (COM(2009)589), 29/04/2010.

Develop bridges between environmental and other actors

A number of potentially relevant activities have been undertaken in this regard as indicated by the Commission's 2009 progress report on the 7FP. The **collaborative research instruments** of the Cooperation Programme enable industry and academia to collaborate in an 'open innovation' environment, contributing to the free circulation of knowledge and technologies.[418] Efforts to build a European level **partnership between research and society** have been strengthened, e.g. a new funding scheme has been introduced which enables Civil Society Organisations to participate in the 7FP.[419] **European Technology Platforms (ETPs)** engage companies, researchers, and non-governmental organizations, led by industry, in developing the direction of research on a number of important strategic areas. FP7 also supports long-term public private partnerships at European level in the form of **Joint Technology Initiatives** (JTIs) have been set up. At least two of the five large-scale JTIs have a significant environmental component: Clean Sky and Fuel Cells & Hydrogen (FCH). However, overall, the extent of the role of environmental actors in these initiatives remains unclear.

3.6.5.3 Impact of the 6EAP

The **Lisbon Strategy** and its objective to make Europe the most competitive and dynamic knowledge society in the world by 2010 was a key driver behind the FP7. The EU-Sustainable Development Strategy was another important factor. Against this background, the impact of the **6EAP** seems to have been relatively small. The FP6 Decision cites the 6EAP among the important environmental commitments of the EU.[420] The FP7 Decision also refers to the 6EAP.[421] These references indicate that the 6EAP served as a point of reference and justification for EU research in relation to sustainable development, global change and ecosystems.

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418 Ibid.

419 Ibid.

420 Decision 1513/2002/EC.

421 Decision 1982/2006/EC.

3.6.6 Provision of regular information

3.6.6.1 6EAP objectives

Article 2(3):

'Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instruments… with an emphasis on:

- data and information on the state and trends of the environment'.

Article 10(e) (priority action):

'ensuring regular information, to be provided starting from 2003, that can help to provide the basis for:

- policy decisions on the environment and sustainable development;
- the follow-up and review of sector integration strategies as well as of the Sustainable Development Strategy;
- information to the wider public.
- The production of this information will be supported by regular reports from the European Environment Agency and other relevant bodies. The information shall consist notably of: headline environmental indicators; indicators on the state and trends of the environment; integration indicators'.

3.6.6.2 Achievement of objectives

The EU Sustainable Development Strategy Monitoring Reports, which are periodically published by the EU's statistical office (Eurostat), mostly ensure achievement of the 6EAP objectives regarding regular provision of environmental information. However, the first report was available in 2005 rather than in 2003, as required by the 6EAP. In addition, the Commission's Annual Environmental Policy Reviews provide regular information.

Following the European Commission's 2005 Communication 'Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy',[422] the reports are based on a set of sustainable development indicators (SDIs) which were successively developed and revised. As required by the 6EAP, these indicators include headline indicators, indicators on the state and trends of the environment as well as integration indicators. The EU SDS Monitoring Reports also provide a basis for policy making. For example, the Monitoring report 2009 has served as input for the Presidency Report on the 2009 Review of the EU SDS and the 2009 December European Council Conclusions on the EU SDS. Monitoring Reports were published in 2005, 2007 and 2009, making data available for policy-making and the public on a regular basis. Moreover, information on the state and trends of the environment in the EU is accessible online through

[422] CEC (2005): "Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy" (SEC(2005)161 final).

the Eurostat website. Additional information on the state and trends of the environment in the EU is provided through the EEA State of the Environment reports and its website.

The choice and quality of indicators depends on the data availability in the Member States. This has constrained the choice of indicators as well as their value in terms of comprehensiveness and explanatory value. For example, one of the key indicators in the 2009 monitoring report, the abundance of common birds, only contains data for 19 of 27 Member States.

3.6.6.3 Impact of the 6EAP

The EU SDS Monitoring Report and the SDIs were created in the context of the Lisbon Strategy and the EU SDS which require indicator-based monitoring. However, the 6EAP has played a role in defining the SDIs because the indicators were also chosen with a view to measuring progress towards selected 6EAP objectives (e.g. achieve a more sustainable use of pesticides).[423]

3.6.7 Reviewing and regularly monitoring information and reporting systems

3.6.7.1 6EAP objectives

Article 2(3):

'Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instrument, taking into account regional and local differences, as well as ecologically sensitive areas, with an emphasis on:

- data and information on the state and trends of the environment'
- Article 10(f) (priority measure)
- 'reviewing and regularly monitoring information and reporting systems with a view to a more coherent and effective system to ensure streamlined reporting of high quality, comparable and relevant environmental data and information. The Commission is invited, as soon as possible, to provide a proposal as appropriate to this end. Monitoring, data collection and reporting requirements should be addressed efficiently in future environmental legislation'.

3.6.7.2 Achievement of objectives

The 6EAP objectives on review and regular monitoring of reporting systems were mostly met and, arguably, even surpassed. However, the objectives were relatively modest, merely requiring review and regular monitoring of reporting systems and formulation of a proposal to improve reporting systems.

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[423] Provision of regular information – Commission Communication – Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy (SEC(2005)161), p. 12.

Two measures are particularly relevant in terms of the improvement of environmental information systems: In February 2008, the Commission published the 'Shared Environment Information System' (SEIS) Communication (COM(2008)46), announcing its intention to create, together with the European Environment Agency (EEA), a single web-based system for collecting, reporting and analysing environmental information. The SEIS will integrate other European initiatives such as INSPIRE and EIONET. In addition, the Infrastructure for Spatial Information in the European Community (INSPIRE) Directive (2007/2/EC) had been adopted in March 2007. The Directive aims to create a European spatial data infrastructure to enable sharing of environmental spatial information among public sector organisations and better facilitate public access to spatial information. Both measures contribute significantly to the 6EAP objective to develop 'more coherent and effective system to ensure streamlined reporting of high quality, comparable and relevant environmental data and information'.

3.6.7.3 Impact of the 6EAP

Both the SEIS Communication and the INSPIRE Directive refer to the 6EAP as a justification for the adoption of measures. However, there is no indication that the 6EAP had a strong influence on the adoption of either the SEIS Communication or the INSPIRE Directive.

Implementation of SIAS so far included streamlining the reporting requirements for air quality under the thematic strategy on air pollution, reviewing the IPPC Directive and relations between air pollution and climate change, and adoption of a more effective approach to the production, exchange and use of data and information under the Water Information System for Europe.

3.6.8 GMES

3.6.8.1 6EAP objectives

Article 2(3):

'Full consideration shall be given to ensuring that the Community's environmental policy-making is undertaken in an integrated way and to all available options and instrument, taking into account regional and local differences, as well as ecologically sensitive areas, with an emphasis on:

- data and information on the state and trends of the environment'.

Article 10(g) (Priority action):

'reinforcing the development and the use of earth monitoring (e.g. satellite technology) applications and tools in support of policy-making and implementation'.

3.6.8.2 Achievement of objectives

The 6EAP objective of 'reinforcing the development and the use of earth monitoring (e.g. satellite technology) applications and tools in support of policy-making and implementation' has only partly been achieved so far. As a consequence of the EU-led GMES (Global Monitoring for Environment and Security) initiative for the establishment of a European

capacity for Earth Observation, the development of earth monitoring applications and tools has been reinforced. The system, however, is not scheduled to be operational before 2014. Consequently, the actual use of earth monitoring has not yet increased.

By releasing four communications the Commission[424] outlined the way to an operational GMES system. GMES (Global Monitoring for Environment and Security) is an EU-led Initiative for the establishment of a European capacity for Earth Observation. Earth observation-based services already exist in Europe, but they are, among other things, dispersed at national or regional level and cannot rely on a sustainable observation capacity. GMES aims to overcome these barriers. The system aims to provide useful data on a range of issues which correspond to user needs.[425] The processing and dissemination of this information is carried out within the 'GMES service component'. The thematic areas within the GMES service component comprise: land, marine and atmosphere information; climate change information; and emergency and security.

While some progress has been made in terms of developing tools and datasets the space based component is still lacking. The launch of Sentinel-1A, the first Earth observation satellite is scheduled for December 2012, which means that the system will not be operational before the end of the 6EAP. In addition, the GMES pre-operational services and products are seen as being unable to cover current operational needs of individual DGs, the Member states and industry.[426]

Besides the lack of the space-based component, GMES also suffers from poor coordination among potential GMES users, problems related to communication and mutual understanding of users and service providers, potential administrative burdens[427] and the future governance of GMES.

3.6.8.3 Impact of the 6EAP

The impact of the 6EAP on the adoption and implementation of GMES is not evident. Initially, GMES was driven to some extent by the decisions taken at the Gothenburg European Council in June 2001. The related European Commission Communication on the EU Sustainable Development Strategy states that the Community should contribute to establishing by 2008 a European Capacity for global monitoring of environment and security (GMES). Nowadays the main driver seems to be the service provider community and the European Space Agency.

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424 CEC (2001): Communication from the Commission to the Council and the European Parliament: Outline GMES EC Action Plan (Initial period: 2001-2003), (COM(2001)609); CEC (2004): Communication from the Commission to the European Parliament and the Council: Establishing a GMES capacity by 2008 - (Action plan 2004-2008), (COM(2004) 65 Final) and CEC (2005):Communication from the Commission to the Council and the European Parliament: GMES: From concept to reality (COM(2005) 565 Final), CEC (2008): Communication from the Commission: Towards a Shared Environmental Information System ,(COM(2008) 46 Final).

425 The definition of user is still not fully completed.

426 Evaluation of the activities of the GMES Bureau - Final report February 2009, available at: http://ec.europa.eu/gmes/pdf/studies/gmes_bureau_evaluation_main_report.pdf.

427 Philipp Schepelmann/ Arkaitz Usubiaga/ Mikel Orive/ Thomas Dworak/ Michaela Matauschek (2010): Governance of GMES – a user perspective - Final September 2010 available on request.

3.6.9 Implementation and enforcement of EU environmental legislation

3.6.9.1 6EAP objectives

Article 3(2):

'Encouraging more effective implementation and enforcement of Community legislation on the environment and without prejudice to the Commission's right to initiate infringement proceedings`. This requires:

- increased measures to improve respect for Community rules on the protection of the environment and addressing infringements of environmental legislation;
- promotion of improved standards of permitting, inspection, monitoring and enforcement by Member States;
- a more systematic review of the application of environmental legislation across the Member States;
- improved exchange of information on best practice on implementation including by the European Network for the Implementation and Enforcement of Environmental Law (IMPEL network) within the framework of its competencies'.

3.6.9.2 Achievement of objectives

The main objectives of the 6EAP in the area of effective implementation and enforcement of EU environmental legislation were mostly achieved. However, progress with respect to a more systematic review of the application of environmental legislation and concerning exchange of best practice on implementation may have been less significant than with respect to the remaining objectives. It should also be pointed out that the achievement of 6EAP objectives does not necessarily imply that implementation and enforcement have improved because the 6EAP objectives focus on measures rather than outcomes. In fact, as illustrated in Annex A (section 1.6.8) there is little concrete evidence that implementation and enforcement has in fact improved. Besides a lack of adequate data, this may at least partly be due to the fact that it may be too early for an evaluation in terms of outcomes because many measures have only been adopted in recent years.

Implementation of EU legislation is, first and foremost, the responsibility of Member States. However, the European Commission monitors national implementation and has the power to initiate infringement proceedings against offending Member States. Nonetheless, the EU, and in particular the Commission, adopted a wide range of measures.

Increased measures to improve respect for EU environmental law

The Commission has stepped up efforts since the mid-90s to guide Member States in implementing EU law. During the 6EAP's term the Commission has introduced new preventive tools or has used some existing preventive tools more systematically. These measures or tools include: the development of Commission guidance documents interpreting specific matters of EU law, the sharing of good practices at national and EU level, the recourse to early 'package meetings' to discuss transposition difficulties with national administrations, the establishment of expert groups, the use of performance score-boards (e.g. the Natura 2000 barometer highlights progress in establishing the Natura 2000

network), the use of web-based question-and-answer tools, the organisation of information seminars on correct implementation of complex directives, the establishment of other formal and informal contacts with national authorities for instance through regular contacts between the Permanent Representations of the Member States and the Secretariat General of the Commission, and through networks of experts such as IMPEL and Green Enforce.[428]

The Commission has also strengthened efforts to introduce preventive measures when drafting legislation. It now systematically includes a provision in its legislative proposals requiring Member States to provide concordance or correlation tables – listing each article of the Directive and the 'national implementing measures' that transpose it into the national law.[429] However, this requirement is all too often deleted at the request of Member States during the decision-making process. The Commission is also committed to systematically including review clauses in its legislative proposals which can help to improve and simplify legislation over time. Through this effort to increase the quality of the legislation, the Commission aims, among other things, to improve implementation.[430]

Increased measures to improve addressing infringements of EU environmental law

The Commission adopted several measures to improve addressing infringements of EU environmental law, in particular the Commission's strategy on implementation and enforcement of 2008, the EU pilot project, and a new policy to determine fines for non-compliance with ECJ judgements.

Since 2002 the Commission has made efforts to address infringements of EU legislation more effectively by prioritising particular types of cases. In a general Communication on 'Better monitoring of the application of Community law', published in 2002[431], the Commission first specified the 'priority criteria' it would apply in the exercise of its discretion on how to deal with infringements of Community law brought to its attention by citizen complaints. For the environmental field, priority was to be given, for example, to cases involving 'damage to the environment with implications for human health'.

In a 2007 Communication[432] the Commission refocused the general criteria for 'prioritisation and acceleration in infringements management' and announced that this general guidance would be further specified for each sector. In this context the Commission published a

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428 Bonnie, Anne (2005): The evolving role of the European Commission in the enforcement of Community law: from negotiating compliance to prosecuting Member States. *Journal of Contemporary European Research*. Vol 1. Issue 2. pp 39-53.; Allio, Lorenzo and Fandel, Marie-Hélène (2006). Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu.

429 CEC (2003): Commission Communication on better monitoring of the application of Community law (COM(2002)725). 16/05/2003.

430 Allio, Lorenzo/Fandel/ Marie-Hélène (2006): Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu.

431 CEC (2003): Commission Communication on better monitoring of the application of Community law (COM(2002)725). 16/05/2003.

432 CEC (2007d): Communication from the Commission. A Europe of Result – Applying Community Law. (COM (2007)502). Brussels. 5.9.2007.

'Communication on implementing European Community environmental law' In November 2008.[433]

The **2008 Communication** placed more emphasis than before on a preventive approach. Relevant measures include helping Member States implement EU environmental legislation and 'solve problems highlighted by citizens and NGOs' through such measures as guidance documents, regular dialogue and support activities. On a trial basis the Commission also placed environmental experts in some of its Representations in Member States chosen due to the high level of complaint-making and dissatisfaction expressed towards the Commission.

Where the preventive approach fails, the Commission focuses its enforcement activities on those breaches of EU environmental law that it considers to be 'fundamental' or 'systemic' based on a number of criteria – an approach which DG Environment had already implicitly practiced for some time.[434]

The 2008 Communication also stresses the importance of enforcement through national courts in the Member States and, in this respect, refers to the 2003 proposal for a Directive on access to justice in environmental matters, which remains stalled in the Council.

The EU **pilot project** or scheme, operating since April 2008, is a problem-solving mechanism in which the Commission and 15 Member States work closely together and more consistently to produce quicker and better responses to information requests, complaints and petitions with the ultimate aim of correcting infringements of EU law at an early stage without recourse to infringement proceedings. Just like environmental infringement procedures currently account for approximately one third of all open infringement cases, 36% of the files within the EU pilot scheme concern the environment. First experience with the pilot project are relatively positive[435], but there are some concerns that, among other things, it might be used by Member States to postpone full implementation.[436]

With the publication of the Communication 'Application of Article 228 of the EC Treaty'[437], the Commission introduced a new tougher **policy to determine fines for non-compliance** with ECJ judgements, committing the ECJ to impose both lump-sums and periodic penalties for each day of non-compliance.[438]

Improved standards of permitting, inspection, monitoring and enforcement by Member States

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433 Ibid.

434 Stakeholder consultation, interview.

435 CEC (2010c): Report from the Commission. EU pilot evaluation report. (COM(2010)70). 3/3/2010.

436 ClientEarth (2010): Key notes on monitoring the application of Community law – EU pilot. European Parliament public hearing. 28 April 2010.

437 CEC (2006): Communication from the Commission. Application of Article 228 of the EC Treaty. SEC/2005/1658. 20/09/2006.

438 Allio, Lorenzo/Fandel, Marie-Hélène (2006): Making Europe work: improving the transposition, implementation and enforcement of EU legislation. EPC Working Paper No. 25. European Policy Centre. June. Brussels. Available at: www.epc.eu; EC (2006): Communication from the Commission. Application of Article 228 of the EC Treaty. SEC/2005/1658. 20/09/2006.

Several measures to improve standards of permitting, inspection, monitoring and enforcement by Member States were adopted, in particular the implementation of non-binding criteria for environmental inspection, the adoption of the Environmental Crime Directive, measures to support national judges in environmental matter, and the adoption of certain EU provisions providing for enhanced access to justice at the national level.

The non-binding Recommendation 2001/331/EC sets out criteria for adequate environmental inspection, with a view to guide Member States to improve the effectiveness of their enforcement of EU environmental law. In 2007, the Commission published a **review of implementation of the Recommendation**[439] which concluded that despite progress in implementation, 'there are still large disparities in the way environmental inspections are being carried out within the Community' and suggested that the Recommendation should be amended 'in order to improve its implementation and strengthen its effectiveness'.[440] In November 2008, the European Parliament adopted a non-legislative resolution on environmental inspections in response to the Commission's Communication, urging the Commission to come forward with a proposal for a Directive on environmental inspections. The Commission is currently analysing several options and is expected to present a proposal in 2011.[441]

The Commission's review of implementation of the Recommendation also called for 'specific legally binding requirements for the inspection of certain installations or activities should be included in sectoral pieces of legislation'. This has been taken forward in certain legislative measures, i.e. the Industrial Emissions Directive (2010/75/EU)[442], the Waste Shipment Regulation ((EC) No 1013/2006), the Directive (2009/31/EC) on carbon capture and storage and Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

In 2008 the **Directive on the protection of the environment through criminal law** was adopted.[443] Although the Directive only provides a general clause on penalties stating that unlawful conduct is punishable by 'effective, proportionate and dissuasive criminal penalties', the Directive has the potential to contribute to some extent to the 6EAP objective of encouraging more effective implementation and enforcement of EU environmental law through defining criminal offences in the field of environment and harmonizing the scope of liability.

In its November 2008 Communication on implementing European Community environmental law, the Commission rightly emphasizes the crucial role national courts play in the

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439 CEC (2007e): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the review of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States. (COM(2007)707). Brussels. 14/11/2007.

440 Ibid.

441 Stakeholder consultation, interview.

442 Inspection requirements have also been inserted in Directive 2009/31/EC on carbon capture and storage and in Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

443 Directive 2008/99/EC on the protection of the environment through criminal law.

enforcement of EU legislation.[444] Because of this key role **national judges** play, the Commission has launched several initiatives aimed at supporting them. The Commission for instance runs a cooperation programme with national judges to look specifically at issues arising from the implementation of EU environmental law and to compare and discuss practices in different Member States. DG Environment also supports the activities of the EU Forum of Judges for the Environment established in 2004.

While the Commission's 2003 proposal for a Directive on access to justice in environmental matters remains stalled in Council due to subsidiarity concerns, other EU measures which were adopted to implement the Aarhus Convention include provisions on **access to justice** linked to the enforcement of those specific procedural environmental rights. Directive 2003/35/EC introduced such provisions, directly inspired by Article 9(2) of the Convention in the EIA[445] and IPPC[446] Directives, while Directive 2003/4/EC on access to environmental information also includes an access to justice provision[447], mirroring Article 9(1) of the Convention. Finally, Directive 2004/35/CE on environmental liability[448] also contains certain relevant provisions.

Systematic review of the application of environmental legislation

The Commission undertakes more systematic examination of the cases of non-transposition, incorrect transposition or incorrect application of EU environmental legislation. According to Krämer (2008)[449] this is one of the main reasons for the increase of ECJ judgements in the environment field the last ten years. As to the review of correct application (compliance in practice), the Commission focuses mostly on formal aspects of application such as whether national or regional authorities have adopted plans, whether they have drawn up reports, etc.[450] The Commission in particular carries out more conformity-checking studies than before. In 2009 alone 63 conformity-checking studies were carried out.[451] As mentioned above, in order to facilitate the systematic assessment of conformity between EU legislation and national transposition measures, the Commission now systematically includes a specific legal provision in new legislative proposals requiring Member States to provide correlation

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444 CEC (2008a): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on implementing European Community Environmental Law. (COM(2008)773).18/11/2008.

445 Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2003/35/EC, art. 10a.

446 Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, art. 16.

447 Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information, art. 6.

448 Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, art. 13.

449 Krämer, Ludwig (2008): Environmental judgments by the Court of Justice and their duration. Research Papers in Law. European Legal Studies. College of Europe. Bruges.

450 Stakeholder consultation, interview.

451 EC (2010d): Management Plan 2010 DG Environment. Available at: http://ec.europa.eu/atwork/synthesis/amp/doc/env_mp.pdf.

tables which, however, is frequently deleted during the co-decision procedure. The Commission is also committed to systematically including review clauses in its proposals which can help to review the application of the legislation. The Commission has also been more systematically producing implementation reports in the environmental sector.

Improved exchange of information and best practice on implementation

It is somewhat unclear whether the manifold activities of IMPEL during the 6EAP term have improved the exchange of information and best practice on implementation if compared to IMPEL's previous activities. However, they certainly continued to make an important contribution to exchange of information and best practice on implementation. IMPEL's activities during the 6EAP term ranged from, among many other things, extensive work on Recommendation 2001/331/EC on criteria for adequate environmental inspection, to work on Best Practices concerning Training and Qualification for Environmental Inspectors, to peer-reviewed studies of the regulatory authorities in individual Member States.[452] IMPEL also changed its status from an informal network to a legally formulated entity which has helped clarify its relations with its members and the EU institutions. In particular, the changed status has made it eligible for LIFE+ funding, thus setting its future activities on improving implementation on a firmer financial basis.

Beyond the activities of IMPEL the increasing reliance on broad framework directives contributes is likely to contribute to improved exchange of information and best practice on implementation through the networks of policy-makers, stakeholders and experts which are often created to support the implementation of these directives.[453]

3.6.9.3 Impact of the 6EAP

At first sight the impact of the 6EAP on the adoption of horizontal policy measures regarding implementation and enforcement appears to be rather limited or indirect. This results partly from the fact that the 6EAP provisions on implementation and enforcement are rather vague and broadly formulated. However, the 6EAP did have some indirect impact on the adoption of measures as it contributed to a climate within the EU in which the EU institutions attached increased priority to implementation and enforcement.

The 6EAP had a stronger facilitating role for certain measures than for others. In particular, the adoption of the 2008 Communication on implementing European Community Environmental Law[454] clearly reflected the priority attached to implementation as expressed in the 6EAP and its mid-term review. While also responding to a long-standing interest of the European Parliament, the 6EAP and its mid-term review supported the adoption of the

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452 IEEP (2010): Manual of European Environmental Policy. Institute for European Environmental Policy. Earthscan. Available at: http://www.europeanenvironmentalpolicy.eu.

453 Homeyer, Ingmar von (2010): "Emerging experimentalism in EU environmental governance" In: Sabel, Charles F. and Jonathan Zeitlin (eds.), Experimentalist Governance in the European Union: Towards a New Architecture?, Oxford: Oxford University Press, p. 121-150.

454 CEC (2008a): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on implementing European Community Environmental Law. COM(2008)773. 18/11/2008.

Communication. The 6EAP also had a certain, more direct impact with respect to provisions on inspection requirements, in particular with respect to the introduction of such requirements in the IPPC Directive.

3.6.10 Environmental policy integration

3.6.10.1 6EAP objectives

Article 2(4):

'The Programme shall promote the full integration of environmental protection requirements into all Community policies and actions by establishing environmental objectives and, where appropriate, targets and timetables to be taken into account in relevant policy areas.

Furthermore, measures proposed and adopted in favour of the environment should be coherent with the objectives of the economic and social dimensions of sustainable development and vice versa'.

Article 3(3):

'Further efforts for integration of environmental protection requirements into the preparation, definition and implementation of Community policies and activities in the different policy areas are needed. Further efforts are necessary in different sectors including consideration of their specific environmental objectives, targets, timetables and indicators. This requires:

- ensuring that the integration strategies produced by the Council in different policy areas are translated into effective action and contribute to the implementation of the environmental aims and objectives of the Programme;
- consideration, prior to their adoption, of whether action in the economic and social fields, contribute to and are coherent with the objectives, targets and time frame of the Programme;
- establishing appropriate regular internal mechanisms in the Community institutions, taking full account of the need to promote transparency and access to information, to ensure that environmental considerations are fully reflected in Commission policy initiatives, including relevant decisions and legislative proposals;
- regular monitoring, via relevant indicators, elaborated where possible on the basis of a common methodology for each sector, and reporting on the process of sectoral integration;
- further integration of environmental criteria into Community funding programmes without prejudice to existing ones;
- full and effective use and implementation of Environmental Impact Assessment and Strategic Environmental Assessment;
- that the objectives of the Programme should be taken into account in future financial perspective reviews of Community financial instruments';

3.6.10.2 Overview

In particular the provisions of Article 3(3) of the 6EAP on environmental integration reflect the specific context in which the 6EAP was developed. This applies in particular to the provisions calling for 'ensuring that the integration strategies produced by the Council in different policy areas are translated into effective action and contribute to the implementation of the environmental aims and objectives of the Programme' and, to a lesser extent, 'regular monitoring, via relevant indicators, elaborated where possible on the basis of a common methodology for each sector, and reporting on the process of sectoral integration'. More specifically, these provisions reflect the Cardiff Process of environmental policy integration which was initiated with a Commission Communication[455] to the Cardiff European Council in June 1998 and required various sectoral Council formations, such as the Agriculture Council, to elaborate environmental integration strategies. However, despite some initial progress, the Cardiff Process was effectively discontinued after 2004. Therefore, in so far as the 6EAP implies the continuation and further implementation of the Cardiff Process - Article 3(3) even explicitly refers to 'the integration strategies produced by the Council' - its objectives relating to environmental policy integration were not achieved.

However, this does not mean that environmental integration was not pursued by means other than the Cardiff Process. The Commission's impact assessment procedure discussed above in the section on policy evaluation became a central element of the Commission's efforts to pursue environmental integration (However, impact assessment focuses on the three dimensions of sustainable development, rather than exclusively environmental aspects). The EU Sustainable Development Strategy was another important element. Perhaps more importantly, as illustrated below and in the sections in this report dealing with the integration of climate concerns in energy and transport policy and the integration of environmental requirement in the CAP, the CFP and development policy, environmental policy integration has also continued with varying degrees of success and driven by a number of factors in the sectors themselves.

Environmental Integration in Transport Policy

3.6.10.3 Achievement of objectives: Transport Policy

Some progress has been made with respect to the 6EAP objective of promoting full integration of environmental protection requirements into transport policy. However, progress varies according to different types of negative environmental effects of transport. In particular, significant efforts have been made to reduce GHG emissions from transport. Some progress has also been made with respect to air quality and, to some degree, also noise. There was little progress with respect to a number of other issues, such as links

[455] CEC (1998): A strategy for integrating environment into EU policies – Partnership for Integration (COM(98)333).

between transport and urban sprawl, the environmental impact of infrastructure construction, and fragmentation of habitats and biodiversity loss.

As illustrated in more detail in section 3.1 significant progress has been made with respect to the adoption of measures to reduce GHG emissions from the transport sector. In particular, the EU adopted the Aviation Directive, the Biofuels Directive, the Renewable Energy Directive, the Regulation on CO_2 emissions from passenger cars, the Fuel Quality Directive, and the Directive on the promotion of clean and energy-efficient road transport vehicles which extends beyond GHG emissions to include air pollutants.[456]

Relevant measures which were adopted during the 6EAP's term to address environmentally harmful effects of transport which do not primarily aim at reducing GHG emissions include the following:

- Continuation of the Transport Environment Reporting Mechanism (TERM) which was established in 1998 in the context of the Cardiff Process. TERM provides indicators to monitor the environmental impacts of the transport sector. The EEA publishes annual TERM reports.
- Since 2002, the CIVITAS Initiative for cleaner and better transport in cities has provided more than €180 million to promote sustainable urban transport in all Member States.
- The Intelligent Energy Europe (IEE) programme, part of the Competitiveness and Innovation Framework Programme (CIP) and formerly known as STEER, is funding energy efficiency in transport in European Member States. IEE was instituted by Decision 1230/2003/EC.
- The Motorways of the Seas Projects and the Marco Polo programme - both part of the Trans-European Network (TEN-T) - seek to reduce road traffic and congestion on Member State motorways by promoting more sustainable modes of transporting freight, such as rail, short-sea and inland shipping. The Marco Polo programme was established in 2003[457], was significantly revised in 2006[458] and again in 2009[459] to simplify its procedures.
- A revised Directive on the charging of heavy goods vehicles for the use of certain infrastructures ('Eurovignette Directive', Directive 2006/38/EC) was adopted in 2006

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456 EurActiv: White Paper on Transport. http://www.euractiv.com/en/transport/white-paper-transport/article-129628.

457 Regulation (EC) No 1382/2003 of the European Parliament and the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme).

458 Regulation (EC) No 1692/2006 of the European Parliament and of the council of 24 October 2006 establishing the second Marco Polo programme for the granting of community financial assistance to improve the environmental performance for the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003.

459 Regulation (EC) No 923/2009 of the European Parliament and of the Council of 16 September 2009 amending Regulation (EC) No 1692/2006 establishing the second 'Marco Polo' programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II).

which enabled Member States to differentiate tolls, among other things, according to a vehicle's emission category ('EURO' classification) and the amount of congestion.

- In 2006, the Commission published its mid-term review of the White Paper on the European Transport Strategy from 2001 (COM (2006) 314). This review announced a considerable change in policy: It abandoned the objective of 'decoupling economic growth and the demand for transport with the aim of reducing environmental impact' of the original 2001 Transport White Paper which can also be found in Article 5(2) of the 6EAP. The review focussed on making transport 'greener' instead of reducing overall transport volumes. Moreover, the emphasis on a modal shift towards greener transport modes was replaced by a focus on co-modality with the goal of improving the efficiency of all transport modes.
- Regulation (EC) No 715/2007 was adopted in June 2007. The Regulation introduces, among other things, tighter emission standards for light passenger and commercial vehicles - Euro 5 and Euro 6 - from 2009 and 2014, respectively.
- The European Commission introduced the Greening Transport Package (COM(2008)433) in July of 2008 to create greater sustainability in the transport sector. The Greening Transport Package covers the Greening Transport Inventory which takes stock of measures taken in the past, the Communication on the Strategy to Internalise the External Costs of Transport, a legislative proposal for a revision of the Eurovignette Directive, and a Communication on the perceived rail noise from existing wagons. The Greening Transport Package aims at the internalisation of the external costs of transport. The Strategy to Internalise the External Costs of Transport identifies market-based instruments, such as taxation, tolls and 'in certain circumstances' emissions trading as the most suitable instruments. In the proposal for the amendment of the Eurovignette Directive the Commission proposes that Member States should be able to adapt charges to reflect the local air and noise pollution and the congestion that the vehicle causes at the time it is used. The Communication on perceived rail noise proposes various measures, such as voluntary agreements and the adoption of noise emission ceilings at national level, to achieve noise reduction from existing rail freight trains by 50%.

  The Greening Transport Package and the Strategy to Internalise the External Costs of Transport also focuses on a number of complementary measures to internalise costs and tackle the environmental effects of transport. In this context they sets forth specific goals and timelines to reach certain objectives. Relevant initiatives include: measures to reduce emissions in maritime transport and internalise costs if no action is taken by the International Maritime Organisation by 2009 (no proposal to date); revision of the Energy Taxation Directive in 2008 (discussion is ongoing); proposals for new legislation to limit CO_2 from vans, develop a system for tyre labelling, and revise the Car Labelling Directive by the end of 2008. While proposals for legislation regarding CO_2 limits for vans and tyre labelling have been made, no proposal for the revision to the Car Labelling Directive has been presented. Furthermore, the Commission committed to present a proposal in 2009 to further reduce the sulphur content of liquid maritime transport fuels, however, there is no proposal to date.

- In 2009 the European Commission issued the **Action Plan on Urban Mobility** to highlight the responsibility of local, regional and national authorities to develop urban mobility policies supporting sustainable transport.[460] It focuses on six themes for action to be carried out by 2012: promoting integrated policies, focusing on citizens, greening urban transport, strengthening funding, sharing experience, and optimising urban mobility.
- Directive 2009/33/EC to promote clean and energy efficient vehicles requires public authorities to include the environmental impact of vehicles into procurement decisions. Authorities are to consider the externalities linked to energy consumption, CO2 emissions and other pollutant emissions during the entire operational lifetime of vehicles when purchasing them.

The abandonment of the objective of decoupling economic growth and the demand for transport in the 2006 revision of the Transport White Paper and the new focus on improving the efficiency of all transport modes instead of focussing on a modal shift represent a significant setback for environmental policy integration in the transport sector and contradict the 6EAP's call for decoupling. However, the implications of the new approach for the adoption of concrete measures are not clear. More importantly, it can be argued that any negative implications were, at least for the time being, offset by renewed efforts to internalise the external costs of transport on the basis of the Greening Transport Package and, more importantly, by the various measures which were adopted since 2008 to reduce the GHG emissions from the transport sector.

While overall integration of environmental concerns into transport policy has improved, integration has increasingly focussed on GHG emissions, while significantly less progress has been achieved with respect to other environmental issues linked to the transport sector. The Greening Transport Paper confirms this shift, identifying climate change as 'the priority environmental problem'. This emphasis is also reflected in the concrete measures proposed under the Green Transport Package.

3.6.10.4 Impact of the 6EAP

Many transport policies, including the Greening Transport Package, were notably developed within the framework of the EU Sustainable Development Strategy (EU SDS), the Lisbon Strategy, and the CARE Package.[461] By contrast, there is no evidence for a significant impact of the 6EAP on the integration of environmental requirements into transport policy, although the 6EAP may have played a supportive role by influencing the broader discussion.

Environmental Integration in Cohesion Policy

[460] EC (2009): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on Urban Mobility, (COM(2009) 490/5).

[461] See, for example, CEC (2008a): Commission staff working document Communication from the Commission to the European Parliament and the Council, Greening Transport COM(2008) 433.

3.6.10.5 Achievement of objectives: Cohesion Policy

The objective of Article 3(3) of the 6EAP calling for 'further integration of environmental criteria into Community funding programmes without prejudice to existing ones' has been achieved for EU Cohesion Policy. Relative to previous programming cycles, environmental integration has been strengthened. The principle of environmental integration in EU funding and the role of environmental investments in particular for regional development have gained increasing prominence. More specifically, in addition to the provision on funding programmes in Article 3(3), progress was made with respect to other requirements laid down in this Article, in particular 'consideration, prior to their adoption, of whether action in the economic and social fields, contribute to and are coherent with the objectives, targets and time frame of the Programme, and full and effective use' and 'implementation of Environmental Impact Assessment and Strategic Environmental Assessment'. Certain contributions were also made to other aims, such as 'objectives of the Programme should be taken into account in future financial perspective reviews of Community financial instruments'.

However, progress towards environmental integration in Cohesion Policy does not mean that full integration as mentioned in Article 2(4) of the 6EAP has been achieved. The implementation of relevant measures varies across Member States and Cohesion Policy was subject to strong alternative influences in the context of the Lisbon Strategy prioritising economic and social objectives which may undermine environmental integration.

Integration of environmental requirements in Cohesion Policy occurs at different levels, i.e. the overall policy framework, the rules which determine eligibility for funding, and the governance mechanisms which influence the content of funding requests. Environmental concerns have been increasingly integrated at all three levels.

Regarding the policy framework two developments were particularly relevant:

- The General Regulation 1083/2006/EC[462] for the 2007-2013 financial perspective adopted in 2006 laid down provisions for the European Regional Development Fund (ERDF), European Social Fund and the Cohesion Fund, which provide €347 billion in the 2007-2013 financial perspective for projects aiming to address regional disparities and boost growth and jobs. The Regulation introduced for the first time a stand-alone article on sustainable development.
- The Community Strategic Guidelines for Cohesion[463] for the 2007-2013 financial perspective set out a novel approach where EU funding for certain environmental measures can be regarded as a driver for economic development. Funds to 'green' production processes and SMEs development (e.g. eco-innovation, eco-technologies, EMAS, etc.) were made available although the funding for such measures is fairly limited. Additionally, some funding was allocated to environmental investments which

[462] Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, *OJ L 210, 31.7.2006.*

[463] CEC (2005): Cohesion Policy in Support for Growth and Jobs: Community Strategic Guidelines, 2007-2013, (COM(2005)299),05/07/2005.

seek to go beyond compliance with the EU environmental acquis and to respond to climate challenges in the regions and preserve ecosystems.

Regarding the rules which determine eligibility for funding the following developments were particularly relevant:

- Article 2 (1b) of Regulation 1984/2006/EC governing the rules on the Cohesion Fund stipulates that the scope of assistance provided by the Fund shall include 'the environment within the priorities assigned to the Community environmental protection policy under the policy and action programme on the environment'. Funding is provided in particular for financing investment needs arising from the implementation of EU environmental acquis. For the 2007-2013 financial perspective, EU structural and cohesion funds allocate approximately €105 billion for a broad range of environmental measures.[464]
- In 2008, as part of the European Economic Recovery Plan, the Commission proposed changes in the General Regulation and other regulations.[465] Regulation (EC) No 397/2009[466] amended the ERDF Regulation (EC) No 1080/2006 so that all Member States could use up to 4% of the ERDF allocations for energy efficiency and renewable energy measures in housing.

Providing direct funding for environmental purposes is, however, insufficient in terms of environmental integration as long as non-environmental spending from EU funds can have significant negative environmental effects. Environmental integration therefore requires mechanisms which ensure that non-environmental investments are not environmentally counterproductive. The General Regulation 1083/2006/EC introduces novel governance mechanisms to enhance environmental integration in the design of national and regional Operational Programmes (OP) as well as relevant institutional structures. These provisions include:

- *Sustainable development as a horizontal issue:* Article 17 of the General Regulation stipulates that 'the objectives of the Funds shall be pursued in the framework of sustainable development and the Community promotion of the goal of protecting and improving the environment as set out in Article 6 of the Treaty'.
- *Ex-ante evaluation:* the General Regulation sets out the requirement for Member States to conduct evaluations of the OPs which should take into account 'the objective of sustainable development and of the relevant Community legislation concerning environmental impact and strategic environmental assessment' (Article 47).

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464 CEC (2008a): Communication on the results of the negotiations concerning cohesion policy strategies and programmes for the programming period 2007-2013, (COM(2008)301).

465 CEC (2008): European Economic Recovery Plan. (COM(2008)800), 26/11/2008.

466 Regulation (EC) No 397/2009 of the European Parliament and of the Council of 6 May 2009 amending Regulation (EC) No 1080/2006 on the European Regional Development Fund as regards the eligibility of energy efficiency and renewable energy investments in housing, *OJ L 126, 21.5.2009,*

- *Strategic Environmental Assessment (SEA):* In 2007, the Commission requested that Member States conduct an SEA as a parallel process to the ex-ante evaluations in line with the SEA Directive 2001/42/EC for the NSRF and OP.
- *Environmental Impact Assessment (EIA):* Major projects are subject to an EIA in line with the EIA Directive 2003/35/EEC. The Commission requires Member States to submit to the Commission as part of the official project documentation 'an analysis of the environmental impact' (Article 40(f)).
- *Partnership:* The partnership principle sets out the requirement for Member States to cooperate with environmental actors during the preparation, implementation, monitoring and evaluation of OPs (Article 11).
- *Monitoring committees:* Article 63 of the General Regulation sets out that Monitoring Committees should be established for each OP. Environmental authorities are usually full members of the committees, while non-governmental organisations are invited as observers.
- *Strategic reporting:* Member States are required to submit two strategic national reports which aim to assess the extent to which implementation of the Programme contributes to the objectives of Cohesion Policy as established in the Treaty, the tasks of the Funds as laid down in the General Regulation and the Integrated Guidelines for growth and jobs.

The results of an evaluation suggest that the various mechanisms outlined above supported environmental integration, although there was significant variation in terms of effectiveness between the different mechanisms[467], but also between different Member States.[468]

In some countries, further institutional mechanisms were created, such as 'sustainability managers' and networks of national and regional environmental authorities responsible for the management of various EU funded projects.[469]

In 2003, a Europe wide network of environmental and managing authorities (ENEA-MA) of EU funding programmes and projects was set up to promote the exchange of knowledge and experience among managing authorities with regard to environmental integration. Recently, a new working group has been established on the future Cohesion Policy, which aims to provide input to the negotiations on the future EU Funds[470].

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467 Nordregio (2009): The potential for Regional Policy Instruments, 2007-2013, to contribute to the Lisbon and Göteborg objectives for growth, jobs and sustainable development, Final report.

468 Ferry, M. Mendez, C. / Bachtler, J. (2008): From environmental sustainability to sustainable development? Making concepts tangible in Structural Funds Programmes. IQ-Net Thematic paper (22)2, European Policies Research Centre.

469 IEEP (2010): Manual for European Environmental Policy, Earthscan.

470 ENEA-MA Plenary meeting, December 2010, DG Regional Policy http://ec.europa.eu/environment/integration/pdf/enea/Agenda%2013%20Oct%202010%20FIN.pdf.

3.6.10.6 Impact of the 6EAP

The 6EAP appears to have had a significant impact on the integration of environmental requirements in Cohesion Policy in several respects. The EU SDS and perhaps to a lesser extent the 6EAP influenced the 2007-2013 General EU Funds Regulation 1083/2006/EC in a way that for the first time environmental integration and sustainable development were explicitly embedded in the Regulation as a cross-cutting theme which should be incorporated horizontally, and be adequately addressed, in the national/regional Operational Programmes and project preparation/ implementation. Article 2(b) of the Regulation on the Cohesion Fund 1080/2006/EC explicitly refers to the 6EAP, stipulating that the Fund should invest in environmental projects which are in line with the Community environmental policy and action programme. The Community Strategic Guidelines do not refer directly to the 6EAP, however in the section on urban development they refer to the Urban Thematic Strategy.

However, the role of the 6EAP should not obscure the fact that the Lisbon Strategy was a much more powerful driver for establishing economic and social priorities and allocating funding to these, among other things, through compulsory earmarking of funds. In addition, even though sustainable development and environmental integration were embedded in the policy framework of Cohesion Policy, in practice, their operationalisation and application varies significantly across countries/regions. In many new Member States in particular, administrations and beneficiaries have struggled to interpret the concept of sustainable development as a horizontal principle and its application can be considered to be relatively weak.

3.6.11 Promoting sustainable consumption and production patterns through a blend of instruments

3.6.11.1 6EAP objectives

Article 3(4):

Promotion of sustainable production and consumption patterns by effective implementation of the principles set out in Article 2, to internalise the negative as well as the positive impacts on the environment through the use of a blend of instruments, including market based and economic instruments. This requires, inter alia:

- 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 gradually eliminating them;
- analysing the environmental efficiency of tradable environmental permits as a generic instrument and of emission trading with a view to promoting and implementing their use where feasible;
- promoting and encouraging the use of fiscal measures such as environmentally related taxes and incentives, at the appropriate national or Community level;
- promoting the integration of environmental protection requirements in standardisation activities;

Article 3(5):

'promoting an integrated product policy approach throughout the Programme that will encourage the taking into account of environmental requirements throughout the life-cycle of products, and more widespread application of environmentally friendly processes and products'.

Article 3(6):

'promoting a green public procurement policy, allowing environmental characteristics to be taken into account and the possible integration of environmental life cycle, including the production phase, concerns in the procurement procedures while respecting Community competition rules and the internal market, with guidelines on best practice and starting a review of green procurement in Community Institutions'.

3.6.11.2 Introduction and overall achievement of objectives

The analysis below focuses on important measures which were adopted in relation to the 6EAP objectives on promoting sustainable consumption and production patterns. The analysis proceeds in two parts reflecting the fact that the EU Environmental Technology Action Plan (ETAP), which was not foreseen by the 6EAP, subsequently played an important role with respect to achieving relevant 6EAP objectives. The first part focuses on economic instruments and eco-design with respect to energy. The second part analyses the contribution of ETAP to relevant 6EAP objectives.

Most 6EAP objectives relating to the promotion of sustainable consumption and production patterns were achieved. However, it needs to be pointed out that all of the respective objectives are quite modest, merely calling for 'promoting', 'encouraging', or 'analysing' various actions or options. More specifically, the EU adopted the following relevant measures.

3.6.11.3 Achievement of objectives: economic instruments and eco-design

The energy taxation Directive (Directive 2003/096/EC) sets out for the first time a range of minimum tax rates for energy related products, thus representing a step forward from the earlier Directive on Mineral Oils[471] which only focused on motor fuels. The Directive corresponds to the provisions in the 6EAP on 'promoting and encouraging the use of fiscal measures such as environmentally related taxes and incentives, at the appropriate national or Community level'. However, the Directive sets low minimum levels for energy taxation[472], which in practice provide little incentive to increase energy taxation enough to stimulate substantial energy efficiencies. A substantial divide remains between countries with taxes far above the minimum EU rates and countries with relatively low rates. Despite these shortcomings, the Directive represents the first attempt to improve harmonisation and acknowledges the importance of a common energy taxation framework.

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[471] Directive 92/82/EEC of 19 October 1992 on the approximation of the rates of excise duty on mineral oils.

[472] Hasselknippe /Christiansen (2003): Energy Taxation in Europe: Current Status- Driver and Barriers – Future Prospects. FNI Report 14/2003.

In March 2007 a Green Paper on Market Based Instruments (MBI)[473] was presented which had a major focus on energy taxation. Notably, it proposed to split tax rates set out in the energy taxation Directive into energy and an environmental component, and explored the possibility of further shifting taxes from labour to environmentally–damaging products and services ('Environmental Tax Reform'). Reactions to the Green Paper were meant to provide input to a revision of the energy taxation Directive. A draft proposal for a revised Directive was tabled in 2009[474] with the aim of bringing the energy taxation Directive more closely in line with the EU's climate and energy objectives and to introduce an explicit environmental element into the tax. A revised proposal was meant to be issued as part of a 'green tax package' – including draft legislation on reduced VAT rates for 'green' products and a Commission Communication on the role of taxes in energy and environmental policy. The package however has been put on hold following internal consultations within the Commission.

The Sustainable Consumption and Production and Sustainable Industrial Policy (SCP-SIP) Action Plan[475] was published in July 2008. It sets out an integrated series of legislative and non-legislative measures to green European manufactured products, working towards three major objectives: an integrated policy framework for eco-efficient products; cleaner and leaner production; and contributing towards consumption and production efforts internationally.

The Eco-design Directive 2009/125/EC[476], which had been proposed alongside the SCP-SIP Action Plan, establishes a framework (rules and criteria) for the setting of minimum requirements for the performance of energy-related products. It expands the scope of the original eco-design framework Directive (2005/32/EC) from energy-using products (EuP) to all energy related products which have an impact on energy consumption during use (e.g. windows, construction products, insulation materials, detergents and water-using products). The measure does not introduce directly binding requirements as such, but rather defines a process, conditions and criteria for setting requirements through implementing measures. The Commission prepares implementing measures for certain products based on an assessment of the impact of a product on the environment throughout its lifecycle. The Directive corresponds to the provisions in the 6EAP on 'promoting an integrated product policy approach throughout the Programme that will encourage the taking into account of environmental requirements throughout the life-cycle of products, and more widespread application of environmentally friendly processes and products'.

Other key measures which seek to reduce the impact from energy and energy-related products and promote sustainable consumption and production include the following:

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473 Green Paper on market-based instruments for environment and related policy purposes, (COM(2007)140), 28/03/2007.

474 CRC (2009): Proposal for a Council Directive Amending Directive 2003/96 restructuring Community framework for the taxation of energy products and electricity (presented by the Commission), (COM (2009) XXXX).

475 CEC (2008): Commission Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, (COM(2008)397), 16/07/2008.

476 Council Directive 2009/125/EC establishing a framework for the setting of Ecodesign requirements for energy-related products (recast). OJ L28531.10.2009.

- Energy Performance of Building Directive[477] promotes an improvement in the energy performance of buildings in the EU by setting a common framework and a number of requirements to ensure that action is taken by Member States.
- Energy Labelling Directive[478] introduces an EU-wide energy labelling scheme for household appliances which rank products according to their energy efficiency consumption. In September 2010 the Commission proposed new energy labels for TVs and updates to the existing label scheme for refrigerators, dishwashers and washing machines.[479]
- The Energy End-use Efficiency and Services Directive[480] sets indicative targets, removes market barriers and introduces measures to promote energy efficiency and energy services. Among other things, the Directive requires Member States to adopt an indicative national energy savings target of 9%, to be achieved in 2016. Member States are required to submit National Energy Efficiency Action Plans (NEEAPs) to the Commission which set out, among other things, how they intend to reach the indicative 9% target.

3.6.11.4 Achievement of objectives: Environmental Technologies Action Plan

In January 2004, the Commission published a Communication '**Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union'.**[481] The ETAP Action Plan aims to: remove barriers to harness the full potential of environmental technologies and deliver win-win solutions for the environment and the economy; ensure the EU takes a leading role in developing and utilising environmental technologies; and mobilise all interested stakeholders in achieving these objectives. ETAP sets out a series of measures focusing on three key areas of intervention:

- Bring research to markets: enhance research, demonstration and dissemination, establishing technology platforms and testing networks;
- Improve market conditions: agree performance targets, mobilize necessary financial resources, revise environmental state aid guides, review environmentally harmful subsidies, green public procurement, increase awareness among stakeholders;
- Act globally: promote responsible investments and trade.

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477 Council Directive 2002/91/EC on the energy performance of buildings. OJ L1, 4.1.2003.

478 Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (recast), OJ L 153/1, 18/6/2010.

479 European Commission (2010): Press release - Energy savings: Commission sets up new energy labels for televisions, refrigerators, dishwashers and washing machines, IP/10/1182, 28/09/2010, http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1182&format=HTML&aged=0&language=en&guiLanguage=en.

480 Council Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC. OJ L 114, 27.4.2006.

481 CEC (2004): Communication from the Commission to the Council and the European Parliament Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union, COM(2004)38, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0038:FIN:EN:PDF .

Implementation of most ETAP actions requires the adoption of additional measures. Financial instruments such as the 7th Research Framework Programme (FP7) and the Competitiveness and Innovation Framework Programme (CIP) are major EU-level instruments for the implementation of ETAP. FP7 allocates approximately €10 billion to environmental technologies, whereas the preceding FP6 devoted approximately €1.4 billion, indicating that these technologies have gained significantly more importance as a result of increased coordination of existing programs.[482] The CIP makes explicit reference to ETAP, and two of its sub-programmes, namely *Entrepreneurship and Innovation* and *Intelligent Energy,* and has the potential to foster the development of environmental technologies.[483] Eco-innovation is described as a transversal theme of the whole programme, and within the *Entrepreneurship and Innovation* sub-programme, nearly €200 million is specially allocated to support eco-innovation.

ETAP contains 25 actions, including 11 priority actions. The following are particularly relevant in terms of the 6EAP provisions on promoting sustainable consumption and production patterns: develop and agree on performance targets for key products, processes and services (priority action 4); review environmentally harmful subsidies (priority action 7); encourage procurement of environmental technologies (priority action 8).

Performance targets for key products, processes and services

Under this priority action, the Commission undertook to work with Member States and relevant stakeholders to consider how best to develop a process to identify performance targets for environmental technologies drawing on various approaches and instruments, in particular integrated product policy (IPP) and eco-design of energy-using products.

With regard to the 6EAP's provisions on promoting IPP, the Commission published a Communication in June 2003 setting out a non-binding framework for the consideration of a product dimension within environmental policy.[484] A programme to take forward at least some of the elements set out in the Communication was put in place. Specifically this focused on the completion of pilot projects and the development of approaches regarding the most environmentally harmful products.[485]

Concerning the eco-design of energy-using products (EuP), the Commission adopted the so-called EuP Directive, which, as explained in more detail above, was re-cast through the Eco-design Directive.

Reviewing environmentally harmful subsidies and using fiscal measures

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[482] Ecorys (2009): The implementation of the Environmental Technologies Action Plan. Draft final report. Under the Framework Contract ENV.G.1/FRA/2006/0073. Ecorys Research and Consulting. 23 August 2009.

[483] Pallemaerts, M., ten Brick, P., Herodes, M., Bassi, S. and Geeraerts, K. (2007): Study on the potential contribution of the federal authorities to the development of an integrated policy in the field of eco-innovation in Belgium. Report for the Belgian federal Public Service for public health, food chain safety and environment. IEEP. London.

[484] EC (2003):Commission Communication on "Integrated Product Policy - Building on environmental life-cycle thinking". (COM(2003)302). Brussels. 18.06.2003.

[485] IEEP (2010a): Manual of European Environmental Policy. Institute for European Environmental Policy. Earthscan. Available at: http://www.europeanenvironmentalpolicy.eu.

In relation to the 6EAP objective to 'encourage' reforms of environmentally harmful subsidies, prepare a review and develop methods to identify them with a view to elimination, ETAP reviewed environmentally harmful subsidies. Further to this, studies were carried out with the aim of, among other things, developing a methodology for identification, assessment and quantification of environmentally harmful subsidies and an 'EHS Reform tool' for screening, integrated assessment and reform of environmentally harmful subsidies was developed.[486]

In relation to the 6EAP objective to promote and encourage the use of fiscal measures, tax incentives are mentioned only in passing in the ETAP Communication under the heading 'Creating incentives and removing economic barriers'. None of the 28 actions recommended by ETAP refers to the introduction of such incentives. With the exception of the EU measures concerning energy taxation described above, environmental taxes have mainly been introduced at Member States level.[487]

Encouraging procurement of environmental technologies

In relation to the 6EAP objective relating to the promotion of green public procurement policy, ETAP put forward a priority action (No 8) to encourage procurement of environmental technologies and, among other things, set national targets for the uptake of environmentally friendly technologies. It also noted that the Commission had already contributed to this area by proposing what was to become the Directive 2006/32/EC on energy end-use efficiency and energy services as well as a number of other developments (On Green Public Procurement, see also the next section 'Better environmental information').

3.6.11.5 Impact of the 6EAP

The 6EAP appears to have had some impact on the adoption of certain measures contributing to the promotion of sustainable consumption and production patterns. This is the case for the Eco-design Directive, which contains multiple references to the 6EAP. Although an instrument such as ETAP was not foreseen in the 6EAP, the Programme also appears to have had some impact on ETAP. In addition to several references to the 6EAP, for example with respect to the removal of environmentally harmful subsidies, the ETAP Communication states that existing EU policies are a firm basis to build on, thereby referring to the 6EAP. The four priority areas identified by the 6EAP as areas on which particular attention needs to be focussed on during the 6EAP's 10-year term, provide a clear and ambitious policy framework for the development and dissemination of new environmental technologies. In the financial statement annexed to the ETAP Communication, the 6EAP is even mentioned as the legal basis for the action plan, next to the EC Treaty (in particular Article 174) and Decision No 1513/2002/EC on the sixth research framework programme (FP6). The Commission's preparatory communications for ETAP also contain several references to the 6EAP. In its Communication of March 2003 on developing an action plan for environmental

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[486] IEEP et al (2009): Environmentally Harmful Subsidies: Identification and Assessment. Final report for the European Commission's DG Environment. Institute for European Environmental Policy. November 2009.

[487] EC (2008): Taxation trends in the European Union. Data for the EU Member States and Norway. Eurostat Statistical Books.

technology[488], the Commission explicitly states that the 6EAP provided guidance to the Commission. However, other measures, such as the Energy Taxation Directive, resulted from discussions which predated the 6EAP and the 6EAP appears to have had no impact on these measures.

3.6.12 Better environmental information on environmental products and processes

3.6.12.1 6EAP objectives

- Article 3(6):
- To help ensure that individual consumers, enterprises and public bodies in their roles as purchasers, are better informed about the processes and products in terms of their environmental impact with a view to achieving sustainable consumption patterns. This requires:
- encouraging the uptake of eco-labels and other forms of environmental information and labelling that allow consumers to compare environmental performance between products of the same type;
- encouraging the use of reliable self-declared environmental claims and preventing misleading claims;
- promoting a green public procurement policy, allowing environmental characteristics to be taken into account and the possible integration of environmental life cycle, including the production phase, concerns in the procurement procedures while respecting Community competition rules and the internal market, with guidelines on best practice and starting a review of green procurement in Community Institutions;

3.6.12.2 Achievement of objectives

The 6EAP objectives relating to better environmental information on environmental products and processes were broadly achieved. However, it needs to be pointed out that all of the objectives are quite modest, merely calling for 'promoting' and 'encouraging' certain actions or to '*help* [emphasis added] to ensure' the achievement of certain aims.

A number of legislative measures providing for the labelling of energy using goods have been adopted that encourage the uptake of eco-labels and other forms of environmental information and labelling. Some key measures adopted since 2002 are outlined below:

- Directive 2010/30/EC on energy labelling[489] recast and extended the scope of previous Directive 92/75/EEC to all energy-related products. The Directive establishes requirements for labelling and information on the environmental performance of certain products with the aim of helping consumers make better

[488] EC (2003): Communication from the Commission. Developing an action plan for environmental technology. (COM(2003)131). Brussels. 25.03. 2003.

[489] Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (recast), OJ L 153/1, 18/6/2010.

choices. The new Directive has yet to be transposed, thus it is too early to tell what the impact of the new Directive will be. A survey[490] of compliance with the previous Directive (92/75/EEC) found that the total share of correctly labelled appliances that is those in full accordance with the Directive, across all 29 countries (27 EU Member states, Norway and Iceland) included in the analysis was found to be 61%. There were, however, huge differences between countries and between different appliances.

- The Energy Labelling Directive also contains provisions on public procurement. By extending the scope of the Directive beyond household goods, more products in the public procurement pool are required to be labelled. With more products bearing the same label across all Member States, less fragmentation of procurement policy is envisaged.
- Regulation (EC) 66/2010 on the EU eco-label[491] repeals the previous Eco-label Regulation (EC) No 1980/2000 and lays down revised rules for the establishment and application of the voluntary EU eco-label scheme to goods and services in the Community market. The revised Regulation aims to streamline the previous Regulation to raise awareness, understanding and respect for the EU eco-label, bring about more eco-labelled products, and reduce administrative costs and burden on business. The new Eco-label Regulation entered into force on 19 February 2010, thus it is too early to assess its effects. However, it addresses several key factors – awareness, administrative burden and cost[492] – which have constrained the effectiveness of the previous Regulation.
- Regulation (EC) 106/2008 on an energy-efficiency labelling programme for office equipment (Energy Star) is a voluntary energy labelling programme for office equipment (computers, computer monitors, printers, copiers, scanners, fax machines). Regarding public procurement, the Regulation obliges central government to apply energy efficiency requirements included in Energy Star Standards in procurement procedures for contracts above the thresholds of the Public Procurement Directives

In addition to the provisions on public procurement mentioned above, a number of measures have been adopted which aim to facilitate/encourage the uptake of green public procurement (GPP) in the EU, including:

- The 2003 Integrated Product Policy (IPP) Communication called on Member States to develop a national action plan (NAP) on GPP by the end of 2006. As of September 2010, a NAP or equivalent document had been adopted in 21 Member States, and

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490 Schlomann, et al., (2009): Survey of Compliance Directive 92/75/EEC (Energy Labelling) Final Report for the European Commission Directorate-General Energy and Transport, 2009.

491 Regulation (EC) No 66/2010 on the EU Eco-label, OJ L 27/1, 30/01/2010.

492 Cf. IEEP (2010): Manual for European Environmental Policy, Earthscan.

NAPs were in the process of development in the remaining six Member States (Bulgaria, Estonia, Greece, Ireland, Hungary, Romania).[493]

- EU Directives on public procurement (Directive 2004/18/CE and Directive 2004/17/CE) clarify how environmental considerations can be taken into account in public procurement procedures and practices.
- Directive 2006/32/EC on energy end-use efficiency and energy services provides that the public sector should fulfill an exemplary role in the context of this Directive and should *inter alia* adopt at least two measures from a list in Annex VI of the Directive aimed at procurement of energy efficiency equipment and buildings.
- Directive 2009/33/EC on clean and energy efficient road transport vehicles requires that energy and environmental impacts linked to the operation of vehicles over their whole lifetime are taken into account in all purchases of road transport vehicles as covered by the public procurement Directives and the public service Regulation.
- The Communication on public procurement for a better environment (COM(2008)400)[494] proposes a series of actions to address certain obstacles to the uptake of GPP and promotes more and better GPP. These actions involve the creation of a process for setting common GPP criteria, encouraging the publication of information on lifecycle costing of products, increasing certainty on the legal possibilities to include environmental criteria in tender documents, and increasing support for the promotion and implementation of GPP through a political target linked to indicators and future monitoring. The Communication proposed that by 2010, 50% of all public tendering procedures should be 'green', i.e. comply with common EU core GPP criteria.

The Commission has worked with Member States and stakeholders to develop common criteria for 18 product and service groups.[495] Already in 2004, the Commission published a 'Buying Green! – A Handbook on Environmental Public Procurement' which explains how environmental considerations can be integrated in public procurement procedures and clarifies the legal position of integrating environmental considerations in a tender.[496] A web-based Training Toolkit on GPP has been produced and in 2009-2010 a programme to raise awareness of GPP policy in 19 EU Member States was carried out. In addition an extensive

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493 DG Environment (2010): GPP National Action Plans – The Status in Member States, http://ec.europa.eu/environment/gpp/action_plan_en.htm, Site accessed 15/12/2010.

494 CEC (2008): Communication from the Commission on public procurement for a better environment, (COM(2008)400), 16/07/2008.

495 DG Environment (2010): GPP common criteria, http://ec.europa.eu/environment/gpp/gpp_criteria_en.htm, Site accessed 15/12/2010.

496 DG Environment (2004): Buying Green! – A Handbook on environmental public procurement, http://ec.europa.eu/environment/gpp/pdf/buying_green_handbook_en.pdf.

training programme was carried out for 40 participants from 19 Member States.[497] A Helpdesk for GPP was launched in January 2010.

In 2006, seven Member States (Sweden, Finland, Denmark, Austria, Germany, the Netherlands and the UK - known collectively as the 'Green-7') were practising a significant amount of GPP, while GPP was applied much less, or not at all in other Member States.[498] In 2006/2007, the Green-7 had an average overall level of 45% GPP of the total procurement value and 55% GPP of the total amount of contracts.[499] In 2011, the Commission will undertake a monitoring exercise of the level of GPP covering all Member States.

3.6.12.3 Impact of the 6EAP

There is no evidence for a significant direct impact of the 6EAP on the Eco-label Regulation, the Energy Labelling Directive and the GPP Communication. However, while the Eco-label Regulation does not mention the 6EAP, the annex of a Commission Decision[500] establishing the Community Eco-label working refers to the 6EAP stating that 'The Community Eco-label scheme is part of a broader strategy aimed at promoting sustainable production and consumption. This aim can be achieved in the context of a 'framework for an integrated life-cycle oriented product policy' as indicated in the Sixth Environmental Action Programme (6EAP)'. The explanatory memorandum accompanying the Commission's proposal for the revised Energy Labeling Directive[501] also refers to the 6EAP. These references to the 6EAP seem to imply that the Programme was part of the broader policy framework within which these specific developments took place although one cannot infer a direct impact based on these references alone. The GPP Communication does not mention the 6EAP.

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497 DG Environment (2010): GPP web pages, http://ec.europa.eu/environment/gpp/index_en.htm , Site accessed 15/12/2010.

498 CEC (2008a): Commission Staff Working Document accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public procurement for a better environment, Impact Assessment, SEC(2008)2124), 16/07/2008.

499 PWC (2009): Collection of statistical information on Green Public Procurement in the EU Report on data collection results, Report by PricewaterhouseCoopers, Significant and Ecofys, January 2009, http://ec.europa.eu/environment/gpp/pdf/statistical_information.pdf.

500 2006/402/EC.

501 CEC (2008): Proposal for a Directive on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (COM (2008)778).

3.6.13 Environmental Liability

3.6.13.1 6EAP objectives

- Article 3(8):
- 'To create a Community liability regime requires inter alia: legislation on environmental liability'.

3.6.13.2 Achievement of objectives

The Environmental Liability Directive[502] (ELD) was adopted on 21 April 2002. Consequently the 6EAP objective '(t)o create a Community liability regime requires inter alia: legislation on environmental liability' was achieved. Article 3(8) states the creation of a Community liability regime requires 'inter alia' the adoption of legislation. However, it is not clear to which other measures 'inter alia' refers. Consequently, it is not possible to assess the degree to which the adoption of the ELD was sufficient for the creation of a Community liability regime.

3.6.13.3 Impact of the 6EAP

The 6EAP had no identifiable impact on the adoption of the ELD and is not mentioned in the Directive. The ELD was adopted a few months ahead of the 6EAP after a drawn-out discussion over many years.

3.6.14 EU Enlargement

3.6.14.1 6EAP objectives

Article 2(5):

'The Programme shall promote the adoption of policies and approaches that contribute to the achievement of sustain- able development in the countries which are candidates for accession ('Candidate Countries') building on the transposition and implementation of the acquis. The enlargement process should sustain and protect the environmental assets of the Candidate Countries such as wealth of biodiversity, and should maintain and strengthen sustainable production and consumption and land use patterns and environmentally sound transport structures through:

- integration of environmental protection requirements into Community Programmes including those related to development of infrastructure;
- promotion of transfer of clean technologies to the Candidate Countries;
- extended dialogue and exchange of experience with the national and local administrations in the Candidate Countries on sustainable development and preservation of their environmental assets;

[502] Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environment liability with regard to the prevention and remedying of environmental damage, "Environmental Liability Directive".

- cooperation with civil society, environmental non-governmental organisations (NGOs) and business in the Candidate Countries to help raise public awareness and participation;
- encouraging international financing institutions and the private sector to support the implementation of and compliance with the environmental acquis in the Candidate Countries and to pay due attention to integrating environmental concerns into the activities of the economic sector'.

3.6.14.2 Achievement of objectives

An assessment of the achievement of 6EAP objectives in the 'enlargement countries' is extremely difficult due to the diversity among these countries. First, there are large differences with respect to economic development ranging from relatively wealthy Slovenia to the Former Yugoslav Republic of Macedonia or Bosnia and Herzegovina. Second, these countries are at very different stages on the road to accession to the EU. Some countries have, at the time of writing, been EU Member States for several years, but were still candidate countries when the 6EAP was adopted. Others, such as Bosnia and Herzegovina, are potential candidate countries. More specifically, since the 6th EAP was adopted, 12 new Member States (10 from Central and Eastern Europe (CEE), together with Cyprus and Malta) have joined the EU. Currently, there are four candidate countries (Croatia, Turkey, the Former Yugoslav Republic of Macedonia, and Iceland) and five potential candidates (Albania, Bosnia and Herzegovina, Montenegro, Serbia, Kosovo under the UNSC Resolution 1244/99).

Against this background the assessment of the achievement of the relevant objectives of the 6EAP must remain highly general and preliminary: while the EU has launched various initiatives which help to attain the objectives of the 6EAP, the degree to which these measures contributed to objectives such as co-operation with civil society remains unclear.

These conclusions are based on the following considerations:

The transposition and implementation of the environmental acquis communautaire is a central objective in the context of EU accession. This is a process which is not so much driven by EU environmental policy (or the 6EAP) but by the broader accession negotiations and process. The focus of the assessment is therefore on aspects which are of central importance for the environmental dimension of enlargement, but are somewhat less closely linked to the accession process than the adoption of the acquis itself: integration of environmental requirements, funding of environmental investment, and cooperation with civil society.

Environmental Integration

The EU accession process was a strong driver for the introduction and implementation of environmental integration in CEE countries which joined the EU in 2004 and 2007; yet the CEE countries were challenged to assert this new framework within the domestic policy-making context involving evolving administrative and bureaucratic structures.[503] In principle, the efforts to strengthen administrative capacities constituted an opportunity to implant procedures and capacities for environmental integration. However, the accession process itself is highly demanding with respect to administrative capacity which tends to work against environmental policy integration.

Certain EU measures were perceived as especially important for promoting environmental integration in CEE countries; this applies, in particular, to the Environmental Impact Assessment and Strategic Environmental Assessment Directives. However, partly as a result of implementation problems, effects of these measures on EPI are less evident in practice.

After the accessions of Bulgaria and Romania, the EU raised the standards for the promise of membership.[504] This might also have implications for environmental integration. The dispersal of enlargement funds is now considered to be guided by a stricter and more cautious policy of conditionality with the potential candidates and candidate countries.[505] It is expected that candidates and potential candidates in South East Europe going through transformations will find it harder than their predecessor candidates to achieve EU environmental standards.[506] Efforts to promote environmental integration may also be negatively affected by this trend. However, to some extent environmental integration may also be less necessary, given that potentially environmentally harmful investment projects, for example with respect to the transport infrastructure, will also be affected by the tighter conditions. In fact, there is even the possibility that stronger conditionality might itself partly reflect stricter environmental integration requirements.

Funding Mechanisms

New Member States which acceded in 2004 and 2007 received large sums of EU funding before and after accession in the framework of pre-accession assistance and, after accession, the Cohesion Funds. Candidate countries and potential candidates receive support under the 2007 Instrument for Pre-Accession Assistance (IPA).

The EU accession process involving potential candidates and candidate countries is supported by the Instrument for Pre-Accession Assistance (IPA) as outlined in the

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503 Withana, S./Baldock, D./Farmer, A./Pallemaerts, M./Hjerp, P./Watkins, E./Armstrong, J./Medarova-Bergstrom, K./Gantioler, S. (2010): Strategic Orientations of EU Environmental Policy under the Sixth Environment Action Programme and Implications for the Future. Report for the IBGE-BIM. IEEP. London.

504 Papadimitriou, Dimitris and Eli Gateva (2009): Between Enlargement-Led Europeanisation and Balkan Exceptionalism: An Appraisal of Bulgaria's and Romania's Entry into the European Union. Perspectives on European Politics and Society Vol. 10, No. 2, 152–166, June 2009.

505 Pridham, Geoffrey (2007): Change and Continuity in the European Union's Political Conditionality: Aims, Approach, and Priorities. Democratization, 14(3):446-471.

506 Unalan, Dilek, /Richard Cowell (2009): Adoption of the EU SEA Directive in Turkey, Environmental Impact Assessment Review, 29:243-251.

Commission Regulation (EC) No 718/2007 of 12 June 2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA), and Commission Regulation (EU) No 80/2010 of 28 January 2010 amending Regulation (EC) No 718/2007.

The IPA is an EU financial mechanism to support beneficiaries (potential candidates and candidate countries) in the pre-accession process from 2007-2013 involving five components: support for transition and institution-building; cross-border cooperation; regional development; human resources development and rural development and is based on strategic multi-annual planning. The dispersal of enlargement related funds such as the IPA is integrally linked to the fulfilment of stated requirements at various stages and funds are dispersed based on progress made by the beneficiary country.

The IPA, especially Component III, increasingly enabled candidate countries to meet the requirements of adoption of the EU environmental *acquis*, including in particular investment intensive measures related to water and waste management. Article 3 of the IPA Regulation asserts that, '[t]he objectives of pre-accession assistance shall be pursued in the framework of sustainable development and the Community promotion of the goal of protecting and improving the environment.' Furthermore, the Transition Assistance and Institution Building Component and the Regional Development component both take into account the importance of environmental policies and priorities. The IPA funds several important environmental endeavours. Cooperative environmental efforts, for example, are enhanced through Cross-Border Programmes such as the Black Sea Synergy (COM(2007)160).

The IPA also supports the development of civil society (Article 2 (e); Article 6(1. The Environment Forum, for example, is an EU funded project, 'to build and strengthen civil society active in the environment field in candidate countries and potential candidates through information exchange on EU environmental policy and developments in the enlargement process' (see http://www.envforum.eu/doku.php/ngos_enlargement/start; last visited November 25, 2010).[507]

The Regional Environmental Network for Accession (RENA)[508] which was set up in 2010 to enhance regional environmental cooperation in the Western Balkans and Turkey for EU accession and its working group on strategic planning and investment supports, among other things, capacity building for environmental investments.

While current IPA funds pose a tighter budget and strict dispersal, the Cohesion Policy has increased the administrative capacities of new Member States in Central and Eastern Europe and supported the development of key environmental infrastructure improving water and waste management. The Cohesion fund specifically targets the environment and transport infrastructure. The budgets for the Structural Funds and the Cohesion Fund for 2007-2013 are about 278 billion euro and 70 billion euro respectively.[509] Out of the total Cohesion Policy budget 2007-2013, 105 billion euro are anticipated for environment related programmes and

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507 http://ec.europa.eu/environment/integration/pdf/cohesion_policy_2007.pdf).

508 http://www.renanetwork.org/.

509 http://europa.eu/scadplus/glossary/structural_cohesion_fund_en.htm.

projects.[510] More than half of the Cohesion Fund of 2004-2006 went to eligible new Member States.

Cooperation with civil society

The Commission has initiated and supported numerous activities and action with respect to civil society and environmental NGOs in the former and present candidate countries as well as potential candidate countries. For example, as early as 1990 the Commission was a co-founder of the Regional Environmental Center[511] (REC) which aims to assist in solving environmental problems in CEE countries. The REC 'fulfils this mission by promoting cooperation among governments, non-governmental organisations, businesses and other environmental stakeholders, and by supporting the free exchange of information and public participation in environmental decision making'. More recent activities include the launch of the Environment Forum[512] which aims to engage environmental NGOs from candidate countries and potential candidate countries 'interested and involved in the EU enlargement process. It aims to support NGOs in their active and constructive role in the enlargement process… One of its goals is to develop capacities of environmental NGOs to establish a constructive dialogue with national authorities'. Previous projects supported by the Commission included the NGO Dialogue and New NGO Forum, which focused on information exchange and improvement in transparency between NGOs and the Commission.

The Civil Society Facility (CSF) is a financial facility of the Instrument for Pre-Accession Assistance (IPA). Providing 'support for local civil society initiatives and capacity-building, reinforcing the role of civil society' is one of the three areas of activity of the CSF. Environment is one of the sectors eligible for CSF funding. Funding of civil society activities in the Western Balkans was expected to triple over the period 2008-10 compared to the period 2005-07 (COM(2008) 127 final).

In 2005 the Commission published the Communication Civil Society Dialogue between the EU and Candidate Countries (COM (2005) 290 final) focussing specifically on intensifying dialogue processes in Croatia and Turkey. The Commission argues that 'Any future enlargement of the EU needs to be supported by a strong, deep and sustained dialogue between the societies of the candidate countries and in the EU Member States, as well as with the EU institutions'. However, the communication does not specifically focus on the environment which is mentioned specifically in two sections: In Section 1.2 the Communication states that 'the dialogue with Croatia aims more towards enhancing public debate in Croatia on EU membership, especially leading to a deeper understanding and acceptance of EU values and standards. In addition to more general political issues, this dialogue is particularly important in certain areas of the EU *acquis* such as, for example, the environment, food safety and consumer protection, as well as the obligations in the field of

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510 SEC (2010): Commission Staff Working Paper '2009 Environment Policy Review.'SEC (2010) 975 final, Brussels, 2.8.2010.

511 http://www.rec.org/.

512 http://www.envforum.eu/doku.php/theproject/start.

external assistance'. With respect to long-term partnerships with NGOS, social partners and professional organisations in Turkey the Communication states that 'such increased international exposure should also be aimed at helping Turkish NGOs grow stronger and participate more actively in EU debates. Organisations active in such crucial areas as youth, gender-equality, environment, consumer rights, cultural rights, civil and human rights, and combating social exclusion and discrimination of all kinds, should be particularly encouraged to establish a dialogue with their EU counterparts'.

3.6.14.3 Impact of the 6EAP

No evidence of a significant impact of the 6EAP on the various measures was found. It should be noted, however, that in particular the debate about the 6EAP at the time of its formulation is likely to have had a certain impact in the countries which joined the EU in 2004 and 2007. Relevant actors from these countries were to some extent involved in these debates.[513]

3.6.15 Summary assessment

The aims of the 6EAP with respect to strategic approaches and governance were mostly achieved in most of the areas assessed. More specifically this applies to the following seven areas: public participation, improvement of the process of policy making through evaluation, provision of regular information, implementation and enforcement of EU environmental legislation, promoting sustainable consumption and production patterns through a blend of instruments, better environmental information on products and processes, and environmental liability. Results were more mixed in four areas: environment in Community research programme, review and regular monitoring of information and reporting systems, use of earth monitoring tools, environmental integration. In one area - EU enlargement - only a partial assessment was possible, which is mainly due to the exceptionally strong variation of the national contexts in which EU measures addressed and in which they operated.

This overall high degree of goal achievement with respect to strategic approaches and instruments contrasts with the more variable achievement of 6EAP objectives in most of the four environmental priority areas. Two factors help to explain these differences. In doing so, they also put the high level of goal achievement with respect to strategic approaches and instruments in perspective: First, there may arguably be fewer intervening variables between the 6EAP objectives concerning governance and effects on governance than between 6EAP objectives concerning specific environmental priority areas and effects on environmental quality. Consequently, measures which 'only' aim to affect governance are more likely to be achieved than measures which aim to achieve environmental outcomes. Second, and more importantly, many objectives of the 6EAP with respect to strategic approaches were quite modest, merely calling for, for example, 'promoting' or 'encouraging' certain processes or 'analysing' particular problems. The respective objectives can then be achieved relatively easily as a movement in a certain direction is sufficient for goal achievement, even if the

[513] See, for example, Regional Environmental Center (2000).

overall movement or degree of change remains small. While similar modest qualifications of objectives can be found in the four environmental priority areas, they can be interpreted more easily in the light of 'harder' environmental objectives of the 6EAP for the particular priority area.

The impact of the 6EAP on the adoption of measures contributing to the its objectives in the area of strategic approaches and governance was small and often not identifiable. Interestingly, the Programme seems to have had some impact on the formulation of the Environmental Technology Action Plan, although this measure was not foreseen in the 6EAP. It seems possible that ETAP provided a 'window of opportunity' to take forward - and obtain financial resources for - certain initiatives, such as addressing the problem of environmentally harmful subsidies, which the 6EAP called for.

4 Overall assessment of the 6EAP

4.1 6EAP contribution to EU environmental governance and policy performance

Article 192(3) of the Treaty on the Functioning of the EU (TFEU) provides for the adoption of 'general action programmes setting out priority objectives to be attained' by the European Parliament and the Council in accordance with the ordinary legislative procedure (former co-decision procedure). The Treaty goes on to state that 'measures necessary for the implementation of these programmes' are to be adopted in accordance with the legislative procedure laid down in either Article 192(1) or (2). This wording implies that the action programmes have a guiding function, but that the concrete measures which are needed to implement the programmes need to be adopted through separate processes. The guiding function can be interpreted as comprising of two linked, but separate elements: First, it requires the 'setting out [of] priority objectives'. Second, the concept of a 'general action programme' implies that the programme should also outline 'actions' which are necessary to achieve the 'priority objectives'.

Against this background of the purpose or function of an EAP, the extent of the added value provided by the 6EAP mainly depends on its contribution to providing effective guidance for EU environmental policy and indeed other policies with significant environmental effects. Given that the concrete actions and measures required to implement the objectives of the Programme are to be adopted in separate processes, the 6EAP must first of all, influence these processes to fulfil its guiding function and create an added value. Put differently, the 6EAP needs to affect EU governance, in particular, but not only, in the environmental field. Section 4.1.1 therefore looks at the extent to which the 6EAP contributed to an improvement of relevant governance structures and processes. More specifically, the section first assesses the performance of the 6EAP in providing policy-makers and stakeholders with orientation as to the main principles and priorities of (what was then) future EU environmental policy. Given the often competing demands which policy-makers face, the legitimacy of the Programme and its effects on the legitimacy of EU environmental policy more broadly are essential governance resources. Consequently, this section goes on to analyse different aspects of the legitimacy of the 6EAP. The 6EAP also recognises information provided by scientists and stakeholders in open, participatory processes of policy-making as another critical factor. Thus, the analysis examines the ways in which the 6EAP contributed to mobilising actors to provide relevant information and thereby improve the knowledge base. Finally, the capacity of the 6EAP to steer EU environmental policy also depends on instruments which policy-makers have at their disposal. The analysis therefore concludes with an assessment of the 6EAP's proposals for tools and instruments. Section 4.1.2 goes on to assess the contribution of the 6EAP to improve EU environmental policy in several important general respects, i.e. effective priority-setting, coherence and efficiency, and the resilience and reach of EU environmental policy.

It should be noted that an assessment of the added value of the 6EAP is a challenging exercise for several reasons. First, the added value of the 6EAP can only be identified

against a counterfactual scenario in which the 6EAP does not exist. Of course, many assumptions of this scenario, which must often remain implicit due to the limited scope of this study, remain open to discussion. Second, the 6EAP is a broad, complex document, which covers a large number of different issues in many different contexts. It therefore requires extensive analysis. Perhaps more importantly, the large range and variety of issues covered by the 6EAP make it difficult to arrive at overall conclusions, which are valid for the Programme as a whole. For example, how should an overall assessment of the impact of the 6EAP on EU environmental policy-making weigh the considerable impact of most of the Thematic Strategies, which are key elements of the Programme, on the leveraging of the adoption of legislation, against the 6EAP's weak or even absent impact on the adoption of measures in respect of most of the other priority actions, which usually feature less prominently in the Programme, but are far more numerous than the Thematic Strategies? Third, the added value of a legally non-binding programme such as the 6EAP may often lie more in 'soft' social psychological factors relating to perceptions among policy-makers and stakeholders rather than concrete impacts on specific measures.

The below assessment relies on several sources: the analyses conducted in the previous parts of this report on the contribution of important measures to the achievement of 6EAP objectives, relevant drivers and barriers, and the contribution of the 6EAP to the adoption of relevant measures. The assessment also draws on the results of the three workshops conducted for this project and on the results of the electronic survey. Within the limited scope of this project, the different methods of inquiry have been used to cross-check or even triangulate certain results. Nevertheless, the reliability of many results remains subject to the limitations of the scope of this study and the methods employed. This also applies to the results of the electronic survey, which faced the additional constraint of a relatively small pool of sufficiently knowledgeable people.

4.1.1 Contribution of the 6EAP to EU environmental governance

Orientation: providing a sense of direction for EU environmental policy

A key function of an overarching strategic framework, such as the 6EAP, is to provide policy-makers, stakeholders, and the interested public with general orientation and a sense of direction, outlining the status quo and future trends in that policy area. To effectively fulfil this general guidance function, an overarching strategic framework needs to perform well in several respects. It should reflect, or create, a sufficiently broad consensus on basic premises and elements; it needs to be sufficiently clear and transparent to enable stakeholders, policy-makers, and the interested public to understand it; and it must be well communicated to ensure policy-makers, stakeholders, and the interested public are aware of its existence and contents and are encouraged to engage with it. In addition, one might argue that the framework should be formulated in a way which enables it to be used as a yardstick for the purpose of undertaking an ex-post evaluation of policy-making in the area.

The 6EAP succeeded in establishing an overarching strategic framework for EU environmental policy, providing stakeholders and policy-makers with the opportunity to achieve a **better understanding of EU environmental policy and its future direction**. This applies to actors within the European Commission, the other EU institutions, the

Member States and beyond. The aims and principles of the 6EAP, which constitute the core elements of this framework, are set out in Article 2 of the 6EAP. They include the four environmental priority areas of climate change, nature and biodiversity, environment and health, and natural resources and waste, as well as a number of principles, e.g. the polluter pays principle, and approaches such as extensive dialogue with stakeholders, raising awareness and public participation. The 6EAP sent a clear signal that these environmental priorities and governance approaches would be relevant areas of policy development in the coming years. This positive assessment of the characteristics of the 6EAP as an overreaching framework for EU environmental policy corresponds to the results of the electronic survey and discussions at the workshops which suggest that the basic elements of the 6EAP are considered to be appropriate and that the 6EAP managed to build a significant consensus supporting these elements.[514]

The orientation function of the 6EAP however suffers from the fact that the programme is **not very transparent** and has a complicated structure. For example, it requires a detailed reading of the 6EAP to find out which Thematic Strategies the 6EAP calls for, even though the Strategies are key elements of the Programme. Another example concerns the priority actions which are usually listed under the respective priority area. However, in the case of certain objectives of Article 2 and the strategic approaches listed in Article 3, respective priority actions can be found in Article 10. Moreover, the distinctions between important concepts of the 6EAP are not sufficiently clear. This concerns the distinction between strategic approaches and priority actions as many strategic approaches could also be interpreted as horizontal priority actions, such as those listed in Article 10.

According to some stakeholders and observers, the lack of transparency of the 6EAP can partly be attributed to the fact that the Programme was adopted through the **co-decision procedure** which introduced many new provisions to the Programme. In particular, in its first reading alone the European Parliament tabled 221 amendments to the Commission's proposal for the 6EAP, of which 174 were incorporated by the Council. As a result, the total length and detail of the Programme increased significantly. For example, the length of the provisions on the environment and health priority area more than tripled from the Commission's initial legislative proposal to the text, which was eventually adopted. Other parts of the 6EAP were also expanded significantly.

There are a number of factors indicating that the 6EAP has, with some exceptions, **not been communicated very well** among the EU institutions and among different sectors as well as across levels of governance. Initially, the adoption of the 6EAP through the co-decision procedure ensured that the 6EAP was discussed among the participating EU institutions. However, by the time of the mid-term review of the 6EAP, interest in the 6EAP had markedly declined, although some actors operating at the European level, for example the European Investment Bank and the Eurocities network appear to have been more aware of the 6EAP.

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514 Overall, respondents to the electronic survey considered the 6EAP areas to be well chosen with 89% finding the choice either quite (50%) or fully (39%) appropriate. This was confirmed by the findings on individual priority areas: in each case, 82% - 90% of respondents considered the choice of the priority area in question to be appropriate. In terms of providing substantive environmental principles, 46% or respondents found this statement to be quite relevant and 21% considered it to be very relevant.

Similarly, communication of the 6EAP across sectors, in particular to industry, has been somewhat more effective. European-level actors, such as Eurocities, and industry have a direct interest in predicting the adoption of new EU environmental measures which might directly affect their activities and business models. In these cases, pro-active communication of the 6EAP is likely to be a less important condition for informing relevant actors about the 6EAP than in other cases where actors are less directly affected by EU environmental policy. Experiences from the workshops held for this study at national level suggests that communication of the 6EAP appears to have been particularly problematic across different levels of government. Consequently, knowledge of the 6EAP at national and sub-national level is often restricted to a small circle of experts. Information relating to the 6EAP is also difficult to locate on the DG Environment website.

In setting out general aims, specific objectives and priority actions, the 6EAP could in principle be used as a yardstick for the **ex-post evaluation** of EU environmental policy. However, two main factors seem to significantly reduce the utility of the Programme in this respect: First, the complex structure of the 6EAP and its large number of partly overlapping objectives and priority actions does not offer sufficient transparency and clarity. Second, many of the objectives and actions set out in the 6EAP are relatively vague so it is not always obvious what would be required to meet these requirements.

Legitimacy: increasing the acceptance of EU environmental policy

Given that the 6EAP provides a strategic framework for EU environmental policy, the legitimacy of the Programme is likely to affect the legitimacy of EU environmental policy more generally. More specifically, it can be argued that the 6EAP made a **significant positive contribution to the legitimacy of EU environmental policy** in two ways: First, from a legal-procedural point of view the Programme was adopted through the co-decision procedure. Second, the 6EAP seems to have had a positive effect on the perceived legitimacy of EU environmental policy as a result of several factors, such as its adoption through the co-decision procedure[515], the continuation of the long tradition of EU environment action programmes, and the perceived performance of the 6EAP.

In contrast to previous EAPs which took the form of Commission documents that were politically endorsed by the Council through a declaration or resolution, the 6EAP was adopted through the **co-decision procedure**. The Council and the European Parliament were therefore for the first time directly involved in the formulation and adoption of an EU EAP.[516] In particular the involvement of the directly elected European Parliament increased the democratic legitimacy of the 6EAP from a legal-procedural point of view. The results of the electronic survey suggest that this legal-procedural argument also affected the *perceived* legitimacy of EU environmental policy and of the 6EAP in defining the overall contours of future EU environmental policy. Significant majorities of respondents supported the view that

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515 The co-decision procedure had a twofold impact on legitimacy: it increased legitimacy both in theory and in practice, i.e. with respect to actual perceptions.

516 Although it should be noted, that the mid-term review of the 5EAP was conducted under co-decision procedure.

the co-decision procedure increased the legitimacy of the 6EAP[517] and that the 6EAP increased the legitimacy of EU environmental policy more generally.[518]

The perceived positive impact of the 6EAP on the legitimacy of EU environmental policy may, however, not only derive from the Programme's adoption through the co-decision procedure, but also reflect other factors. **Tradition** – in particular the fact that EU environmental policy has been framed by EAPs since its origin in the early 1970s – appears to be relevant in this context. For example, during the workshops, when participants were asked to consider a past or future EU environmental policy without an environmental action programme they had difficulties with such a scenario. This reaction could indicate that at the level of perceptions, there is a deeply embedded link between EU environmental policy and EU EAPs.

In certain important respects, the electronic survey yielded a positive assessment of the performance of the 6EAP. Such positive views may further enhance the legitimacy of EU environmental policy. However, they are difficult to reconcile with the results of the analysis of the actual impact of the 6EAP in this study. This suggests that **social psychological factors** might also contribute to the perceived legitimacy of the 6EAP and by extension, EU environmental policy more generally. For example, 51% of respondents to the electronic survey thought that the 6EAP had a moderate influence on policy-making, while 27% thought that the influence was strong. In particular the fact that more than a quarter of respondents attributed a strong influence on EU environmental policy-making to the 6EAP contrasts with the findings of the objective assessment of this study, according to which the influence of the 6EAP varied strongly among issues and also over time and could therefore be characterised as moderate 'on average'. Similarly, 48% of respondents thought that the 6EAP made a relevant contribution to increasing the predictability of EU environmental policy-making, and 17% thought that this contribution was very relevant. However, being a prescriptive rather than predictive document, the ability of the Programme to actually predict policy is closely linked to its impact on specific policy developments which, as mentioned above, was varied and often too small to significantly increase predictability.

Given the variability of the impact of the 6EAP, it seems possible that the judgement of some respondents who attributed high predictive capacity and a strong impact on policy-making to the 6EAP may have been disproportionally affected by those instances in which the Programme did in fact have a considerable impact, in particular the Thematic Strategies, which were highly visible as a result of their prominent role for the programme and participatory approach. Further reinforcing such a selective perception, the need to reduce cognitive dissonance could explain the **gap between the perceived and actual**

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[517] Almost all respondents to the electronic survey either fully (56%) or partly (32%) agreed with the statement that the 6EAP added legitimacy.

[518] The statement that the 6EAP increased legitimacy of EU environmental policy was found to be quite (57%) to very (25%) relevant by respondents to the electronic survey.

performance and predictive capacity of the 6EAP.[519] It should be noted that positive perceptions of the performance of the 6EAP are likely to have a positive effect on the legitimacy of EU environmental policy-making even if they partly result from social psychological factors such as the need to reduce cognitive dissonance.

It is difficult to identify concrete effects of the legitimacy enhancing function of the 6EAP on specific measures. However, statements by a number of stakeholders suggest that the legitimacy of the 6EAP, of which the **Thematic Strategies** were key elements helped, to defend the Strategies in the face of strong political resistance against some of them (for further details, see Chapter 4.4, 'Co-decision procedure').

Participation: mobilising input and support for EU environmental policy

The input of information through the participation of relevant actors in the policy-making process supports effective policy-making.[520] The 6EAP clearly indicated that stakeholder and scientific input were to be improved and the provisions of the Programme on participation, awareness raising and policy-making based on best available scientific evidence, as well as the development of the Thematic Strategies and the co-decision procedure used to adopt the 6EAP, are relevant in this respect.

The 6EAP emphasises that EU environmental policy-making should be based on **participation and best available scientific input**. Article 2 on the aims and principles of the 6EAP and Article 10 on environmental policy-making are the most prominent references to this approach. Several pieces of legislation on public participation were adopted after the 6EAP came into force. However, the contribution of the 6EAP to this development was small in comparison to other factors, such as implementation of the Aarhus Convention. Similarly, stakeholder participation and scientific input are essential elements of improved EU impact assessments of important Commission proposals. However, processes such as the EU SDS and the Better Regulation initiative had a considerably stronger impact on the formulation and adoption of these procedures than the 6EAP.

Although the 6EAP made only small contributions to the adoption of specific legislation and procedures in support of participation and scientific input, the development of the Thematic Strategies and the co-decision procedure used to adopt the 6EAP are also relevant in this respect. The **co-decision procedure** not only enabled direct contributions by Member State officials and the European Parliament in the process of negotiating the 6EAP, it also provided additional or alternative channels of information and influence for external stakeholders and

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519 For example, cognitive dissonance may arise from the fact that many stakeholders and decision-makers have a strong interest in the predictability of policy-making, which allows them to look ahead and increase the reliability of their investment and other plans. However, given the complexity of multi-level EU decision-making, it is often difficult to predict EU policy-making. In an effort to reduce the resulting conflict, cognitive dissonance theory suggests that stakeholders and decision-makers may attribute exaggerated problem-solving capacities to potential solutions, such as the 6EAP, to the problem of predictability. The fact that academics were the only group of respondents to the electronic survey which considered the predictive capacity of the 6EAP to be low corresponds to this interpretation as academics do not have a direct professional interest in the predictability of EU policy-making and would therefore not be affected by cognitive dissonance.

520 However, as pointed out by an academic expert at one of the workshops, too much input risks overloading the policy-making process if it cannot be adequately processed.

experts. Examples include interactions with MEPs or Member State representatives during the negotiation process.

The development of the **Thematic Strategies** arguably provided the most important contribution of the 6EAP to stakeholder participation and improved scientific input. Two aspects of the Thematic Strategies were particularly relevant in this respect as they differed from standard practices of EU legislative processes: First, the broad, sub-sectoral perspective of the Thematic Strategies enabled structured consultation and scientific input on wider issues. These wider issues ranged from a comprehensive approach to pesticides regulation to coverage of a whole 6EAP thematic area in the case of the Natural Resources Strategy. Second, the Thematic Strategies aimed at identifying suitable measures, targets etc, rather than adopting specific proposals submitted by the Commission. While the 2000 and 2001 European Climate Change and Clean Air for Europe Programmes used similar approaches, the 6EAP codified this approach and led to its broader application. In the process of developing the Thematic Strategies, participation and scientific input often played an important role. For example, stakeholder participation contributed significantly to the decision to propose the Marine Strategy Framework and the Soil Framework Directives under the respective Thematic Strategies. In contrast, conflicting opinions among stakeholders constrained the development of a more far-reaching Urban Thematic Strategy. Scientific input also had a strong impact on the results of the Marine and Air Thematic Strategies.

Instruments: translating environmental objectives into outcomes

The 6EAP refers to an **extensive range of environmental approaches and instruments**, in particular in Article 3. In addition to some of the issues discussed above, the 6EAP also supports wider approaches including improving implementation of EU environmental legislation, integration of environmental considerations in sector policies, and promoting sustainable consumption and production; as well as more specific instruments, for example, the adoption of targets and timetables, voluntary agreements, instruments to improve information, and various economic instruments. In certain cases, the 6EAP also calls for the application of specific tools and instruments to address particular environmental problems, for example, the Programme calls for the use of tradable permits in the area of climate change.

With the exception of an emphasis on the Thematic Strategies, participation, and improving the knowledge base, the Programme **does not prioritise specific approaches or instruments**. As the 6EAP supports a considerable number of approaches and instruments but only establishes a rudimentary hierarchy among them, it is perhaps not surprising that the overall **impact of the Programme on the choice of instruments and approaches frequently appears to have been limited** to providing a certain reinforcement of support through the inclusion of a particular approach or instrument in the Programme.

Nevertheless, in at least two cases - the Thematic Strategies and environmental policy integration - the 6EAP seems to have had an impact on the choice of policy instruments and approaches. As a result of the close association between the **Thematic Strategies** and the 6EAP it seems reasonable to conclude that the processes of developing and adopting the Thematic Strategies represent a significant impact of the Programme on EU environmental

governance. Perhaps more importantly, the Thematic Strategies exerted a considerable influence on the choice of instruments in the areas they covered. The Thematic Strategies created and/ or reinforced European networks of policy-makers, stakeholders and experts. In most cases they also led to the adoption of legislation, in particular relatively broad and flexible framework directives, which extended EU environmental policy into sensitive areas, such as the marine environment, characterised by strategic sensibilities and/ or subsidiarity concerns on the part of many Member States. In other cases, the Thematic Strategies supported the adoption of legislation which revised pre-existing measures and filled certain gaps. In contrast to original expectations, the Thematic Strategies on natural resources and on the urban environment did not result in the adoption of concrete targets and timetables but led to non-binding measures and arrangements for co-operation. This is a reflection of the policy context in relation to natural resources and the political sensitivities of addressing urban issues at the EU level.

The 6EAP also had some positive impact on the **integration of environmental objectives and considerations in sectoral policies**; this is elaborated in more detail in the section on policy coherence below.

4.1.2 Contribution of the 6EAP to the performance of EU environmental policy

Priority setting: making EU environmental policy more effective

In the face of limited administrative, financial and political resources, setting the right priorities is critical for effective policy-making. The success of the priority setting process depends on whether the chosen priorities reflect the most pressing problems and whether they are effectively reflected in subsequent political decision-making.

Priority setting in the 6EAP occurs at three levels of increasing specificity:

- the four thematic areas of climate change, nature and biodiversity, environment and health and quality of life, and natural resources and waste which form the most general priorities of the 6EAP;
- the seven Thematic Strategies on air, waste prevention and recycling, the marine environment, soil, pesticides, natural resources and the urban environment;[521]
- a large number of priority actions which differ widely in the specificity of their content ranging from general statements to the adoption or revision of particular pieces of legislation.

The **four thematic areas** are widely seen as appropriate and adequately reflect the most pressing environmental problems. The thematic priorities selected in the 6EAP are still of relevance today. This assessment is backed by the 2010 State of the European Environment and Outlook Report of the European Environment Agency. As mentioned above, it also corresponds to the results of the electronic survey and discussions at the workshops. Larger differences are visible in terms of the relative political weight afforded to each thematic area

[521] Formally, the Thematic Strategies are priority actions. However, they play a special role in the 6EAP which introduces the concept of Thematic Strategy and devotes a whole Article to this (Article 4).

since the adoption of the 6EAP. This is partly due to different political opportunity structures[522], which resulted from changes in internal and external drivers of action. In particular, climate change had a much stronger overall impact on the EU environmental policy agenda than the remaining three thematic areas, especially following the adoption of the 20-20-20 targets by the European Council in March 2007. External factors, such as the momentum created by the release of the fourth assessment report of the IPCC, the discussion on the nexus between climate change and energy security, and the high volatility of oil prices in 2006/2007 helped create a window of opportunity which was effectively exploited. With respect to the remaining three priority areas, the environmental agenda was, despite some variation, significantly more balanced. Against this background, it appears that the four thematic areas were useful mainly in terms of identifying the most important environmental challenges. While the thematic areas provided a useful overall frame for EU environmental policy, operational programming occurred through more specific processes which also determined the balance among the four thematic areas in actual policy-making.

The seven **Thematic Strategies** are key instruments of the 6EAP (Article 4) and form a second, more specific, *de facto* layer of priority setting within the priority areas. The Thematic Strategies placed the emphasis on particular sub-areas within three of the four priority areas, the only exception being climate change. However, climate change relied on a process, which was similar to the Thematic Strategy approach and predated the 6EAP, the European Climate Change Programme. In the course of their formulation, the Thematic Strategies identified concrete measures and tools to be adopted in each respective area. Examples include several pieces of EU framework legislation, for instance the Marine Strategy Framework Directive and the proposal for a Framework Directive on Soil. Effective priority setting through the Thematic Strategies was supported by extensive consultation of stakeholders and experts. The 6EAP required the Thematic Strategies to be adopted within the first three years of the duration of the Programme. Although this deadline was missed, the existence of a deadline helped ensure that the development of the Thematic Strategies formed a key component of EU environmental policy-making in the years following the adoption of the 6EAP.

The Thematic Strategies focussed on areas of existing community legislation, which were in need of revision and extension, for example legislation on air pollution and waste management, as well as areas, which had, if anything, only marginally been addressed by EU environmental policy at the time, such as soil protection and the urban environment. Although participants in the electronic survey were not directly asked to comment on the choice of the sub-areas of the Thematic Strategies, the fact that most respondents evaluated the Strategies positively suggests that they broadly agreed with that choice.[523] However, it can be argued that in some areas, such as air pollution, the respective Thematic Strategy strongly built on pre-existing processes which would arguably have led to similar results in

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[522] The term political opportunity structure is used here in a very broad sense to cover the impact of shifts in external factors on political choices. For a discussion of the concept see, for example, Mayer and Minkoff (2004).

[523] Respondents also had the opportunity to propose areas for additional Thematic Strategies. The diversity of responses suggests that there were no obvious gaps.

the absence of the Thematic Strategy. In these cases the added value of the Thematic Strategies in terms of setting new priorities was therefore relatively small.

Despite the overall positive impact of the Thematic Strategies on priority setting, not all the Thematic Strategies were equally effective. In particular the Thematic Strategies on the urban environment and natural resources failed to meet expectations. Apart from raising the profile of urban environment issues at EU level, the urban Thematic Strategy yielded few lasting results. While the Thematic Strategy on natural resources had some success in terms of institutional capacity building, it failed to put forward the targets and indicators, which it had been expected to produce. Structural problems, in particular subsidiarity and economic strategic concerns and external factors, such as the impact of EU enlargement on the development of the Urban Thematic Strategy, contributed to the variation in the performance of the Thematic Strategies. More effective Thematic Strategies have also encountered significant problems in translating priorities into action. For example, although the Air Thematic Strategy called for the revision of the national emission ceilings Directive, no proposals have been tabled to date.

The overall contribution of the various **priority actions** to priority setting is difficult to assess due to the fact that their specificity varies widely ranging from general statements, such as 'encouraging coherent assessment, further research and cooperation on threatened species', to the adoption or revision of particular pieces of EU legislation which in some cases was almost completed at the time the 6EAP was adopted, e.g. the Liability Directive. Many priority actions were either too vague or were heavily conditioned by processes that pre-dated the 6EAP. Consequently, they had little impact on effective priority setting.

Adoption of the 6EAP through the co-decision procedure was one of the reasons why the 6EAP lacked sufficiently clear priorities beyond the environmental priority areas, which were too broad to deliver concrete priorities for measures to be adopted, and the Thematic Strategies. As mentioned above, the co-decision procedure provided opportunities for the addition of numerous specific issues to the 6EAP. According to former Environment Commissioner Margot Wallström this threatened to turn the 6EAP into a 'shopping list'.[524]

Coherence: integrating EU environmental policy

Preparations for the adoption of the 6EAP considered the future of EU environmental policy as a whole and provided an opportunity to identify and discuss issues of coherence. More specifically, the development of the 6EAP could build on the experience with, and the assessment of, the 5EAP and required taking stock of existing and planned EU environmental measures, identifying gaps, cases of incoherence, and overlaps in policy areas. The agenda setting and policy formulation processes also involved a broad range of actors, including the Commission, Parliament, Council, Member States and non-state stakeholders.

There are no simple measures of coherence and it is difficult to establish whether the 6EAP has in fact led to an overall increase in policy coherence in practice. The 6EAP appears to

[524] European Parliament, Legislative Observatory, Procedure COD 2001/0029, http://www.europarl.europa.eu/oeil/resume.jsp?id=205212&eventId=76365&backToCaller=NO&language=en.

have contributed to coherence at different levels, i.e. between the different thematic priority areas, e.g. Climate Change and Nature and Biodiversity; within specific priority areas, e.g. soil and biodiversity; and at the sectoral level between environmental and non-environmental policies, e.g. agriculture and fisheries.

Despite certain efforts, the 6EAP did not sufficiently recognise the links between its four thematic priority areas. For instance, although the 6EAP recognises the links between climate change and biodiversity in Article 9(2) on international issues, it does not mention them in Articles 5 and 6 on climate change and biodiversity. This failure to recognise links between these two areas has, for example, contributed to the controversy over the impacts of biofuels on biodiversity objectives.[525] Moreover, the three Thematic Strategies which could have contributed to a significant improvement of coherence at the sub-sectoral level - the Soil and Natural Resources Strategies and the Urban Environment Strategy - have so far not resulted in sufficiently concrete measures. For example, the soil Thematic Strategy calls for initiatives to increase synergies and address the interactions between measures aiming at soil protection and measures in several other fields, such as climate change, river basin management and protection of coastal waters. However, despite some progress, for example with respect to coverage of certain relevant issues in the new Industrial Emissions Directive, opportunities to increase synergies and address these interactions remain limited, which is in part due to the fact that the proposed soil Framework Directive has so far not been adopted. Similarly, the natural resources Thematic Strategy, which arguably could have addressed the inter-linkages across the thematic areas, in particular between natural resources and biodiversity, has not yet resulted in specific measures beyond further research and the creation of certain new institutions and fora. Thus, policy coherence across the thematic areas of the 6EAP remains a challenge. This conclusion corresponds to the results of the electronic survey in which a large majority (80%) of respondents considered the 6EAP to have had a relatively small impact on coherence between environmental areas. Stakeholders consulted during the workshops also maintained that the 6EAP had not sufficiently addressed the issue of coherence across the different priority areas.

Within the thematic priority areas, the 6EAP appears to have contributed to improved coherence in specific policy sub-areas through the Thematic Strategies. Some Thematic Strategies focussed on closing gaps in respective priority areas, e.g. the Strategies dealing with marine and urban environment, soil and natural resources. In contrast, the air, pesticides and waste prevention and recycling Strategies focussed on revising existing legislation with the aim of improving coherence among these measures and addressed smaller, more specific gaps, such as the new provisions on fine particles (PM 2.5) addressed in the Air Thematic Strategy. The overall extent to which these initiatives managed to improve coherence remains to be seen, not least because a number of relevant measures have only recently been adopted. Despite the contribution to coherence of the Thematic Strategies in some specific sub-areas of environmental policy, it should be noted that their scope was in most cases too narrow to sufficiently increase the overall internal coherence of

[525] The links between climate change and biodiversity have subsequently been recognised in other measures, such as the 2009 White Paper on adaptation to climate change.

the four thematic areas of the 6EAP[526] which could be further improved in areas such as Nature and Biodiversity and Environment and Health.

The 6EAP recognises the importance of cross-sectoral policy coherence, stating that environmental requirements need to be integrated into non-environmental policies, while environmental measures must take the social and economic dimensions into account. Several other provisions of the 6EAP further emphasise and specify the need to integrate environmental requirements into non-environmental sectors. There is some evidence suggesting that the 6EAP had some impact on **integration of environmental requirements in non-environmental sectors**. Various EU measures e.g. in the energy and agriculture sectors and to a lesser extent in cohesion and transport policy increasingly aim to take environmental, and in particular climate change concerns into account. Moreover, although the 2001 EU Sustainable Development Strategy (EU SDS) was adopted prior to the 6EAP its substantive environmental contents largely reflect the objectives set out in the proposed 6EAP.[527] As illustrated in more detail in Chapter 2.3 this suggests that the 6EAP and the EU SDS mutually reinforce each other in this respect.

Some stakeholder views also suggest that the 6EAP has been helpful in promoting the consideration of environmental issues in certain processes within the Commission, e.g. during inter-service consultation, thereby contributing to environmental policy integration. More specifically, against the background of generally improved policy co-ordination and integration within the Commission, the comprehensiveness of the 6EAP's four thematic areas allowed DG Environment and other actors to strengthen the case for consideration of environmental aspects in sectoral policies touching on the thematic areas. The 6EAP itself also had an important effect on environmental policy integration by serving as a point of reference for non-environmental actors and agencies, such as the European Investment Bank and Local Governments for Sustainability (ICLEI). These actors used the 6EAP to inform and justify their efforts to integrate environmental requirements into their respective activities.

While the integration of environmental concerns in various EU policies often improved at the agenda setting and policy formulation stages, this was frequently not the case in the implementation of these policies, which was strongly influenced by the approaches and priorities of Member States. In addition, improved integration, for example of climate change objectives in energy and transport policies and of environmental objectives in agricultural policy, was often heavily influenced by policy-specific circumstances, such as the adoption of the 20-20-20 climate and renewable energy target by the European Council or international developments, for example trade negotiations. In general other processes, such as the EU Sustainable Development Strategy and especially the Climate and Energy Package, frequently appear to have had a stronger impact on environmental policy integration than the 6EAP.

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526 The effects on coherence of the only Thematic Strategy with a sufficiently wide scope - the Natural Resources Strategy – also remains small due to the limited concrete results of the Strategy.

527 Although the 2001 EU SDS was presented prior to the formal adoption of the 6EAP, the Commission's proposal for the 6EAP predated its proposal for the EU SDS.

Comprehensive cross-sectoral policy coherence based on mutual sectoral integration to some extent benefited from the broad approach to agenda setting of the Thematic Strategies, which included Commission services and other policy-makers and stakeholders from non-environmental sectors. However, its overall impact on relevant initiatives, such as environmental, economic and social impact assessment of major policy proposals and the EU Environmental Technology Action Plan (ETAP), was small. While the 6EAP calls for improved impact assessment, it only contains few direct references to promoting innovation and environmental technologies. The EU Sustainable Development Strategy, the Lisbon Strategy, and the Climate and Energy Package, had a significantly stronger impact on these measures. Several participants in the workshops confirmed that the 6EAP is seen as an environmental programme with limited significance beyond the environmental sector. These findings broadly correspond to the results of the electronic survey: a clear majority of respondents (60%) considered the effects of the 6EAP on cross-sectoral policy coherence to be largely insignificant.

Regarding coherence between the EU's **internal and external policies**, the majority of stakeholders consulted in the field of external action did not recognise the 6EAP as a key point of reference in their policy discussions. Although the 6EAP devotes an article to 'international issues' which has a similar structures as the articles on the four environmental priority areas, this has not helped address issues of coherence between the EU's internal and external actions in the environmental and related spheres.

Sustaining and advancing environmental protection: providing resilience and increasing the reach of environmental policy-making

As a Programme stretching over a period of ten years, the 6EAP contributed to sustaining and advancing environmental requirements in the face of shifting political constellations, such as a new Commission and European Parliament, and changes in Member State governments, as well as changing external circumstances, for example the economic crisis and new developments at the international level. This was confirmed by the electronic survey which showed that most of the respondents either fully or partly agreed that the 6EAP has increased coherence of EU environmental policy over time (54%) and has provided continuity by bridging election periods (69%). More generally, workshop participants reported that the 6EAP created a certain degree of political commitment. Both at national and EU-level, references to the 6EAP were therefore used to justify and support the adoption of certain environmental measures.

Faced with changing political priorities and external developments, the 6EAP made a significant contribution to keeping environmental requirements on the EU agenda, in particular at times of strong political opposition. The role and relevance of the 6EAP differed according to different priority areas. The 6EAP has had a relatively strong impact in the waste sector and in certain areas relating to the nature and biodiversity and environment and health thematic areas. In particular, the Thematic Strategies were an important area where the 6EAP helped to keep environmental protection requirements on the EU agenda. According to a number of stakeholders, given the strong opposition, which the Strategies faced at times from various actors, it seems likely that they would not have been adopted - or would at least not have been adopted in their present form - had they not been enshrined as

key elements of the 6EAP. The 6EAP can also be seen to have reinforced a range of other environmental commitments which preceded the 6EAP by their inclusion in the Programme. This consolidation helped to reaffirm and reinforce existing commitments and targets such as the objective of a maximum global temperature increase of 2° Celsius in the field of climate change. This target had been supported by the Environment Council in 1996, but was affirmed with the adoption of the 6EAP by the three EU institutions. The waste sector provides another pertinent example. While the basic approach to EU waste policy had been decided long before the adoption of the 6EAP, the Programme helped to maintain this approach despite resistance by certain actors. However, due to the multitude of factors which affect policy-making it is difficult to establish the precise extent to which the 6EAP contributed to sustaining environmental requirements, in particular if they originated prior to the adoption of the Programme.

The 6EAP also made a contribution to advancing EU environmental policy, albeit in different ways and to a different extent in the different priority areas. Climate change was the only area where the 6EAP hardly contributed in this regard. However, with the European Climate Change Programme, climate change had its own *de facto* Thematic Strategy. More importantly, it also had strong alternative drivers, in particular the international commitments resulting from the Kyoto Protocol and, later the European Council's 20-20-20 targets, thus the 6EAP was less necessary as a driver given these existing processes. In the remaining priority areas, the Thematic Strategies were often key to advancing beyond commitments which predated the 6EAP. This may have been particularly pronounced with respect to biodiversity. Here the Thematic Strategies on soil and the marine environment allowed for an extension of the EU environmental agenda to areas in which the EU had previously not been very active. A similar, though weaker, argument applies to the Thematic Strategies on natural resources and the urban environment. While some stakeholders were disappointed that these Strategies have so far not resulted in legislative measures, it should be kept in mind that these Strategies concerned politically sensitive areas characterised by strategic interests and subsidiarity concerns on the part of some Member States. Thus, it is questionable whether alternative approaches would have been more successful. The remaining Thematic Strategies on air, pesticides and waste focussed on traditional areas of EU environmental policy. Nevertheless, they too contributed to advancing EU environmental policy, albeit to different degrees, by improving co-ordination and updating existing measures and by adding a limited number of additional requirements.

The 6EAP's effects on sustaining and advancing environmental protection declined significantly in the years following the adoption of the Thematic Strategies. This can partly be attributed to the fact that certain objectives of the 6EAP – in particular the adoption of the Thematic Strategies - had been achieved. However, in several areas the adoption of additional measures seemed necessary to achieve certain environmental objectives of the 6EAP. Yet, the 2007 mid-term review of the 6EAP did not provide a sufficiently strong impetus to reinvigorate the 6EAP (see section 4.5 for further discussion of this issue).

4.2 Added value in the thematic areas

Climate Change

The EU has successfully adopted a variety of measures and mainstreamed the issue of climate change in other policies and in comparison to other industrialised countries has created an ambitious climate change policy over the last few years. It is generally on track to meet its Kyoto targets, although greenhouse gas emissions are not decreasing in all sectors (e.g. transport). However, the assessment in this report shows that the 6EAP only contributed marginally to these developments. This may seem surprising, because the 6EAP attributes particular importance to climate change, its first environmental priority area and because many of the climate objectives of the 6EAP have been met. However, an analysis of the measures adopted and as stakeholder opinions confirm, the 6EAP did not introduce any notable new objectives and priority actions in this area. In most cases, it only restated existing quantitative targets (e.g. Kyoto target, 12% renewables in total energy use by 2010) and did not formulate new or more ambitious quantitative targets (such as in the field of energy efficiency and in the transport sector).

Other drivers of climate policies turned out to be much more forceful than the 6EAP. At the time of the adoption of the 6EAP, the main factors responsible for ambitious EU climate policies were the European Climate Change Programme, the desire to exert leadership in international climate negotiations and the EU's international commitments under the Kyoto Protocol. The main EU climate change initiatives - the creation of the EU ETS and the EU CARE package - were closely linked to these three drivers. It seems almost certain that the same or very similar measures would have been adopted in the absence of the 6EAP.

In addition, widespread public support allowed the EU to pursue levels of ambition higher than in most other industrialised nations and helped to reach agreements on contested issues like the CARE package. This awareness among the public and media was prompted by a multiplicity of factors including the publication of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, the publication of the so-called Stern report on the economic implications of mitigation and adaptation, media events like the Oscar-winning film 'An inconvenient truth' by Al Gore, and natural disasters like Hurricane Katrina. In addition, topics like energy security concerns lend themselves as strong arguments in favour for a shift towards renewable energies and energy efficiency.

Overall, climate change turned out to be a much more dynamic policy field than originally anticipated in the 6EAP. Especially since 2007, the dynamics of climate change policy have changed in a way that could not have been foreseen in 2002. As a result, the targets set out in the 6EAP were subsequently surpassed by more ambitious measures. For example, binding targets replaced indicative targets in the field of renewable energy. Although the 6EAP was not a major driver of climate policy, it did have some specific value in this policy area. The 6EAP helped to reflect on the emerging political status of climate policy in Europe. In this context, it also summarised the status quo and confirmed climate change as an important part of the policy agenda. Thus, it served as a guidance and reference document in this thematic area. Furthermore, although the 6EAP did not introduce any notable new objectives and priority actions in this area, it set out and reconfirmed a path for action and

strengthened it through broader institutional support, including that of the European Parliament.

Nature and Biodiversity

It is difficult to accurately establish the extent to which an overarching framework like the 6EAP has influenced specific policy developments, and apart from the adoption of the Thematic Strategies on Soil and the Marine Environment, there is little concrete evidence that the 6EAP played a major role in driving forward particular developments in the Nature and Biodiversity thematic area. Nonetheless, there are suggestions that the 6EAP provided some added value in certain instances.

One of the main strategic documents relating to EU biodiversity policy, the 2006 Biodiversity Action Plan (BAP), largely built on policy foundations established prior to the formal adoption of the 6EAP, namely the adoption by EU leaders in June 2001 of the Gothenburg target to halt biodiversity decline by 2010, the global target agreed at the WSSD in Johannesburg in 2002, the 1998 EU Biodiversity Strategy and its review. It is however important to note that the Gothenburg European Council conclusions state that 'biodiversity decline should be halted with the aim of reaching this objective by 2010 as set out in the 6th Environmental Action Programme'.[528] Although the 6EAP had not been adopted at the time, the Environment Council had reached a political agreement on the 6EAP in early June 2001[529] to serve as input to the Gothenburg European Council. The 2010 biodiversity target had thus been agreed by EU Environment Ministers, was endorsed by the European Council in the EU SDS, and was subsequently formally adopted in the 6EAP. Therefore, the inclusion of the 2010 target in the 6EAP can be seen as an important factor influencing subsequent developments. Certain stakeholders consulted in the context of this study also maintained that the inclusion of the 2010 target in the adopted 6EAP made it an implicit headline target for the EU and thus helped reinforce it. Moreover, although the actions and objectives of the 6EAP were not looked at in detail when the BAP was being designed, some stakeholders reportedly used certain 6EAP commitments to justify their arguments for action in a particular area (e.g. on soil).[530]

The mid-term review of the 6EAP concluded that 'the scale of the challenge faced means that additional approaches are needed and most importantly a way has to be found to make it economically interesting to protect bio-diversity'.[531] This reflected the growing acknowledgement of the socio-economic importance of natural ecosystems. A proposal for a study on the economic significance of the global loss of biodiversity had been put forward by the environment ministers of the G8+5 in March 2007, before the publication of the mid-term

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528 Council of the European Union, Presidency Conclusions, Gothenburg European Council, 15 and 16 June 2001, http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf.

529 Council of the European Union, (2001), 2355th Council meeting - ENVIRONMENT -, Luxembourg, 7 June 2001, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/09116-Communiqu%c3%a9-1.doc.html#_Toc517083961.

530 Stakeholder consultation, Brussels conference.

531 CEC (2007): Communication from the Commission, on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007)225, 30/04/2007.

review of the 6EAP. However, the fact that the mid-term review recognised the need for further work in this regard may have influenced the Commission's subsequent financing of the The Economics of Ecosystems and Biodiversity (TEEB) initiative and the launch of related studies which have helped increase recognition of the economic value of biodiversity and ecosystem services in the policy process.

The value of the 6EAP can also be seen in some of the processes it instigated, in particular the development of the two Thematic Strategies in this area. In the case of soil, the 6EAP helped position soil on the EU policy agenda, thus raising the profile of an issue which had previously not been considered in an integrated manner at EU level. The proposal for a soil framework Directive was a result of the stakeholder consultation process to develop the Thematic Strategy, and although the Directive remains blocked in the Council, the stakeholder process created a strong community of soil experts across Europe better able to debate and address emerging issues such as the role of soils in the delivery of climate change objectives. Thus, the processes set in motion by the 6EAP have aided constructive engagement on these issues within Europe. Similarly, the existence of a Marine Strategy Framework Directive and much of its content are a direct result of the processes set in place by the 6EAP and the analytical and consultation processes to develop the Marine Thematic Strategy. It is unlikely that similar measures would have been introduced without the Marine Thematic Strategy process.

The value of the 6EAP can also be seen in pushing forward developments in certain areas, for instance in relation to forestry. As noted by certain stakeholders, forestry has been an area where the 6EAP has succeeded in promoting coordination and initiating new policy developments. Discussions in this area also frequently refer to the commitments in the 6EAP. These numerous references seem to suggest the potential influence of the 6EAP and could perhaps reflect *inter alia* the need to justify EU intervention in an area of limited Community competence.

In terms of the role of the 6EAP in other sectors, on the whole the 6EAP does not seem to have played a major role in influencing the integration of environmental considerations in the agriculture and fisheries sectors, which have instead been influenced by a number of other internal and external factors, including the strength of environmental movements in Member States, integration requirements in the Treaty, and international commitments. However, the 6EAP can be seen to provide a useful statement of Community objectives in these areas which can be used to justify certain actions and ensure that attention continues to be paid to the environment as the CAP and CFP evolve and are subject to reform. It was also noted by stakeholders that the 6EAP helped promote consideration of integration issues during inter-service consultation by providing DG Environment with a broader mandate to be involved in discussions in other sectors.[532]

The Nature and Biodiversity thematic area brought together a number of fairly discrete sub-areas under one umbrella, which in itself was a rather novel approach and helped provide a signal of overall political intention and ambition in this area. An added value of the 6EAP was

[532] Stakeholder consultation, interview.

considered by stakeholders to be its role in placing nature and biodiversity issues on the same level as other environmental issues, in particular climate change policy, thus making it more comparable to efforts in other areas. Despite the lack of a common denominator between the different sub-areas in the thematic area and the limited linkages between the sub-areas and for that matter between these sub-areas and other thematic areas of the 6EAP; the process of developing the 6EAP in itself can be considered helpful in terms of mapping out existing commitments, plans and actions in line to be adopted, identifying overlaps and potential gaps in the coverage of EU policy, and allowing a comparison within and across the different thematic areas.

Environment and Health

The Environment and Health thematic area included a number of fairly discrete sub-areas on which the 6EAP has had varying degrees of influence. A number of developments in this area had their own drivers and institutional points of debate which were in place prior to the adoption of the 6EAP, e.g. REACH, the Water Framework Directive (WFD), and the Clean Air for Europe (CAFE) Programme, and thus the added value of the 6EAP in these instances was virtually non-existent. However, there are instances where the 6EAP played an influential role and helped push forward action which may not have happened at all or may have taken longer without the impetus of the 6EAP.

In the case of chemicals, the process to develop the REACH Regulation began with the publication of a White Paper in 2001 and the majority of objectives and actions of the 6EAP relating to chemicals reflect those in the White Paper. There could however be a possibility that the inclusion of these objectives in the 6EAP provided additional political impetus which enabled the presentation of a legislative proposal by the Commission in October 2003 and the conclusion of subsequent negotiations on the measure in the face of significant opposition.

The adoption of the WFD shortly before the 6EAP limited the strategic role of the 6EAP in this area. While the 6EAP formed part of the background context to the development of subsequent water related measures and may have added some impetus to the adoption of certain measures, it cannot be considered an important driver in this area. To a large extent, the measures adopted were envisaged prior to the adoption of the 6EAP and had their own legal, policy and institutional processes in place. The groundwater Directive was a ‘leftover’ of the failure to agree all issues during the conciliation committee leading to the adoption of the WFD. The need for a Directive on environmental quality standards (EQS) in water policy was identified by parties in 2000 – two years before adoption of the 6EAP. The 6EAP provided an umbrella for the revised bathing water Directive, however the revision had been debated long before the 6EAP was first developed (there had been an earlier proposal for a revision, withdrawn by the Commission). It is also worth noting that some policy developments have taken place which were not envisaged in the 6EAP, for instance in relation to flood risks, however this is largely in response to external factors, in particular the increased occurrence of floods in Europe.

The 6EAP envisaged the adoption of three Thematic Strategies in this area. In certain instances, the requirement to develop a Thematic Strategy helped move forward action which otherwise may not have taken place at all. For instance, in the case of the urban

environment, it is unlikely that a Thematic Strategy would have been adopted had it not been included in the 6EAP. Although the outcome of the Urban Thematic Strategy is largely viewed as disappointing, cities and their networks involved in the process appreciated the opportunity of being able to engage with the Commission and some stakeholders suggested that cities have used the Thematic Strategy to justify actions to improve their urban environment. In this respect, the Thematic Strategy has provided at least some sort of strategic direction for EU and national action on the urban environment. In the case of pesticides, although some developments may have taken place without the 6EAP, given the growing recognition of the need to revise EU pesticides legislation and various studies conducted prior to the 6EAP, it is unlikely that the same standard and strategic approach to the issue as set out in the Pesticides Thematic Strategy and accompanying legislation would have been adopted were it not for the 6EAP. In the case of air policy, a more integrated, strategic approach to developing EU air quality policy had been initiated under the Auto-Oil Programmes and the CAFE programme which preceded the 6EAP. Thus, although the adoption of the air Thematic Strategy was a direct response to a request in the 6EAP, it could be argued that the Strategy largely confirmed and strengthened processes that were already in place.

Although one could argue that many of the developments in the Environment and Health thematic area would have happened regardless of the 6EAP given the pre-existing processes they were part of, this does not make their inclusion in the 6EAP irrelevant. The fact that the 6EAP included certain commitments, in particular the requirement to develop the Thematic Strategies, helped keep certain initiatives in this thematic area on track and on the agenda in the face of political or actual opposition. The stakeholder engagement processes that took place in the development of the Thematic Strategies have been very useful in terms of enabling stakeholders to come together and express their respective views and in helping to improve the knowledge-base. Moreover, the 6EAP brought together disparate issues under the overarching objective of improving quality of life and providing an environment where pollution does not give rise to harmful effects on health and environment, thus providing a useful stock taking exercise of existing commitments and planned actions in this area and a useful point of reference for subsequent developments.

Natural Resources and Waste

The 6EAP outlined the EU's environmental objectives in the areas of waste management and natural resources thereby establishing a close link between waste policy and resource policy and highlighting the resource potentials and qualities of waste by promoting waste prevention, reuse and recycling/recovery. The 6EAP provided the basis of the Thematic Strategies on resources and on waste, which, in turn, increased the transparency of EU policy-making in these areas and offered insights into the position of the Commission on various waste- and resource-related issues. In this way, for example the Thematic Strategy on the prevention and recycling of waste functioned as a link between the provisions on waste and subsequent legislation adopted in this area, most importantly the revised Waste Framework Directive.

In the field of waste management, the 6EAP principally builds on and perpetuates policy choices, which had been made prior to its adoption – e.g. prioritising waste prevention and

recycling over the disposal of waste, and reducing hazardous waste. The objectives laid down in the 6EAP reinforce these approaches, without adding any new policy options, approaches or targets. Bearing this in mind, while the measures introduced following the adoption of the 6EAP could potentially have been taken in the absence of the 6EAP, it can be argued that the 6EAP provided additional support to adopt corresponding policies. More specifically, the clear objectives of the 6EAP relating to waste policy served to reinforce the direction which European waste policy had taken since the 1990s and helped defend these earlier choices against competing approaches, in particular those based on a significantly stronger reliance on the market.

In the resources field, the 6EAP did not lay down particularly concrete objectives for resource use or resource policy. Given that resource policy is a rather new policy area, the 6EAP could not build on established policy choices, which it might have been able to reinforce. Faced with limited political support, methodological difficulties, and the absence of concrete objectives, the 6EAP did not succeed in shaping European resource policy to a considerable extent. However, the 6EAP was clearly the basis for the development of the Thematic Strategy on Resource Use. The Strategy inspired further research and led to the creation of new institutions and fora, but failed to produce the targets for resource use as originally envisaged. In addition, action plans (e.g. Action Plan on Sustainable Consumption and Production) and proposals for product-related directives/regulations (e.g. Ecodesign-Directive, revised Ecolabel Regulation), which will contribute to the resource-related objectives of the 6EAP, have been published.

International

With some noteworthy exceptions, the 6EAP has not been a major driver or vehicle for EU action in the international area. Objectives and policy priorities relating to the international dimension were to a large extent integrated in the EU policy framework before the adoption of the 6EAP and a number of initiatives were already underway to integrate environmental considerations in the EU's external policies. For instance, the requirement for environmental integration in the Community's external policies is set out in the Treaty, as is the EU's aspiration for a leadership role at the international level in relation to regional or global environmental problems. These requirements in the Treaty, together with commitments towards the external dimension in the renewed EU SDS and developments in the international agenda have been the main factors driving forward action in relation to the EU's development and trade policies. More general factors, including the EU's interest in promoting its own environmental standards at the international level and its desire to shape its identity as a global 'green leader' are likely to have played a significant role in the EU's approach towards international environmental governance throughout the 6EAP period, while political factors and the 2004 enlargement was important in the development of the European Neighbourhood Policy.

There are however some examples where the 6EAP appears to have played a role in the international area. For example, measures introduced to combat illegal logging make references to commitments in the 6EAP. As noted in the Nature and Biodiversity section above, discussions in the forestry area frequently refer to the 6EAP and may reflect *inter alia* the need to justify EU intervention in an area of limited Community competence. In the area

of investment, one of the aims of the European Investment Bank (EIB) is to allocate a significant proportion of its total lending to environmental protection and sustainable communities. Projects that qualify in this sense are those that make a significant contribution to the priority areas and the Thematic Strategies of the 6EAP.[533] In relation to funding within the EU, the 6EAP is viewed as a cornerstone of the EIB's environmental lending practices.[534]

A number of internal EU policies have implicit external consequences, most notably in relation to the consumption of natural resources, e.g. the CAP and CFP, but also in terms of encouraging different production patters, e.g. through EU product standards. The external consequences of internal policies have an effect on the achievement of the international objectives of the 6EAP. While one could argue that setting out the EU's international commitments alongside its wider environmental objectives could help reduce the possibilities for incoherence between internal and external actions, this does not seem to have been the case given the seemingly limited awareness of the 6EAP among the majority of actors involved in this context. Where the 6EAP may have played a role has been in reiterating certain commitments of the EU, in particular the requirement to integrate environmental considerations in all the EU's external relations, thus acting as a further justifying factor for action in this regard.

4.3 Drivers and barriers

As is evident from the assessment in Chapter 3, a number of different factors have affected the achievement of the overall aims, specific objectives and priority actions of the 6EAP. Some factors have helped achieve objectives and improve environmental conditions (drivers), whereas other factors have undermined or prevented progress (barriers). These drivers and barriers vary across and within the different areas of the 6EAP, creating different opportunity structures for relevant actors which, in turn, help to explain the considerable variation in the degree to which 6EAP objectives were achieved. Important drivers and barriers that have affected the attainment of 6EAP objectives, as identified through our research and stakeholder consultation, are set out below.

Changes in the underlying context

The EU is now operating in a very different political and legal framework compared to when the 6EAP was adopted. A number of changes have taken place in the underlying context including shifts in political priorities (at the EU, national and global levels) which for the most part have veered towards a prioritisation of economic and social issues, the adoption of a number of new environmental policies, measures, and targets, changes in economic circumstances including the 2008-2009 financial and economic crises, and improvements in the scientific knowledge base. These changes could not have been envisaged in 2001/2002 when the 6EAP was being developed and highlight some of the difficulties in undertaking such forward looking exercises in a dynamic and uncertain context.

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533 EIB (2009): Statement on Environmental and Social Principles and Standards, p. 4, http://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf.

534 Stakeholder consultation, interview.

Changes in political priorities have influenced the pursuit of action in certain areas at the expense of other less high-profile issues. Climate change is the most evident example of where a shift in political priorities at national and EU levels has helped push forward ambitious developments. This has been driven by a number of factors including concerns relating to energy security and competiveness. There are also instances where a lack of sufficient political will has undermined progress in a particular area. For example despite apparent support for biodiversity conservation among the public and decision-makers this has not yet translated into sufficient action in certain areas partly due to perceptions about the threats of nature and biodiversity compared to other environmental challenges such as climate change as well as a lack of willingness to tackle some of the barriers on the ground, e.g. in land use planning. However, this appears to be changing in recent years, with growing high-level political interest in biodiversity protection stimulated *inter alia* by developments in the knowledge base and increasing recognition of linkages with other policy areas (in particular the economy). Whether this interest will be translated into effective action on the ground remains to be seen. Political priorities in countries both within and outside the EU have also affected the attainment of certain 6EAP objectives, for instance hindering progress in environmental integration in trade and development cooperation policy.

Since the elaboration of the 6EAP, there have been **significant developments in EU environmental policy**. Several pieces of legislation have been adopted or revised such as the floods Directive and the revised waste framework Directive; ambitious targets have been agreed such as the 20-20-20 climate and energy targets; a number of scheduled reviews of legislation have taken place, e.g. the IPPC Directive; and several other environment related strategies, action plans and programmes have been introduced, e.g. on energy efficiency and sustainable consumption and production. There have also been significant changes in the general legal and institutional framework, including the entry into force of the Lisbon Treaty, the election of two new Parliaments and Commissions, and changes to the institutional architecture of the Commission services. Some of these changes were envisaged in the 6EAP and certain policy developments may have been stimulated by the 6EAP to some extent, while other changes had a momentum of their own and were driven by different factors.

Changes in the knowledge base and technological advances have been important factors driving progress in certain areas. For instance, new scientific findings (e.g. the Fourth Assessment Report of the IPCC) and technological advancements (e.g. on CCS) coupled with the political dynamics discussed above, led to a number of ambitious actions in the Climate Change thematic area which overtook what was envisaged in the 6EAP. In the Nature and Biodiversity area, developments in the biodiversity knowledge base and increasing awareness of the importance of ecosystem services, in particular through initiatives such as The Economics of Ecosystems and Biodiversity (TEEB), has helped reinvigorate action to halt the decline in biodiversity.

In certain instances, fluctuations in the state of the economy have influenced the achievement of certain 6EAP objectives, e.g. the economic recession and its corresponding

decrease in production output led to lower GHG emission levels[535]. This has had a greater effect in terms of reducing GHG emissions in the EU and globally than most targeted policies.[536] The economic recession has also bolstered the argument of opponents to more ambitious climate change policies, thus simultaneously acting as a driver and barrier to the achievement of certain objectives. In the agriculture area, more general economic changes, such as the steep increase in the price of cereals in 2008, has highlighted the vulnerability of certain agri-environment measures to fluctuating opportunity costs with a possibly negative impact on the uptake of these measures by farmers and a potential concomitant negative impact on the delivery of these schemes in terms of intended environmental benefits.[537]

Aspects of the decision-making process

The Commission has the sole right of initiating proposals for EU policy and legislation while the European Parliament and Council, in their role as co-legislators, play an important part in determining the final form of subsequent legislative instruments and thus their contribution to 6EAP objectives. For instance, the European Parliament significantly altered the Commission's proposal for a revised waste framework Directive by introducing *inter alia* concrete recycling targets for certain types of waste which contributes to better waste management and more sustainable consumption patterns, especially if treatment of waste by recycling replaces disposal of waste by landfilling. In this way, the European Parliament enhanced the contribution of the Directive to relevant 6EAP objectives. The failure to agree certain issues during negotiations on the water framework Directive provided political impetus for the adoption of subsequent measures including the groundwater Directive and the EQS Directive which in turn are expected to contribute to water-related objectives of the 6EAP. The decision-making procedure can also act as a barrier to the achievement of a particular objective, e.g. the continued blocking of the proposed soil framework Directive by a blocking minority group of Member States in the Council compromises the 6EAP's soil protection objectives, while exceptions introduced during the co-decision procedure to agree the Batteries Directive somewhat hampers the achievement of the 6EAP objective of reducing hazardous waste.

Some of the processes to develop policy put forward in the 6EAP, in particular the stakeholder consultation process related to the development of the Thematic Strategies, are other factors influencing the form of measures and hence affecting the attainment of certain 6EAP objectives. A comparison between the initial preparatory 'towards' Communication put forward by the Commission and the final adopted Thematic Strategy indicates that the level of ambition often increased between these two documents, in part due to the results of the accompanying stakeholder consultation process. The open and extensive stakeholder engagement process to develop the soil Thematic Strategy helped the Commission shape the coverage of its proposals on soil issues and actively promoted the option of a soil

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535 EEA (2010): Tracking progress towards Kyoto and 2020 targets in Europe, p. 9.

536 Oberthür, S., Pallemaerts, M., The EU's Internal and External Climate Policies: an Historical Overview. In, Oberthür, Sebastian, Pallemaerts, Marc (eds.) (2010): The New Climate Policies of the European Union. Internal Legislation and Climate Diplomacy, p. 43.

537 Defra, Natural England (2008): UK Environmental Stewardship Review of Progress.

framework Directive rather than a series of focused policies as previously anticipated. Similarly the process to develop the marine Thematic Strategy led to the proposal for a marine strategy framework Directive. The various studies that supported the development of the air Thematic Strategy and the extensive level of engagement with experts were important elements influencing the final form of the Thematic Strategy and accompanying legislative proposal on ambient air quality. Consulting on issues as part of the pesticides Thematic Strategy process made later discussions, as part of the co-decision procedure, more familiar and framed, thus making the legal process to adopt the related pesticides legislation less confrontational.

Although the Thematic Strategies represented an innovative approach to the development of EU environmental policy; the extensive consultation process significantly lengthened the policy formulation period and delayed the adoption of concrete policy proposals in certain cases. The 6EAP had envisaged the Thematic Strategies to be finalised within three years of the adoption of the Programme (i.e. by June 2005) (Article 4(4)) and for 'appropriate initiatives' to achieve its objectives to be presented within four years at the latest (i.e. by June 2006) (Article 1(3)). The first Thematic Strategy (on air) was presented in September 2005, while the last Thematic Strategy (on soil) was only presented in September 2006, almost half way through the period of the 6EAP. These delays compromised the prospect of achieving the objectives of the 6EAP before its expiry in 2012. However, this should be considered in the context of the EU legislative process which takes approximately five years from initial policy conception to final adoption through the co-decision procedure. Thus, although the 6EAP deadline for developing the Thematic Strategies developed was missed, it can also be considered to have somewhat accelerated the normal process of policy development in the EU; especially when considering that in most cases, the Thematic Strategies were accompanied by legislative proposals, some of which had not been envisaged at the start of the stakeholder consultation process.

Implementation

According to the preamble of the 6EAP, 'full and correct implementation of the existing legislation is a priority'. Accordingly, one of the 'strategic approaches' of the 6EAP is to encourage 'more effective implementation and enforcement of Community legislation on the environment' Article 3(2). This is to be achieved by: increased measures to improve respect for Community environmental rules and addressing infringements; promoting improved standards of permitting, inspection, monitoring and enforcement by Member States; a systematic review of the application of environmental legislation across Member States; and improved exchange of information on best practice on implementation. The mid-term review of the 6EAP also recognised that 'only by ensuring the correct implementation of the acquis will it be possible to realise environmental objectives'.[538]

[538] CEC (2007): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, (COM(2007)225), 30 April 2007, http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0225en01.pdf.

However, as is evident from the analysis in Chapter 3, despite some progress, inadequate implementation of EU environmental legislation continues to be one of the main factors undermining the achievement of several objectives of the 6EAP. Notwithstanding the measures taken by the Commission to improve implementation and enforcement, Member States' record of implementing EU environmental legislation remains poor at least when seen within the broader picture of the overall number of infringement procedures: Environmental infringement procedures account for approximately one third of all open cases for non-communication, non-conformity or bad application of EU law in the EU 27. At the end of 2009, DG Environment had 451 open infringement files under investigation, compared to 481 at the end of 2008.[539] The number of judgements of the European Court of Justice (ECJ) in environmental matters has continuously increased over the years.[540] In addition, the number of cases of non-compliance by Member States (EU 15) with ECJ judgements increased in the first half of the 2000s and fluctuated since then between 66 and 81 cases. By the end of 2009, 66 judgements had not yet been complied.[541] Waste and nature account for 85 and 91 cases respectively. There are 90 open infringements on water matters, 72 on air and 52 on environmental impact assessment.[542] In 2007, DG Environment registered 103 new complaint cases in the Commission's infringement database. In 2008, this number decreased to 62, although 75 cases were sent through to Member States via the EU pilot scheme.[543] In 2009, DG Environment registered 27 new complaints in the infringement database and launched 111 investigations through the pilot scheme. By the end of 2009, DG Environment was responsible for handling 430 petition files received by the Petitions Committee of the European Parliament.[544] These statistics indicate that the implementation of EU environmental legislation in Member States remains far from satisfactory.

The achievement of the environmental objectives set out in the 6EAP is dependent on the normal processes of adopting and implementing legislation. Thus, implementation is a key factor influencing the achievement of a number of objectives set out in the 6EAP and the below section provides an overview of the main implementation problems in the thematic areas identified through our research and stakeholder consultation. A number of caveats should be kept in mind. Firstly, the 6EAP Decision does not contain a clause that explicitly identifies its addressees, its provisions are formulated in an abstract manner, and to the extent that a subject is specified, it is 'the Community'. Such vague provisions do not impose legal obligations on Member States, legal entities, or individuals within Member States.[545]

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539 CEC: DG Environment, http://ec.europa.eu/environment/legal/law/statistics.htm.

540 Krämer, Ludwig (2008): Environmental judgments by the Court of Justice and their duration. Research Papers in Law. European Legal Studies. College of Europe. Bruges.

541 Krämer (2008) and IEEP own calculations as to 2007-2009 on the basis of Commission Annual Reports on Monitoring the Application of Community Law.

542 CEC (2010): 2009 Environment Policy Review, European Commission. Staff Working Paper (SEC(2010)975)

543 CEC (2009): DG Environment, http://ec.europa.eu/environment/legal/law/complaints.htm

544 http://ec.europa.eu/environment/legal/law/complaints.htm

545 Pallemaerts, M. / Geeraerts, K. (eds) (2007): *Assessment of the achievements of the 6th Environmental Action Programme*, Study for the European Parliament Environment, Public Health and Food Safety Committee under contract

Thus, the 6EAP itself does not place binding implementation obligations on Member States. Secondly, according to the Treaty, 'without prejudice to certain measures adopted by the Union, the Member States shall finance and implement the environment policy' (Article 192(4) TFEU) and the role of the Commission is to ensure and oversee the application of EU law under the control of the ECJ (Article 17 TFEU). Thus, implementation is first and foremost, the responsibility of Member States; where they fail to ensure adequate transposition, implementation and enforcement of EU environmental legislation, the responsibilities of the Commission to monitor national implementation and initiate infringement proceedings against offending Member States come into play. Finally, in certain cases, it is still too early to assess whether certain 6EAP objectives have been achieved given the relatively recent adoption of some measures, such as REACH, which are yet to be fully implemented.

In the **Climate Change** area, the 2003 Emission Trading Directive Scheme (ETS) 2003/87/EC faced significant implementation challenges, particularly in the early stages of its implementation and in many cases, the Commission had to initiate infringement proceedings against Member States. Implementation problems included problems of delayed transposition and a lack of stringency in domestic emission caps set out in National Allocation Plans (NAPs) which *inter alia* put into question the environmental effectiveness of the ETS, led to distortions of competition in the internal market, extended the period of uncertainty in the market, and created negative perceptions of the scheme.[546] The discretion left to Member States regarding implementation and application of the Monitoring and Reporting Guidelines lead to a plurality of 27 national systems. A number of factors including rent seeking, susceptibility to lobbying, and concern about international competitiveness have affected implementation of the ETS. Thus, prices for greenhouse gas emission allowances were generally lower than anticipated in the legislative process, with direct consequences on the ability of the ETS to guide and alter individual and corporate behaviour.[547] These problems in implementation affected the attainment of certain 6EAP objectives. After 2007, the allocation of allowances has however been noticeably tighter, causing a greater behavioural effect. The revised ETS Directive 2009/29/EC seeks to address many of the shortcomings associated with its predecessor. Although these aspects only enter into effect in 2013, the long-term perspective and expectation of stricter allowance allocation with a higher share of auctioning have already influenced supply and demand dynamics in the European carbon market and had a favourable effect on allowance prices, thereby influencing important investment decisions in the energy and industry sectors.

In the **Nature and Biodiversity** area, despite some progress, there have been particular problems relating to the development and implementation of many measures in the BAP

IP/A/ENVI/FWC/2006-172/C1/SC8, Institute for European Environmental Policy (IEEP), http://www.europarl.europa.eu/activities/committees/studiesCom.do?language=EN&body=ENVI.

546 CEC (2009): Commission Staff Working Document. Situation in the different sectors. Accompanying document to the Report from the Commission. 26th Annual Report on Monitoring the Application of Community Law (2008). SEC(2009)1684/2. European Commission. 15 December 2009. Brussels. Available at: http://ec.europa.eu/community_law/infringements/infringements_annual_report_26_en.htm.

547 Rodi, Michael: Die Fortentwicklung des Emissionshandels vor dem Hintergrund der Kyoto-Nachfolge-Diskussion. In In Schulze-Fielitz, H. und Müller, T. (eds). Europäisches Klimaschutzrecht. Nomos 2010, p. 192.

which have affected the attainment of certain 6EAP objectives. Many legal challenges have been brought against Member States in this area with several cases relating to the slow or incomplete identification and designation of sites for inclusion in the Natura 2000 network and inadequate management of habitats and species within Natura sites, especially in the wider environment. Several Member States have increased the number of Natura 2000 sites following infringement procedures launched by the Commission.[548] However, despite progress in designating terrestrial Natura 2000 sites, the establishment of Natura 2000 sites in the marine environment remains significantly below requirements.[549] The BAP failed to outline indicators and baselines for its targets and actions and although the monitoring procedures accompanying some legislative devices associated with the BAP provide useful data for evaluation, other targets lack the prioritisation and measurability required to provoke action and deliver results.[550] Moreover, whilst there were a series of consultations and meetings in which Member States could influence the form of the BAP, responsibility for its implementation was delegated heavily to the Biodiversity Expert Group and by extension to environment ministries and agencies of the EU and Member States, whose political influence is generally regarded as relatively weak.[551] This marginalises the BAP and diminishes its potential to influence other sectors. Stakeholders consider that the lack of ownership of policy development on the part of Member States has undermined commitment and progress in implementation of biodiversity actions to date, with most Member States not taking steps beyond the obligated minimum.[552]

A number of measures in the **Environment and Health** area, e.g. REACH Regulation 1907/2006, have only recently been adopted and are still in the early stages of implementation, thus it is not possible to assess their contribution to respective 6EAP objectives. With regards to the implementation of earlier measures, the deadline for transposition of the Water Framework Directive 2000/60/EC in the EU 15 was poorly met, although Member States have caught up to a large extent and new Member States had progressed well by the date of accession in 2004.[553] The Commission is currently evaluating River Basin Management Plans reported by Member States and, therefore, an assessment of implementation is not yet possible. As of October 2010, 17 Member States and Norway

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548 EC (2009b): Commission Staff Working Document. Situation in the different sectors. Accompanying document to the Report from the Commission. 26th Annual Report on Monitoring the Application of Community Law (2008). SEC(2009)1684/2. European Commission. 15 December 2009. Brussels. Available at: http://ec.europa.eu/community_law/infringements/infringements_annual_report_26_en.htm.

549 EEA (2010): Progress towards the European 2010 biodiversity target, EEA Report no 4/2009.

550 Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

551 Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

552 Stakeholder consultation, Brussels workshop.

553 CEC (2007): Communication from the Commission to the European Parliament and the Council - Towards sustainable water management in the European Union - First stage in the implementation of the Water Framework Directive 2000/60/EC. (COM (2007)128).

had adopted their River Basin Management Plans; although consultations had been finalised in Poland, Slovenia and Romania, the plans were awaiting adoption. In seven Member States consultations were ongoing or had not even started. With respect to air, despite some improvements in air quality there have been problems with implementation of earlier legislation, e.g. the IPPC Directive 2008/1/EC. While existing problems should be addressed to a large extent by the new industrial emissions Directive 2010/75/EU, given that implementation problems existed with the preceding legislation it can be anticipated that implementation of the new Directive will be an important factor where limit values are more stringent or where installations are included for the first time. Moreover, the performance and functioning of the ambient air quality Directive 2008/50/EC depends on the performance and functioning of measures introduced at the European level to reduce emissions at source and on the implementation of national, regional and local measures to ensure air quality limit values are met. The Commission has taken enforcement action against 19 Member States for failure to bring air quality within the limits specified in previous air quality legislation[554], thus the Commission's role in approving any requests for derogations by Member States will be important in meeting the objectives of the air Thematic Strategy.

In the **Natural Resources and Waste** area, there are several problems of implementation relating to waste legislation with over 20% of all EU environmental infringement cases launched related to waste legislation. The Commission's latest general report on the implementation of EU waste legislation[555] concluded that waste legislation is still being poorly implemented and enforced in many Member States, particularly with regard to the Waste Framework Directive, the Landfill Directive and the Waste Shipment Regulation. Some of the key implementation problems highlighted in the report relate to inadequate waste treatment infrastructure in Member States and the lack of separate waste collections. This results in reuse, recycling and recovery targets for waste streams such as WEEE, ELVs or packaging being missed. There are also a large number of cases of illegal shipments of waste, mainly electronic waste and end-of-life vehicles, due *inter alia* to a lack of adequate controls and inspections.[556] In some Member States which joined the EU after 2004 additional problems reported include: heavy reliance on landfilling; inefficient diversion of biodegradable waste from landfills; inadequate waste treatment infrastructure; and lack of societal habits to separate and recycle waste. The situation is, however, reported to not be much better in many older Member States which continue to breach EU rules of waste management and where inefficient diversion of biodegradable waste from landfills contributes to climate change. Despite some progress, such as the move away from landfill to more sustainable

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554 CEC (2010): Commission Staff Working Document - 2009 Environment Policy Review - Part 1, Part 2 and Part 3 (SEC(2010)975).

555 CEC (2009): Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on implementation of Community waste legislation, for the period 2004-2006, (COM(2009)633), 20/11/2009.

556 DG Environment (2008): The EU Waste Shipment Regulation – Enforcement and Implementation, Presentation at Awareness-event and Information Exchange Budapest, 03.06.2008, Available at: http://www.bipro.de/waste-events/doc/events08/hu_pres_1_eu_gk.pdf.

waste management methods[557] and the phasing out of certain hazardous materials in specific products[558], problems of poor implementation or enforcement remain and have no doubt hampered the attainment of relevant 6EAP objectives in this area.

One of the 'strategic approaches' of the 6EAP is to encourage more effective implementation and enforcement of EU environmental legislation. The achievement of the environmental objectives set out in the 6EAP is dependent on the normal processes of adopting and implementing legislation. As is evident in the assessment in this report, transposition, implementation and enforcement of EU environmental legislation and subsequent reporting and monitoring by the European Commission is essential for reaching the objectives of the 6EAP and has been one of the reasons why a number of 6EAP objectives have not been met to date. Although the 6EAP is more a planning document than an implementation tool, if it is to set out objectives to be achieved on the ground, it needs to recognize implementation more prominently as a problem and identify the roles of different actors in the process of addressing the issue.

Level of funding in support of EU environmental policy objectives

Implementation of EU environmental policy implies certain costs for actors involved, including private actors and public authorities at the local, regional and national levels. Adequate financial resources are an important element of effective implementation and in turn have an effect on the achievement of 6EAP objectives. The 6EAP did not place much emphasis on the issue of finance other than calling for further mainstreaming of environmental considerations in Community funding programmes and for the objectives of the Programme to be taken into account in future reviews of Community financial instruments. The 6EAP also makes some references to the need for financial instruments to support the establishment of the Natura 2000 network, implementation of the Cartagena Protocol, encouragement of the use of low input or pesticide free cultivation, and strengthening participation of environmental NGOs in the dialogue process.

As set out in the Treaty, 'Member States shall finance and implement the environment policy' (Article 192(4) TFEU), thus all aspects of implementation of EU environmental law are the responsibility of the Member States. Nonetheless, a number of EU funding instruments such as LIFE+, the Cohesion Policy, and the 6th and 7th Research Framework Programmes, have assisted implementation in many ways, e.g. supporting institutional capacity for nature protection, thus contributing to the achievement of certain 6EAP objectives. While EU funding has the potential to contribute to achievement of several 6EAP objectives, it needs to secure adequate co-financing. The availability of national co-financing is dependent on a number of factors and has recently also been challenged by the economic crisis, and thus could potentially further delay the disbursement of EU funding for environmental measures. Our research and stakeholder consultation identified insufficient financial resources as a barrier to the achievement of several 6EAP objectives.

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557 EEA (2009): EEA Report No 7/2009, Diverting waste from landfill – Effectiveness of waste-management policies in the European Union.

558 Study on analysis of costs and environmental benefits of heavy metal ban, and proposal for better regulation, Oko-Institut, November 2010.

In the **Nature and Biodiversity** thematic area in particular, the lack of sufficient funding has been attributed as a key factor undermining the success of various initiatives including the BAP and the impact of the LIFE programmes. The BAP failed to set aside a specific budget for its implementation and studies show that EU financial resources for effective biodiversity action as a whole are thought to be far below requirements.[559] The impact of successive LIFE programmes on the 6EAP biodiversity objectives while positive, have been limited by their relatively small budgets and narrow scope.[560] One of the major shortcomings identified with the BAP has been the failure to set aside a specific budget for its implementation and the poor level of funding for biodiversity as a whole.[561] The inadequate financing of biodiversity conservation actions and support for other measures stems from a low appreciation of the value of biodiversity and the socio-economic benefits that can arise from protection of habitats and species, as well as poor understanding of the resource requirements of effective conservation management. At a general level, knowledge regarding biodiversity is still under development, which impedes decision-making at all levels and stages.[562]

In the **Environment and Health** area, the lack of adequate financial resources has had effects on implementation of certain measures, for instance in the case of REACH, which places an administrative and procedural burden on public authorities and the European Chemicals Agency (ECHA) to compel industry to discharge its responsibilities, resource constraints and the need for prioritisation has meant that there is still a long way to go before appropriate risk management measures are taken for many 'phase-in' substances. In relation to water quality, despite improvements in the quality of inland bathing waters since 1990, inadequate treatment of sewage and urban stormwater, and emissions of pathogenic micro-organisms from livestock, continue to prevent full compliance with the bathing water Directive across Europe. Insufficient funding (from EU, national and private sources) to help tackle sources of microbial inputs to bathing waters (mostly sewage) has historically been and remains a major cause of implementation shortcomings. In certain cases, despite the availability of EU funding, a more general problem of a lack of awareness of potential sources of funding has limited their uptake, e.g. stakeholders interviewed noted that a lack of coordination makes it difficult for cities, regions and Member States to be aware of all potential sources of funding for the urban environment.

In the **Climate Change** area, measures to reduce greenhouse gas emissions require investment, especially in energy production and efficiency and there are various financial

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559 Kettunen, M., Baldock, D., Adelle, C., Cooper, T., Farmer, M., Hart, K., Torkler, P. (2009): Biodiversity and the EU Budget - an IEEP briefing paper. Institute for European Environmental Policy, London / Brussels.

560 Gantioler, S., et al. (2010): Costs and Socio-Economic Benefits associated with the Natura 2000 Network. IEEP, GHK & Ecologic; Kettunen, M., et al. (2009). Assessing Socioeconomic Benefits of Natura 2000 – a Toolkit for Practitioners (September 2009 Edition). Output of the European Commission project Financing Natura 2000: Cost estimate and benefits of Natura 2000 (Contract No.: 070307/2007/484403/MAR/B2). Institute for European Environmental Policy (IEEP), Brussels, Belgium. 191 pp. +Annexes.

561 Herkenrath P., Fournier N., Gantioler S., Good S. ,Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

562 Stakeholder consultation, Brussels workshop.

instruments that leverage private investments, e.g. feed-in tariffs or quota systems in the electricity sector. Other available instruments are tax rebates, grants and soft bans. The ETS and other market based mechanisms also constitute economic incentives to reduce greenhouse gas emissions in different sectors. It seems plausible that the availability of financial instruments independent of the public budget helps increase certainty with regard to the continuity of financial flows and may have helped drive the adoption of certain ambitious measures. For example, the feed-in tariff does not place an extra burden to the public budget and helped trigger an unexpected growth in renewable energy supply. Furthermore, by strengthening the respective renewable sector it might also have strengthened interest groups fighting for ambitious policies.

In terms of funding in **other sectors**, Rural Development policy provides the majority of financial resources to support biodiversity, soil and water protection goals associated with farmland. However it continues to suffer from insufficient funding to meet its environmental objectives and those set out within the 6EAP. Within the CAP, the budget allocated to Rural Development policy is only half that spent through Pillar 1, and of Pillar 2[563] spending only around 25% is directed towards the agri-environment measure. There are also large disparities in the proportion of the Rural Development budget that Member States choose to spend on measures with environmental objectives.[564] In the fisheries sector, although the European Fisheries Fund (EFF) provides funds for environmental integration related projects (Axis 4), the allocation of such funds by many Member States has been minimal.[565] In the forestry sector, no specific financial resources were dedicated to the implementation of the EU FAP, although various EU funding instruments do address some of its objectives, including the Rural Development Regulation. However, to date, only a small proportion of the EAFRD has been dedicated to forest measures.[566]

The provision of funding for the implementation of different types of environmental measures under **Cohesion Policy** also contributes to certain 6EAP objectives. Ex-post evaluations of the impact of cohesion spending in the 2000-2006 period suggest that overall environmental investments have had a significant impact on improving living conditions and compliance with the EU environmental acquis.[567] For the 2007-2013 period, EU structural and cohesion funds allocate approximately €105 billion for the implementation of a range of environmental measures including wastewater treatment, waste management, Natura 2000, risk prevention,

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563 Pillar 1 is the support provided to farmers' incomes and is in the form of market management and direct payments. It is financed from the European Agricultural Guidance Fund. Pillar 2 is the support provided for the development of rural areas and takes the form of rural development programmes. It is co-financed from the European Agricultural Fund for Rural Development. See: http://ec.europa.eu/agriculture/glossary/index_en.htm

564 DG Agriculture and Rural Development (2009): Rural Development in the European Union – Statistical and Economic information, http://ec.europa.eu/agriculture/agrista/rurdev2009/index_en.htm.

565 Lutchman, I./ Binet, T., (2007): Scorecard on the EFF programming and implementation up to April 2007 – A report to WWF EPO.

566 CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change - Accompanying staff working paper (SEC(2010)163).

567 DG Regional Policy (2010): Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 5b: Environment and climate change.

sustainable energy and transport project.[568] However, by December 2009 environmental investments are reported to only be utilising 21% of the total amount available for such measures.[569] The actual impact of this spending on the environment is difficult to assess at this point as many of the projects have only recently been commissioned. External evaluations have found that environmental funding often gives priority to large-scale infrastructure projects related to the implementation of the EU environmental acquis in the field of waste and water, while in certain instances EU funding tends to favour oversized end-of-the-pipe technologies. These spending patterns sometimes lead to unintended consequences.[570] Moreover, non-environmental spending from EU funds could potentially have a negative impact on the environment, especially in the case of the construction of large infrastructure such as roads and airports (some €40 billion EU funds is allocated to these types of projects in the 2007-2013 financial perspective)[571], and thus could potentially have an adverse impact on certain 6EAP objectives such as those relating to greenhouse gas emissions, land use and habitat fragmentation.

In the context of the **accession process** leading up to the 2004 and 2007 enlargements, a number of EU pre-accession instruments (ISPA, PHARE and SAPARD) contributed towards the transposition of environmental legislation in the then candidate countries, including in particular those measures related to water and waste management, and in supporting capacity building measures for civil society engagement.[572] Furthermore, following their accession to the EU, Structural Funds have played an important role in enhancing the capacity of environmental administrations and in the implementation of water and waste legislation in the new Member States. However, there remains the perception that support from Structural Funds has not been sufficient to guarantee continuity in efforts to approximate prior to accession.[573]

Public opinion

Public support of action in a particular area, usually in combination with other factors, has contributed towards the achievement of certain 6EAP objectives. For instance, the significant increase in the number and severity of natural and man-made disasters increased public

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568 CEC (2008): Communication on the results of the negotiations concerning cohesion policy strategies and programmes for the programming period 2007-2013, (COM(2008)301).

569 CEC (2010): Cohesion policy: Strategic report 2010 on the implementation of the programmes 2007-2013, (COM (2010) 110), 31/03/2010**.**Reasons for this slow absorption are country specific and reflect various factors including *inter alia* inadequate planning, various procedural issues, lengthy preparation times for large projects, and capacity issues.

570 An example from the 2000-2006 period can illustrate this point. When priority in the waste sector was given to large treatment facilities this resulted in oversized investments leading to overcapacity and difficulties to ensure financial viability as well as lower consumer demand and unwillingness to pay for the services. DG Regional Policy (2010) Ex-post evaluation of the ERDF in Objectives 1 & 2, Working package 5b: Environment and climate change.

571 DG Regional Policy. Transport statistics, http://ec.europa.eu/regional_policy/themes/transport/index_en.htm.

572 CEC (2004): Communication from the Commission to the Council and the European Parliament on 2003 Environment Policy Review, (COM(2003)745), Brussels, 2/2/2004, p. 38.

573 Kremilis, G. / Dusic, J, The challenge of implementing the EU environmental acquis communautaire in the new Member States, http://www.inece.org/conference/7/vol1/Kremlis_Dusik.pdf [accessed January 2011].

support for a more comprehensive EU approach to disaster prevention and management[574], and together with support from the European Parliament and the Council, helped stimulate action in this area beyond that envisaged in the 6EAP. Public and press interest in climate change grew significantly in 2007, prompted by a multiplicity of factors. This increased public awareness and interest has been an important driver behind the adoption of ambitious EU climate policies.

In certain cases, insufficient public awareness can also undermine action in a particular area. For instance, the inadequate financing of biodiversity conservation actions and support for other measures is thought to stem from a low appreciation of the value of biodiversity and the socioeconomic benefits that can arise from protection of habitats and species, as well as poor understanding of the resource requirements of effective conservation management.

Interaction with other EU policy priorities

Other EU policy priorities have had an important influence on a number of thematic areas of the 6EAP and hence affected the achievement of certain 6EAP objectives. Developments in the water policy area have been significantly influenced by the failure to reach agreement on certain issues during negotiations on the Water Framework Directive, e.g. on groundwater, as well as issues which have arisen during implementation of the Directive, e.g. water scarcity and drought. The adoption of specific fisheries instruments, e.g. on the prohibition of bottom trawling or the designation of closed areas, has been motivated by the need to comply with or implement the Habitats and Birds Directives. In the field of waste management, the 6EAP principally built on and perpetuates policy choices made prior to its adoption, e.g. prioritising waste prevention and recycling over the disposal of waste, and reducing hazardous waste. In certain instances, entrenched policies such as the CAP may have limited how such sectors were addressed in related measures, e.g. action on water scarcity and drought and sustainable use of soils.

The adoption of the 20-20-20 climate and energy targets and the Climate and Renewable Energy Package have been important developments in the climate change area which have also had some implications on other policy areas. For example, there has been increased attention among policy makers to the role of forests in climate mitigation and adaptation efforts, which has led to the publication of the Green Paper on forest protection and climate change[575] and is likely to influence the type of measures adopted in this area in the future. The question of land use change and associated emissions of soil carbon are increasingly on the political agenda at both the EU and international level. Under the Climate and Renewable Energy Package, there were extensive discussions surrounding the role of carbon stores in relation to the development of land use based sustainability criteria for both biofuels and bioliquids under the Renewable Energy Directive (2009/28/EC). Moreover, at the international level Land Use, Land Use Change and Forestry (LULUCF) is an increasingly important element of negotiations under the UNFCCC. These developments are likely to influence future developments regarding soil issues.

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574 Euro Barometer (2009): Civil Protection, Full Report.

575 CEC (2010): Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change (COM(2010)66).

The main driving factors behind integration of environmental considerations in other sectors including agriculture and fisheries appear to have been the integration requirements set out in the Treaties and the 1998 Cardiff integration process. The integration requirement in the Treaty was also identified as one of the main drivers behind the integration of environmental considerations in the EU's development cooperation policy. Underlying political interests have been another important factor driving progress in the international arena. For instance, the EU's desire to shape its image as an international environmental leader and a competitive interest in promoting its own rather stringent environmental standards have been key factors behind the EU's constructive role in international environmental governance.

Overarching EU strategies such as the Lisbon Strategy and the EU Sustainable Development Strategy reflect broad principles and objectives of the Community and have had an influence on developments in certain areas. The impact of these strategies in terms of influencing specific developments is difficult to accurately establish, however some general observations can be made. For example, in the climate change area, the Lisbon Strategy had a two-fold influence on policy developments. It raised concerns about the potential negative impacts on economic competitiveness of certain legislation which contributed to a lowering in the environmental ambition of some measures, e.g. with respect to aspects of the EU ETS. The Lisbon Strategy also supported the link between climate change and economic issues, e.g. by promoting low carbon technologies, thus providing a favourable context for the development of EU climate related targets and legislation. Climate change is now regularly mainstreamed in discussions on economic policies, as in the example of the Europe 2020 Strategy.[576] Thus, the Lisbon Strategy simultaneously acted as a driver and barrier to the achievement of certain climate change objectives. The adoption of the EU SDS in June 2001 and its subsequent revision in 2006 had a positive impact on the integration of environmental considerations in external policies and other sectoral policies such as agriculture and fisheries, serving to underpin the ambition of adopted measures. The EU SDS also had an impact in specific areas of environmental policy such a biodiversity where the adoption by EU leaders in Gothenburg in 2001 of the target to halt biodiversity decline by 2010 was a major driving force behind action in this area and led to the adoption of the BAP in 2006.[577] However, although biodiversity policy instruments make reference to the EU SDS, there is no evidence that the EU SDS has been crucial for their implementation.

Pressure from international commitments

International commitments have played a role in driving forward action in relation to certain 6EAP objectives. For instance, the EU's international climate change ambitions and commitments have been a major driving force behind action in this area. The joint emission reduction commitment of the EU-15 under the Kyoto Protocol was and still is probably one of the most decisive drivers behind the development and implementation of the EU's climate policies. This commitment also constitutes the basis of the 6EAP's objectives concerning

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576 CEC (2010): Europe 2020. A strategy for smart, sustainable and inclusive growth. COM(2010)2020, published 3.3.2010; Presidency Conclusions, Brussels European Council, 25/26 March 2010.

577 As noted above, the Gothenburg European Council conclusions state that 'biodiversity decline should be halted with the aim of reaching this objective by 2010 as set out in the 6th Environmental Action Programme', even though the 6EAP had not been adopted at the time.

climate protection, although the specification of dangerous climate change to 550ppm and the 2^{o} Celsius target is specific to the 6EAP.

The 2006 BAP was adopted as a follow-up to the 1998 Biodiversity Strategy which had been introduced to *inter alia* take forward the EU's international commitments as a contracting party under the CBD. EU action in relation to biodiversity has also had an influence on the formulation of certain international commitments. For instance, the EU's commitment to halting the decline of biodiversity in the EU by 2010 influenced the subsequent international agreement among the Parties to the CBD. The EU also played an important role at the 10th meeting of the Conference of the Parties (COP 10) to the CBD in October 2010 where advances on a number of key areas were made including the adoption of a Protocol on Access and Benefit Sharing (ABS).

International commitments have also helped push forward action in relation to other sectors. For instance, a combination of international agreements and treaties calling for marine conservation and concern among policy makers for the state of fish stocks and the marine environment more generally meant that there was significant pressure to reform the CFP in 2002. The EU's involvement in initiatives such as Forest Europe has also influenced many of the measures on forestry at the national and Community level. International discussions on the role of forests regarding mitigation and adaption to climate change and in particular the potential of reducing emissions from deforestation and forest degradation (REDD) may influence future instruments in this area. A number of international developments including the 1992 Rio Conference, the adoption of the Millennium Development Goals in 2000, the 2002 World Summit on Sustainable Development and the adoption of the Paris Declaration on Aid Effectiveness in 2005 have contributed to the integration of the environment into the EU's development cooperation activities.

4.4 Appropriateness of the overall approach of the 6EAP

Based on the analyses conducted for this assessment, the overall approach of the 6EAP can be assessed in terms of some of the programme's key functions and characteristics: its character as a strategic framework for EU environmental policy, its level of ambition, the 10-year timeframe, the role of the EU institutions, and its policy-making approaches and instruments.

The 6EAP as a strategic framework

Overall the 6EAP offered a suitable strategic framework for EU environmental policy which provided a sense of direction among policy-makers and stakeholders and enhanced the legitimacy of EU environmental policy more generally. The priority areas and principles for environmental policy outlined in the 6EAP provided a general sense of direction and purpose, while the development of the seven Thematic Strategies offered clear priorities in terms of follow-up in the first years after the adoption of the 6EAP. In spite of these achievements, the strategic character of the 6EAP also faced problems, in particular the declining relevance of the 6EAP after the Thematic Strategies had been adopted. While this was partly the result of the passage of time since the adoption of the 6EAP - including a new Commission and European Parliament - as well as external factors, in particular the rapidly

growing political emphasis on climate change and, later, the 2008-2009 financial and economic crisis, certain aspects of the 6EAP also contributed to the Programme's decreasing relevance. More specifically, reflecting their status as key measures of the 6EAP, the Thematic Strategies had presented clear priorities in terms of concrete follow-up in the years after the adoption of the 6EAP. However, the 6EAP did not establish a hierarchy among the remaining, far more numerous priority actions which, in addition, were often vaguely formulated. As a result, the Programme did not deliver sufficient guidance once the Thematic Strategies had been adopted. The mid-term review of the 6EAP offered an opportunity to revisit the priority actions of the 6EAP. Although the review identified a number of relatively broad areas, such as international cooperation, environmental policy integration, and implementation, where additional efforts were required, it did not lead to the adoption of clear priorities with respect to the remaining priority actions. The growing emphasis of EU environmental policy on climate change subsequently undermined the general guiding function of the 6EAP because it introduced a pronounced de facto hierarchy among the four priority areas in the 6EAP.

A somewhat similar, though less pronounced trend can be observed with respect to the horizontal provisions of the 6EAP concerning environmental governance in Articles 2-4, 10 and, to some extent, also in Article 9 on international issues.[578] The 6EAP provides somewhat less guidance in the area of environmental governance than with respect to the substantive environmental issues covered by the four environmental priority areas because the Programme's governance related priorities are less clear. This mainly reflects the fact that, with the partial exception of Article 9 on international issues[579], the 6EAP does not establish horizontal priority areas of the type of the four environmental priority areas. Similarly, the 6EAP contains fewer priorities with respect to follow-up of the Programme in its initial years. Article 4 makes clear that the thematic strategy approach is a clear governance priority of the 6EAP. However, this is a single priority (i.e. the thematic strategy approach qua approach), while the 6EAP set out seven substantive environmental priority areas for follow-up (i.e. the seven environmental areas for which the Programme called for the adoption of Thematic Strategies).

In term of the extent of governance-related substantive content, the 6EAP's emphasis on improving the knowledge base of EU environmental policy through participation of stakeholders and scientific input seems to come closest to a governance equivalent to the four environmental priority areas. However, the extent to which these provisions contributed to the adoption of relevant measures remains unclear. While the 6EAP lists several relevant priority actions, its main impact on strengthening the knowledge base occurred through the Thematic Strategies and their emphasis on early consultation and scientific input rather than through the adoption of measures associated more closely with these other priority actions.

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[578] Article 9 can partly be interpreted as a governance provision because it emphasises the international aspects of EU environmental governance.

[579] The similarities in terms of priority setting between Article 9 and the four environmental priority areas are limited. While Article 9 emphasises the importance of the international dimension of EU environmental governance, it's concrete provisions mainly focus on particular environmental issues rather than more general aspects of the international dimension of EU environmental governance.

Other important governance priorities of the 6EAP included improving implementation, promoting sustainable production and consumption, the use of various economic instruments, and integration of environmental considerations into non-environmental policies. However, the 6EAP's steering effect in these areas has mostly been weak. Arguably, this can at least partially be attributed to a lack of clear prioritisation.

Level of ambition

In evaluating the 6EAP, it is important to keep in mind that the Programme is reflective of the time of its adoption. Based on the legislative and political context in 2002, the 6EAP aimed to establish a 10-year framework for Community action on the environment. The challenges in conducting such a forward-looking exercise are evident, particularly in the face of external factors which are beyond the control of the EU. The 6EAP has different levels of ambition across its four thematic areas, which can help to explain some of the variable results of the Programme in the different thematic areas.

In hindsight, the level of ambition of the 6EAP in the **Climate Change** thematic area was not very high, however given the period in which it was adopted it can be considered to have been relatively ambitious. The 6EAP did not set a new level of ambition but rather reported on the existing ambition already set out in other documents and represented a collection of existing initiatives and targets. Climate change turned out to be a much more dynamic area than originally anticipated in the 6EAP and the ambition set out was subsequently overtaken by other targets and actions. Accordingly, the 6EAP did not need to play a major role in this policy area, but at the same time it did not hinder policy progress either. By reiterating the status quo, the 6EAP was not a major driver of the level of ambition in this area. However, it might have helped form consensus, including by the Parliament, on the status quo, thus setting out and reconfirming a path for action and strengthening it through broader institutional support. For example, the 2°C target had been supported by the Environment Council in 1996, but was affirmed with the adoption of the 6EAP by the three EU institutions.[580] This might have helped defend this level of ambition and subsequently build on it.

The level of ambition of the 6EAP in the **Nature and Biodiversity** thematic area was very high. However, it is now evident that the 2010 target of halting biodiversity loss was overly ambitious, particularly against the context of insufficient action on the part of Member States. The BAP failed to deliver on its and the 6EAP's main target of halting biodiversity loss by 2010 in part because the target is exceptionally ambitious, but also because action on the part of Member States has fallen short of that ambition.[581]

Although the EU has a relatively strong and comprehensive biodiversity conservation framework, the BAP included too many actions, many of which were unrealistic and/or ill-

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580 Council of the European Union (1996): 1939th Council Meeting – Environment, Brussels, 25 and 26 June 1996, http://europa.eu/rapid/pressReleasesAction.do?reference=PRES/96/188&format=HTML&aged=1&language=EN&guiLanguage=en

581 Stakeholder consultation, Brussels workshop.

defined. The BAP was also inconsistent in its structure and focus (i.e. input and output targets) and lacked prioritisation among its actions. These factors have impeded delivery.[582]

In the **Environment and Health** thematic area, in certain instances, the level of ambition set in the 6EAP was recognised as being too high and was subsequently revised to a more achievable level. For example the air Thematic Strategy concluded it was not possible to achieve the 6EAP objective for air quality even if all technically feasible measures were implemented and instead proposed interim environment and health objectives to be achieved by 2020. The lengthy implementation process of a number of measures, such as REACH, mean that some of the objectives of the 6EAP expressed as environmental outcomes were in hindsight overly ambitious.

In the field of waste management, the 6EAP principally builds on and perpetuates policy choices made prior to its adoption, e.g. prioritising waste prevention and recycling over the disposal of waste, and reducing hazardous waste. The objectives laid down in the 6EAP continue and intensify these approaches, without adding any completely new policy options, approaches or targets. The 6EAP thus served to solidify a specific direction that European waste policy had taken since the 1990s and defended these choices against proposals to liberalise waste policy and water down environmental standards of waste management. In contrast, the 6EAP objectives in the natural resources area can be considered to have been too ambitious insofar as they did not fully take into account the knowledge gaps and methodological challenges in this policy area. A lack of agreed approaches of how to best tackle the issue of resource use and its reduction/decoupling from economic growth together with industry opposition, resulted in limited delivery of concrete results under the Thematic Strategy. The stated objectives in this thematic area cannot be achieved by environmental policy alone, but need to utilise a broad array of policy and industry actors. The time needed to scope this field of policy action and difficulties in establishing common ground were obviously underestimated.

The level of ambition of certain measures has also been influenced by underlying political realities and the scope of the Community's competence. For instance, Community action in relation to forestry has been limited by resistance to a more integrated approach to forest policy as a result of the lack in political will among certain policy-makers, interest groups and Member States. Action in relation to the urban environment has also been held back by subsidiarity concerns. Despite the Commission's proposals to introduce obligations for local authorities to implement environmental management plans and sustainable urban transport plans, these proposals were not supported by some stakeholders partly due to concerns regarding subsidiarity and the need for EU policies in this area. More comprehensive action in relation to soil protection has also been held back by subsidiarity concerns among some Member States.

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[582] Herkenrath P., Fournier N., Gantioler S., Good S. and Mees C. (2010): Assessment of the EU Biodiversity Action Plan as a tool for implementing biodiversity policy. June 2010. European Commission Biodiversity Knowledge Base. Service contract nr 09/543261/B2.

Timeframe of the 6EAP

The 6EAP establishes a 10-year framework for Community action on the environment and had to strike a balance between setting the long-term direction and vision for EU environmental policy and providing the impetus for the necessary policy development in the short-term. The 6EAP extended the scope of the previous EAP by two years. On the one hand, this extension increased the scope for achieving impacts of measures introduced following the adoption of the 6EAP, while on the other it increased the risk of the 6EAP losing momentum and relevance.

For the most part, the environmental objectives set out in the 6EAP were expected to have been achieved before the Programme's expiry in 2012. When discussing the appropriateness of the 10-year timeframe against this background one key issue is whether the timeframe allowed sufficient time to complete the legislative procedure and implement corresponding measures in the spheres selected. In some cases, the 10-year timeframe seemed sufficient for this purpose. For example in relation to waste policy the 6EAP timeframe allowed sufficient time for policy makers to develop policy measures, for Member States to implement those measures, and to gauge their initial effects on respective 6EAP objectives. This was due to the fact that most of the waste related directives enacted under the 6EAP have short-term objectives that allow their achievement to be monitored after a few years. In other policy areas, full implementation was not achieved within this timeframe and the 10-year timeframe was not sufficient for achieving relevant 6EAP objectives, e.g. the REACH Regulation. This was mainly due to the long implementation span of REACH. Alongside implementation, another key issue is the time it takes for a measure to show effect. However, as the environmental impacts of measures (be it positive or negative) often take a time to show effect, the 10-year timeframe is in many cases not appropriate to encompass long-term environmental effects of legislation. In the case of LIFE+ projects, for example, restoration and management activities can take a long time to generate positive conservation outcomes. This is associated with the inherent time lags in ecological systems as well as the magnitude of the actual task. In the case of biodiversity for example, 6EAP biodiversity objectives were too ambitious relative to the timeframe.

During the 6EAP's lifetime a number of changes have taken place in the underlying policy context. These changes could not have been envisaged in 2001/2002 when the 6EAP was being developed and highlight some of the difficulties in undertaking such forward looking exercises in a dynamic and uncertain context. The most drastic example in this respect is the area of climate change where since the adoption of the 6EAP, a number of developments have occurred including the presentation of new scientific findings, the development of new technological options, and political dynamics which were difficult to predict at the time the 6EAP was developed and adopted. It is inevitable that some policy areas develop faster than others given different dynamics. The long timeframe of the 6EAP therefore increased the need for an effective review mechanism to ensure continued relevance of the Programme in a dynamic policy context. The mid-term review of the 6EAP provided an opportunity to adapt the programme to changed circumstances.

The Commission's mid-term review of the 6EAP published in April 2007 concluded that the EU is 'generally on-track' with adopting the measures outlined in the 6EAP.[583] In contrast to the Commission's assessment, a non-binding resolution adopted by the European Parliament in April 2008[584] was much more critical and deplored the fact that the EU is behind schedule with the implementation of the measures planned in the 6EAP. The Council conclusions on the mid-term review adopted in June 2007[585] also noted that while progress has been made, further decisive action is needed and concrete outcomes need to be delivered in the four priority areas of the 6EAP. Although the Commission's mid-term review recognised that scientific evidence identified some gaps between 6EAP objectives and planned and existing measures and that there was a need to strengthen existing measures or adopt new measures no major overhaul of the Programme was considered necessary at the time and thus a proposal to amend the 6EAP Decision was not put forward. Consequently, the opportunity to adapt the 6EAP to changing circumstances was largely missed. Ensuring the continued relevance of the Programme, therefore, proved to be a critical challenge.

In contrast to the extensive mid-term review process undertaken for the 5EAP, the mid-term review of the 6EAP was afforded less attention and viewed more as an obligatory reporting exercise than an opportunity for substantial review of the Programme. A number of factors could explain this approach to the mid-term review of the 6EAP including the rising attention to the climate change debate at the time – the mid-term review of the 6EAP was adopted in April 2007, shortly after the 20-20-20 targets had been agreed by EU leaders. This parallel agenda may have detracted focus and resources away from an evaluation of the whole of EU environmental policy towards a particular area of environmental policy that was beginning to receive high level political and public attention. Moreover, a substantially revised 6EAP including new or adapted priorities as result of the mid-term review would have needed to undergo the co-decision procedure. At least the Impact Assessment (IA) on the mid-term review suggests such an interpretation. In assessing the three options the IA concludes that such an attempt would reopen the debate on the key priorities of the 6EAP, which would be likely to result in a fruitless debate and therefore refrains from substantially revising the 6EAP.[586] The economic downturn in 2004/2005 and the review of the Lisbon Strategy in 2005 may have been other contributing factors influencing the approach to the mid-term review. On a more technical note, the 6EAP did not have clear intermediate targets or

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583 CEC (2007): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, (COM(2007)225), 30 April 2007, http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0225en01.pdf.

584 European Parliament resolution of 10 April 2008 on the mid-term review of the Sixth Community Environment Action Programme (2007/2204(INI)), http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2008-0122+0+DOC+XML+V0//EN&language=EN.

585 Council of the European Union, "New Impetus for EU Environmental Policy", 10796/07, 21/06/2007, http://register.consilium.europa.eu/pdf/en/07/st10/st10796.en07.pdf.

586 CEC (2007): Accompanying document to the Communication from the Commission to the European Parliament, the Council and the European Economic And Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme - Impact Assessment. Commission Staff Working Document (COM(2007)225 final). SEC(2007)547, SEC(2007)546/2, p. 26.

benchmarks by which progress could be assessed during the course of its 10-year timeframe, thus making it more difficult to evaluate progress and determine additional actions required to ensure that objectives where achieved within the defined timeframe.

Co-decision procedure and role of the EU institutions

The 6EAP was the first EAP to be adopted through the co-decision procedure, thus granting it an added degree of political importance and inter-institutional authority compared to its predecessors. While the exact legal nature and effect of the 6EAP may be contested[587], it represents a formal commitment of the Parliament, the Council and the Commission and provides an important benchmark against which the development of EU environmental policy can be evaluated. Although formally an intra-institutional document, in practice the 6EAP is largely perceived as a Programme of the Commission, and in particular of DG Environment.

The co-decision procedure to agree the 6EAP was an intense and lengthy process lasting 18 months from the presentation of the Commission proposal to final adoption of the Decision. The use of the formal legislative procedure offered additional channels for influencing the contents of the Decision. In their first reading in May 2001, MEPs adopted 221 amendments[588] to the Commission's proposal. The Council's common position incorporated 174 of the amendments proposed by the Parliament.[589] During its second reading, the Parliament's plenary meeting in January 2002 tabled 18 amendments.[590] A conciliation committee was convened to resolve the remaining disagreements between the Parliament and the Council and final negotiations were completed in March 2002.[591] Initial insistence by both the Council and the Parliament that the 6EAP should contain detailed quantitative targets and timetables was abandoned, with both institutions agreeing that detailed policy proposals and the selection of specific policy instruments would be developed in the framework of the Thematic Strategies which 'may include' relevant targets. MEPs also retreated on their earlier insistence that all the Strategies should be decided by co-decision; however their proposed three year timetable for producing them was retained. In certain respects, the amendments to the Commission proposal introduced during the co-decision

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587 Pallemaerts, M. and Geeraerts, K. (eds) (2007): *Assessment of the achievements of the 6th Environmental Action Programme*, Study for the European Parliament Environment, Public Health and Food Safety Committee under contract IP/A/ENVI/FWC/2006-172/C1/SC8, Institute for European Environmental Policy (IEEP), http://www.europarl.europa.eu/activities/committees/studiesCom.do?language=EN&body=ENVI.

588 European Parliament Report on the proposal for a European Parliament and Council decision laying down the Community Environment Action Programme 2001-2010 - Committee on the Environment, Public Health and Consumer Policy (2001/0029(COD)), A5-0175/2001, http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A5-2001-0175+0+DOC+PDF+V0//EN.

589 Council of the European Union, Common position adopted by the Council with a view to the adoption of a Decision of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, 11076/01, http://register.consilium.europa.eu/pdf/en/01/st11/st11076.en01.pdf.

590 Position of the European Parliament adopted at second reading on 17 January 2002 with a view to the adoption of European Parliament and Council Decision No .../…/EC laying down the Sixth Community Environment Programme, http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P5-TA-2002-0007.

591 Joint text approved by the Conciliation Committee provided for in Article 251(4) of the EC Treaty on the Decision of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, PE-CONS 3618/1/02, 2001/0029 (COD), C5-0171/2002, http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+JOINT-TEXT+C5-2002-0171+0+DOC+PDF+V0//EN&language=EN.

procedure helped strengthen the adopted 6EAP, for example, at Parliament's request the 6EAP includes provisions for the listing and phasing-out of environmentally harmful subsidies and for the introduction of environmental taxes. At the same time, the number of different issues that were incorporated in the Programme as a result of negotiations during the co-decision process can also be seen as diluting the focus and clarity of the adopted Decision.

Although the process to agree the 6EAP was quite costly in terms of time and resources absorbed, it was also beneficial in terms of strengthening the 6EAP and increasing its legitimacy in later political discussions. In particular in mid-2005 when the progress of the Air and Marine Thematic Strategies through inter-service consultation was blocked, the fact that the Strategies were key elements of the 6EAP helped to keep them on the agenda. According to most stakeholders consulted in the context of this study[592], the requirement to adopt the Thematic Strategies set out in a formally adopted, intra-institutional document provided the Environment Commissioner with a strong and clear mandate to defend the continued development of the Strategies during a time of scepticism. Additional arguments used by the Environment Commissioner and NGOs for the continued development of the Thematic Strategies was the general support of EU citizens for proactive environmental policy and that environmental policy, far from destroying competitiveness, can contribute to long-term sustainable growth. In an effort to further ease concerns relating to the costs of the Thematic Strategies and their impact on European competitiveness, the Commission published a working document[593] in October 2005 setting out how the Thematic Strategies had been developed in line with the Better Regulation agenda.

The process of developing the 6EAP helped stimulate interest in the other institutions, which afforded them more of a say in the priority setting process, with the Parliament for example insisting on the inclusion of a Thematic Strategy on the Urban Environment. The process of developing the 6EAP may arguably also have given other institutions and stakeholders the time to adopt a more strategic, coherent view on certain policy areas which could subsequently be applied in discussions on specific pieces of legislation. Yet, the enthusiasm with which the Parliament approached the development of the 6EAP was also a reflection of the context at the time, namely the entry into force of the Amsterdam Treaty and with it the substantially strengthened role of the European Parliament in environmental policy-making processes.[594] Preparation for the WSSD in Johannesburg and the need for the EU to show its international environmental credentials were other underlying factors at the time the 6EAP was being discussed which influenced the negotiations.

Policy approaches and instruments

In terms of policy approaches and instruments, the **Thematic Strategy approach,** including its effects on the stimulation of stakeholder and scientific input in the policy-making process through broad participation, constitutes the 6EAP's main contribution. This raises the

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592 Stakeholder consultation, workshops and interviews.

593 CEC (2005): Commission Working Document, Better Regulation and the Thematic Strategies for the Environment {SEC(2005) 1197}, (COM(2005)466).

594 It should however be noted that the Parliament was also involved through the co-decision procedure in the mid-term review of the 5EAP.

question of whether the Strategies were a suitable instrument to achieve the objectives of the 6EAP.

The Thematic Strategies mostly resulted in the creation of new or improved European networks of EU-, national-, and subnational-level policy-makers, stakeholders and experts; and in the adoption of various types of legislation, in particular broad framework directives which delegate important responsibilities, e.g. for setting environmental targets, to respective levels of governance. These outputs of the Thematic Strategies differed to some extent from prevailing expectations at the time the 6EAP was adopted. Contrary to these initial expectations, the Thematic Strategies rarely resulted in environmental targets and timetables. However, although they were only expected to identify areas in which EU legislation and other measures should be adopted, most Thematic Strategies went beyond the identification of such areas and were in fact accompanied by concrete legislative proposals.

Several important environmental objectives of the 6EAP in areas such as air pollution and marine biodiversity are unlikely to be reached by the time the Programme expires. This raises the question whether this could be attributed to the failure of the Thematic Strategies to produce environmental targets and timetables and, if so, to what extent this failure was outweighed by the benefits of the Thematic Strategies in terms of the development of legislation. The answer to this question varies to some extent between the different Thematic Strategies. For example, it seems possible that legislation similar to the legislation associated with the Waste Thematic Strategy would have been adopted in the absence of that Strategy, whereas such a development would seem less likely for the case of the Marine Environment Strategy and the associated Marine Strategy Framework Directive.

More generally, it seems possible to argue that **the formulation of legislation** in the framework of the Thematic Strategies can often be interpreted as a suitable 'second-best' solution in the more technical sense according to which, broadly speaking, the 'second-best' solution becomes the solution of choice if one takes certain constraints into account which undermine attempts to achieve the optimal solution.[595] Put differently, the adoption of legislation rather than of targets and timetables in the framework of the Thematic Strategies can often be interpreted as an adequate response to certain constraints - in particular an insufficient knowledge base and the existence of formidable political obstacles - which would probably have undermined the adoption and/ or the effectiveness and implementation of environmental targets and timetables at the time.

Several considerations illustrate the relevance of this argument. For instance, the EU's failure to meet some of the few relatively concrete targets and objectives in the 6EAP illustrates the relevance of political constraints and of the knowledge base for effective target setting. The clear failure to achieve the 6EAP's target to halt biodiversity decline by 2010 can to a considerable extent be attributed to insufficient political support and political constraints at the level of Member States. Illustrating the importance of a sufficient knowledge base for

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595 For a short introductory explanation, see the OECD Glossary of Statistical Terms, http://stats.oecd.org/glossary/detail.asp?ID=3306. For an application to the choice of environmental policy instruments, see Bennear and Stavins (2006).

effective target setting, the impact assessment of the Thematic Strategy on air pollution revealed that the 6EAP objective of achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health could not be achieved because it was not possible to determine safe level of exposure for some pollutants.

Formidable political constraints existed for those Thematic Strategies which had to confront subsidiarity concerns and strategic interests on the part of the Member States. In particular this applies to the Urban Environment, Soil, Marine Environment and to some extent also the Natural Resource Strategies. Subsidiarity concerns negatively affected the development of the Urban Environment Strategy and have so far prevented the adoption of the proposal for the Soil Framework Directive. Member States' strategic interests relating, among other things, to access to resources, constrained the development of the Marine Environment and Natural Resource Thematic Strategies. Moreover, the fact that the Strategies and associated framework legislation delegate many important decisions on substantive measures and implementation to the Member States partly reflects these political constraints.

Similarly, the emphasis of most Thematic Strategies, for example the Natural Resources, Marine Environment and Soil Strategies, on the development of the knowledge base attests to the constraints for the adoption of effective targets and timetables resulting from insufficient knowledge. Gaps in, and the complexity of, the knowledge-base partly explain the failure of, for example, the Resource Thematic Strategy to develop targets. Conversely, the adoption of the ambitious 20-20-20 targets and of the Climate and Renewable Energy Package illustrate the positive effects which a sufficiently developed knowledge base and preparedness to overcome political constrains can have. The adoption of these measures can to a significant extent be attributed to the knowledge base provided by the 4th IPCC assessment report, and to the surge in political support for more ambitious targets and timetables in support of mitigating climate change and a stronger reliance of renewable energy, which resulted from several factors, including a concern for energy security.

Against this background, the proposal / adoption of largely procedural framework directives under four Thematic Strategies can partly be interpreted as a broadly adequate reaction to insufficient political support for the adoption of concrete targets and/ or an insufficient knowledge base. Broad stakeholder participation and the networks of policy-makers, experts and stakeholders established for the development of the Thematic Strategies and the implementation of associated legislation provide an opportunity to gradually strengthen the knowledge-base and build political support for the adoption of effective targets and timetables and their subsequent implementation in the future. This broadly positive assessment of the Thematic Strategies as useful 'second best' solutions should not, however, detract from the fact that the formulation of the Strategies was also associated with significant costs. Their development took about four years and absorbed considerable resources both within the Commission and among stakeholders and experts involved.

Considerations such as the analysis of the drivers and barriers to achieving the environmental objectives of the 6EAP suggest that a stronger focus of the 6EAP on certain other policy approaches and instruments beyond the Thematic Strategies could have further improved goal achievement. Three approaches and instruments appear to be particularly relevant: measures to improve the implementation of EU environmental legislation; initiatives

to promote comprehensive, cross-sectoral policy coherence; and the use of market-based and economic instruments.

Article 2(3) of the 6EAP calls for the adoption of measures to improve **implementation and enforcement** of EU environmental legislation. While recognising that implementation is primarily the responsibility of the Member States, and despite the adoption of a range of relevant measures by the Commission, the analysis of drivers and barriers to the achievement of 6EAP objectives shows that implementation problems at Member State and or sub-national level have been an important factor hindering or delaying the achievement of several 6EAP objectives across the four priority areas. This suggests that the 6EAP's focus on implementation and enforcement may not have been sufficiently strong or precise enough (see section 4.3 for a more in-depth discussion of this issue).

Reflecting, among other things, the at the time of the adoption of the 6EAP still relatively recent introduction of the Amsterdam Treaty's provisions on the integration of environmental requirements in non-environmental EU policies and the associated Cardiff Process of environmental policy integration, the 6EAP emphasises the need to improve environmental policy integration, in particular in Articles 2(4) and 3(3). In contrast, the 6EAP pays less attention to **comprehensive cross-sectoral policy coherence**, which requires mutual integration of environmental, economic and social concerns, although it is also mentioned in Article 2(4). Yet, it seems likely that the achievement of 6EAP objectives would have benefited from a stronger emphasis on cross-sectoral policy coherence. First, according to the analysis of the drivers and barriers, economic concerns relating to economic competitiveness and costs at times acted as a barrier to the achievement of 6EAP objectives. A stronger focus on achieving comprehensive cross-sectoral policy coherence through increasing the efficiency of environmental measures and exploiting synergies between the economic and environmental sectors could have helped reduce such barriers. Second, the 6EAP focuses on persistent environmental problems[596], such as climate change and biodiversity loss which have complex causes closely linked to current economic patterns of activity, emerge over relatively long periods of time, and are difficult to reverse once manifested. Measures required to address persistent environmental problems tend to affect a broad range of economic activities and actors. Improved cross-sectoral policy coherence can lower costs and transform at least some of the costs into new economic opportunities. In addition, effective responses require a preventive and precautionary approach where measures are adopted well in advance of the manifestation of serious environmental impacts. However, costs associated with such comprehensive early responses are more difficult to communicate to the broader public than costs of measures, which are necessary to address manifest adverse environmental effects. Again, cross-sectoral policy coherence which supports a cost-effective approach and helps create new economic opportunities can be expected to increase the acceptability of effective responses to persistent environmental problems among the general public (see section 4.1.2 for a more in-depth discussion of this issue).

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596 See, for example, Martin Jänicke, Klaus Jacob (Hrsg.): Environmental Governance in Global Perspective. New Approaches to Ecological and Political Modernisation. Freie Universität Berlin, Forschungsstelle für Umweltpolitik, 2006, pp. 167-209.

Finally, in Article 3(4) but also in other places, the 6EAP calls for the adoption of **market-based and economic instruments,** including elimination of environmentally harmful subsidies, and the promotion of emission trading and environmental taxes. However, with the partial exception of CO_2 emission trading (Article 5 (2,b)), these calls are often phrased in cautious language, remaining at a general level (promotion of environmental taxes), or are only accompanied by calls for preliminary measures, such as analyses and the establishment of criteria for identifying environmentally harmful subsidies. Given the focus of the 6EAP on persistent environmental problems and the potential of market-based and economic instruments to respond to the associated need for cost-effective instruments, this cautious approach appears to be too weak to meet the environmental objectives of the Programme. The adoption of market-based and economic instruments tends to be politically difficult because costs to affected parties are easily identifiable and EU competencies for taxation and fiscal issues are very limited. However, given the negative effects of environmentally harmful subsidies; the potential of environmental tax reform to achieve largely cost-neutral positive impacts on the environment; and the potential cost-effectiveness of emission trading and other market-based instruments, recourse to these instruments appears to be necessary to effectively address the persistent environmental problems highlighted by the 6EAP.

4.5 Added value of the 6EAP in the context of the SDS and the Lisbon Strategy

This following section discusses the linkages between the 6 EAP and the two main European strategic policy frameworks of relevance to European environmental policy, namely the Lisbon strategy and the European Sustainable Development Strategy (EU-SDS). This discussion mainly focuses on the EU SDS and mentions wherever relevant the Lisbon Strategy.

As outlined in Chapter 2, the SDS and 6EAP were developed in parallel to each other. They are closely intertwined as regards content (degree of specificity and perspective) and instruments in the field of the environment. Understanding their concrete linkages and functions in the process of political decision-making is not an easy challenge, as both documents were not developed with the primary intent of complementing each other, but present outcomes from different policy processes under different political ownership within the Commission. The EU SDS was primarily developed in view of the 2002 Johannesburg Summit and the need to provide an overarching strategy for aligning economic, social and environmental objectives, while the 6EAP was developed with a clear view to program environmental policy development. Nonetheless, the 6EAP is regarded as providing the environmental dimension of the EU SDS.

Conceptually, both documents aim at complementing each other. The **6EAP** firstly notes the relevance of the concept of sustainable development: ‘measures proposed and adopted in favour of the environment should be coherent with the objectives of the economic and social dimensions of sustainable development and vice versa (6EAP, Art. 2(4)). With regards to legislation, the 6EAP does not mention the Lisbon Strategy, but makes some key references to the EU-SDS: ‘The Programme […] indicates priorities for the environmental dimension of

the Sustainable Development Strategy and should be taken into account when bringing forward actions under the Strategy.' (6EAP, Recital 7). It further notes that the 6EAP 'shall form a basis for the environmental dimension of the European Sustainable Development Strategy and contribute to the integration of environmental concerns into all Community policies, inter alia by setting out environmental priorities for the Strategy' (6EAP Art 2(1)).

The original Commission proposal for an **EU Sustainable Development Strategy** went beyond the proposed objectives of the 6EAP in several domains, but did not explicitly mention the 6EAP. At the Goteborg European Council in 2001, the key objectives identified by the 6EAP were, however, implicitly or explicitly noted in the adopted conclusions. It needs to be noted, though, that a formal document for the EU SDS was only adopted in 2006 when the EU SDS was renewed. Prior to this, the only documents that existed were the draft proposal by the Commission and the conclusions of the Gothenburg European Council. In turn this suggests that the main, reliable strategic document relating to environmental policy in the interim period was the 6EAP.

The **added value** of the 6EAP compared to the EU SDS is that it was more specific and thus provided a much more operational framework for programming European environmental policy discussions. A similar effort would not have been possible with the EU SDS that in particular lacks a specific governance approach to identifying and filling in gaps in the overall environmental policy framework

The 6EAP specifies and provides governance approaches, such as the Thematic Strategies and the use of increased stakeholder consultation as well as emphasis on scientific input. It thus **contributes to the actual realisation of environmental goals** both those mentioned by the 6EAP itself as well as by the EU SDS. This can be seen, for example in the case of the Thematic Strategy on Waste recycling which is unlikely to have come about through the EU-SDS alone and was mainly facilitated by the 6EAP.

This is, of course, quite logical, as the 6EAP and the EU-SDS represent different documents with different functions in the EU policy-making process. The EU SDS was suitable to help with better aligning and integrating strategic environmental objectives and headline indicators with other strategic social and economic objectives and headline indicators. Due to its specific design it was not suitable to fulfill the same programmatic effort for European environmental policy as the 6 EAP did.

Nevertheless, and as seen in chapter 2, it is not only the 6EAP that adds value to the EU-SDS. There is reciprocal activity from the EU-SDS in that it elevates and links environmental considerations in the broader debate regarding economic and social development and provides a long-term perspective. This role is vital as, sectoral approaches on, for example, the preservation of biodiversity, may be thwarted by a lack of consideration of the impact that, for instance, the development of industry will have on an area. By locating biodiversity preservation within a wider debate on ecosystem services, there is a chance that a more integrated and sustainable approach may result. In this way, although **the 6EAP and the EU-SDS have different perspectives** both serve different functions and provide added value to the aims of the other.

The 6EAP and EU-SDS together build the environmental pillar of the Lisbon process. The Lisbon Strategy, like the EU-SDS is a high-level political statement of intent and

direction, translating common objectives and principles in the Treaty and 'recognise(s) that economic, social and environmental objectives can reinforce each other and they should therefore advance together'.[597] As noted in chapter 2, the EU-SDS is intended to act as a third, environmental dimension of the Lisbon strategy.[598] Indeed, the EU-SDS has an important function to play in conjunction with the goals of the Lisbon Strategy and acts as a vital means to add an environmental dimension to the jobs and growth agenda. However, through the 6EAP's provision of concrete tools and precise objectives through the EU-SDS, one could argue that the environmental pillar of the Lisbon Strategy was strengthened. In other words, the EU-SDS adds an environmental element to the Lisbon Strategy debate, which is considerably strengthened by the 6EAP. Furthermore, through its tools, the 6EAP supports the EU-SDS' role in promoting cross-sectoral integration of environmental concerns. Still, the 6EAP has an additional value in that it has an entirely independent agenda, and is therefore also able to act alone, providing a specifically focused plan of environmental action from which the EU-SDS can benefit. Furthermore, the 6EAP having been adopted as a decision through the co-decision procedure, provided continuity and reliability in times when the EU-SDS was not commonly supported by all EU institutions. Both the 6EAP and the EU-SDS however failed to attract a similar degree of political attention as the Lisbon Strategy, both within Member States and the European institutions. Some environmental issues have proved more compatible with the dynamics of the Lisbon Strategy than others. Climate change is the best example where the identification of the economic benefits of appropriate environmental commitments helped drive forward progress in this thematic area. Increasing recognition of the economic value of biodiversity and ecosystem services has also helped to raise the political profile of biodiversity issues in recent years.

Nevertheless, despite this seemingly well inter-linked process there are some drawbacks. As the addition of an environmental pillar to the Lisbon strategy was carried out a year after the latter and it has not been part of an integrated sustainable development strategy from the outset. Furthermore although the review process of the EU-SDS and the Lisbon strategy was strong and helped to revitalise them, these reviews were misaligned and did not feed into each other adequately. The 6EAP was not assisted by the fact that its own review took place only once during its life-span of ten years and did not have the reinvigorating effect of the more dynamic EU-SDS review process. In this way, despite the potential for interconnectedness of environmental and sustainable development considerations between the 6EAP, EU-SDS and the Lisbon Strategy, there are still a number of aspects concerning strategic integration, time-frame and review process which could be improved upon.

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[597] Council of the European Union, Review of the EU Sustainable Development Strategy (EU SDS) – Renewed Strategy, Document 10917/06, 26 June 2006.

[598] Presidency Conclusions – Göteborg, 15 and 16 June 2001 SN 200/1/01.

5 Main findings of the assessment

5.1 Introduction: background and approach of the assessment

This report assesses the performance of the sixth EU Environment Action Programme, which was adopted by the European Parliament and the Council in July 2002. The Programme runs for a period of 10 years and will end in July 2012. It was the first EU Environment Action Programme to have been adopted through the legislative co-decision procedure. The 6EAP sets out general and more specific objectives and priority actions for four environmental priority areas: Climate Change; Nature and Biodiversity; Environment and Health; and Natural Resources and Waste. In addition, the 6EAP emphasises various horizontal and governance-related issues in its provisions on 'Principles and Overall Aims', 'Strategic Approaches', 'Thematic Strategies', 'International Issues' and 'Environmental Policy-making'. Serving as a link between the 6EAP's four priority areas and the Programme's horizontal and governance-related provisions, the 6EAP introduces the Thematic Strategy approach in the following areas: air pollution; marine environment; prevention and recycling of waste; sustainable use of resources; urban environment; soil; and pesticides.

The 6EAP required the Commission to submit a mid-term review of the Programme in 2006 and an assessment in the final year of the Programme. The mid-term review of the 6EAP was presented by the Commission in April 2007 and concluded that the priorities of the 6EAP remained valid, but that the EU was not yet on the path to sustainable development. As the 6EAP nears its last phase, preparations for the final assessment have begun. In 2010, the European Commission contracted an independent study to assess the achievements of the 6EAP. The results of this assessment together with the European Environment Agency's 2010 State and Outlook of the Environment Report will be used as input for the Commission's own final assessment of the 6EAP which is expected to be presented in 2011.

Approach of the assessment

The main focus of this assessment is on the 6EAP's added value and its role in leveraging the adoption of EU environmental policies for the achievement of the 6EAP's environmental objectives. This assessment is based on research and analysis of relevant EU policies, legislative measures and tools adopted between 2002 and the end of 2010 as well as targeted interviews, consultations and an electronic survey of key European stakeholders. The analysis covers the different stages of the policy formulation and implementation chain including the initial formulation of the 6EAP, the subsequent processes and measures adopted, their implementation and, finally, the outcomes in terms of the achievement of the objectives. To assess the added value of the 6EAP the assessment looks at a range of factors, which have influenced the adoption of particular measures and policies and contributed to the achievement of objectives set out in the 6EAP. One set of relevant factors is directly linked to the 6EAP which may have a direct impact on the adoption of specific EU environmental policies or an indirect impact which is mediated through effects on EU environmental governance. For example, the fact that the 6EAP calls for the adoption of measures to address a particular environmental issue may directly contribute to the adoption of a corresponding measure. An indirect impact, which is transmitted through effects on governance, occurs if, for instance, the 6EAP increases

the legitimacy of EU environmental policy. The assessment also looks at several external drivers and barriers which have affected the achievement of 6EAP objectives independently of, but also through their impact on the adoption of EU environmental measures. Relevant factors relate, for example, to the context of policy-making, such as economic downturns and new scientific findings, shifting political priorities, international commitments, EU decision-making procedures, and the implementation of measures at national level. Additional questions which this assessment addresses concern the adequacy of the measures adopted and of the timeframe of the 6EAP to reach 6EAP objectives, as well as the added value of the 6EAP and its role in the wider context of the EU Sustainable Development Strategy and the Lisbon Strategy.

Throughout this assessment it is important to keep in mind the role and function of an EAP. Provisions in the Treaty allow for the adoption of general action programmes which should set out priority objectives to be attained. Concrete measures to implement the programmes are to be adopted through separate processes. This wording implies that EAPs have a strategic orientation function, but that concrete measures needed to implement the programmes need to be adopted through separate processes. It is also important to keep in mind that the 6EAP is reflective of the time of its adoption. Based on the legislative and political context in 2002, the 6EAP aimed to establish a 10-year framework for Community action on the environment which was both aspirational and achievable. A number of changes have taken place subsequently which could not have been envisaged when the 6EAP was developed and highlight the challenge of undertaking such forward-looking exercises.

In a first step, the assessment analyses the degree to which the objectives of the 6EAP have been achieved in terms of improvements in the state of the environment as well as with respect to the adoption of relevant measures. It then assesses the contribution of the external factors to the achievement of the objectives. This is followed by an analysis of the direct contribution of the 6EAP to the achievement of 6EAP objectives in the different priority areas. Taking a broader look, which also takes the subjective perception of the 6EAP by policy-makers and stakeholders into account, the assessment then focuses on the more indirect added value of the 6EAP for EU environmental governance. Finally, regarding the overall approach of the 6EAP the assessment looks specifically at particular aspects of the overall approach, such as the timeframe of the 6EAP and its role in relation to other major strategies and initiatives, such as the EU Sustainable Development Strategy.

5.2 Achievement of 6EAP environmental objectives

The main environmental objectives of the 6EAP have been achieved to different degrees in the Programme's four environmental priority areas. In a significant number of cases, important measures have only recently been adopted and have therefore not yet been able to affect the state of the environment. It should also be noted that this assessment was conducted in 2010 and the 6EAP still had some time before its expiry in July 2012.

Climate Change

In the area of climate change, the EU will meet the majority of the 6EAP's main objectives.

The 6EAP's overall aim in the climate change thematic area is a commitment to the 2°C target and to a global reduction of greenhouse gases emissions by 70% as compared to 1990 (without target year). The EU has contributed and is continuing to contribute to this aim by passing and implementing different measures:

The EU pursued the ratification and entering into force of the Kyoto Protocol and fulfillment of an 8% emissions reduction commitment for the period 2008-12 compared to 1990 levels for the European Community. The EU as a whole, and most of its Member States, are on track to meet their respective Kyoto Protocol emission reduction obligations for the first commitment period. It has managed to place itself in a credible position in international climate negotiations to advocate both for a stringent international agreement for the period beyond 2012, as well as the 2°C limit.

To meet its targets, the EU passed and implemented legislation in relevant policy fields (international commitments, adaptation, enlargement and external relations) and sectors (energy, transport, industry and other sectors) as set out in the 6EAP. In particular, since 2007, the EU internal climate policy has become noticeably more ambitious. In 2009, the EU passed the Climate and Renewable Energy Package which comprises measures implementing the '20-20-20' by 2020 targets agreed by the Spring European Council in March 2007.

Based on this package, the 2009 Renewable Energy Directive introduced binding national targets to achieve a renewable energy share of 20% of the EU's gross final energy consumption by 2020. This target actually exceeds the 6EAP's indicative target of a 12% share of total energy usage by 2010 in the EU.

However, the EU failed to pass similarly stringent measures in the field of energy efficiency. The EU adopted an Energy Efficiency Action Plan as well as other measures (e.g. 2002 Energy Performance of Buildings Directive and its recast in 2010), to implement the EU energy saving goal of 20% by 2020, but failed to agree on a binding energy efficiency target to date. Nevertheless, the 6EAP's highly general target on energy efficiency (i.e. the promotion of energy efficiency) was met.

In 2003 the EU ETS Directive was adopted. Although the comparatively low price for carbon since the introduction of the EU ETS has partly undermined the environmental effectiveness of the measure, it has ultimately been one important factor in achieving lower greenhouse gas emissions in the EU. The 2009 revised ETS Directive improves the EU ETS requiring a higher share of auctioning and expanding the powers of the Commission in the emission allowance allocation process. The extension to additional gases and the inclusion of aviation also improved the scheme. The new EU ETS Directive is complemented by the Effort-Sharing-Decision, which contains binding reduction targets for the post-2012 period for sectors not covered by the ETS.

The EU adopted a number, but not all, of the measures envisaged in the 6EAP for the transport sector. Notably, the 2003 Biofuels Directive EU set an indicative biofuel target of 5.75% for transport fuels by 2010 which was later replaced by the 2009 Renewable Energy Directive's 10% renewables target for the transport sector by 2020. The 2009 Regulation on CO_2 emissions

from passenger cars gradually introduces, until 2015, a fleet average of 130g CO_2/km. However, the measures taken so far have not lead to absolute greenhouse gas reductions in the transport sector.

The EU met the highly general 6EAP climate and adaptation objectives. The 2009 White Paper on Adaptation proposes more than 30 concrete actions in a number of areas, e.g. the development of a knowledge base, the integration of adaptation in EU policies as well as health and social policy.

Nature and Biodiversity

In the area of nature and biodiversity, despite some progress, including the extension of the Natura 2000 network and research on the socio-economic value of biodiversity and ecosystem services, the 6EAP objective of halting biodiversity decline by 2010 has clearly been missed. Key pressures, including damaging pollution and habitat fragmentation continue, while policy measures and strategies on invasive species are still under development. Efforts have been made towards the 6EAP objective of promoting a sustainable use of the soil, including the integration of aspects of soil protection in relevant EU policies, improvements in the knowledge base, and increased public awareness; however, the failure to adopt the proposed Soil Framework Directive to date has limited further progress.

Successive reforms of the CAP have introduced important mechanisms that contribute to integrating biodiversity considerations in EU agricultural policies. However, additional efforts are required to achieve the 6EAP biodiversity objectives. The 6EAP objective of integrating environmental considerations in the CFP capitalizing on the 2002 reform has been achieved in part. However, overexploitation of marine fisheries and Natura 2000 site establishment remain problematic. When implemented, the Marine Strategy Framework Directive can be expected to make a significant contribution to meeting the relevant 6EAP objectives. However, there are some limitations to the Directive and issues that it lie beyond its scope and which will have to be addressed using other instruments, such as the CFP.

Despite some progress, the achievement of the 6EAP forestry objectives has been limited by *inter alia* the limited and fragmentary purchase of EU policy in the forestry sector, the small proportion of funding dedicated to forest measures, the increased level of intensified forestry management and the continuing fragmentation of forest habitats. Recent EU efforts in relation to climate change and illegally harvested wood are expected to contribute to 6EAP objectives in the future.

EU provisions for the identification, labelling and traceability of GMOs are appropriately designed and applied effectively and largely meet 6EAP requirements. There is however some doubt as to whether the current EU GMO regulatory framework is sufficient for ensuring effective GMO monitoring, as stipulated in the 6EAP, while the way in which risk assessments are carried out and previous EFSA guidelines have been the subject of significant criticism.

Environment and Health

In the environment and health thematic area, the main means of meeting 6EAP objectives was via new or amended EU legislation and progress has been variable at this stage but can be observed clearly. However, outcomes on the ground have been less clear and the recent

adoption of many policy measures which are still in the process of being implemented makes it difficult to assess their actual contribution to relevant 6EAP objectives.

The European Environment and Health Action Plan put in place EU-wide monitoring and information systems and launched targeted research projects, thus helping to increase information on and awareness of the linkages between environment and health as set out in the 6EAP. More still needs to be done in terms of translating research project results into policy action and integrating health concerns in other policy areas.

Once implemented, the REACH Regulation is likely to contribute to a number of 6EAP objectives. However, the target date for the 6EAP objective that by 2020 chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment is unlikely to be met mainly because of the long implementation span of REACH. Moreover, the substitution objective of the 6EAP is unlikely to be fully met and the implementation of information responsibilities is likely to be compromised. When fully implemented, the Regulation on placing plant protection products on the market and the Directive on sustainable use of pesticides are likely to contribute to several 6EAP objectives. However, certain gaps remain.

The deadline for transposition of the groundwater Directive was January 2009, thus it is still too early to tell what the impacts of the Directive have been. Once the groundwater Directive has been implemented, it is likely to contribute to the 6EAP objective of ensuring protection of surface and groundwater. It is too early to tell what the impacts of the Directive on environmental quality standards will be, however the Directive is likely to have important impacts in the future. The concept of mixing zones where standards do not have to be met (despite Guidance being agreed) leaves some room for possible exploitation. The revised bathing water Directive is likely to have stimulated further action to improve environmental quality. The extent to which this was already planned by the Member States is however difficult to assess. There has been much activity to take forward the 6EAP objective of full implementation of the WFD, including work under the Common Implementation Strategy (CIS), the development of guidance documents, and the Communication on water scarcity and droughts which will be important in addressing some of the quantitative water objectives of the WFD as noted in the 6EAP.

The Air Thematic Strategy concluded that it was not possible to achieve the 6EAP's objective for air quality. Nonetheless, a range of measures have recently been adopted that should contribute to meeting the interim targets in the Thematic Strategy and help move towards the 6EAP objective. However, certain gaps remain including a revision of the national emissions ceilings Directive, action to address indoor air pollution and legislation on some emissions sources. The Urban Thematic Strategy only partially responds to the requirements set out in the 6EAP. Its contribution to relevant 6EAP objectives is difficult to assess, particularly as the Strategy does not contain any binding elements or deadlines. However, the actions that have been taken forward arguably contribute to the 6EAP aim of encouraging sustainable urban development.

Natural Resources and Waste

In the natural resource field the 6EAP required to ensure that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and to break the linkages between economic growth and resource use.

Limited progress has been made in relation to decoupling the use of resources from the rate of economic growth. Better resource efficiency per unit of products produced has been achieved and there has been relative decoupling between resource use and economic growth. However, absolute decoupling has not been achieved with resource use in absolute terms still increasing. As a consequence, the EU is still exceeding carrying capacity in its consumption of renewable and non-renewable resources. The Thematic Strategy (TS) on Sustainable Use and Management of Resources, a strategy called for by the 6EAP, did not cause any direct changes in resource consumption given its rather theoretical character and its emphasis on data generation and institution-building. One positive impact of the TS is the establishment of the Environmental Data Centre on Natural Resources and Products.

In the waste field the 6EAP laid its focus on waste prevention and better waste management, i.e. the reduction of waste disposal in landfills and an increase in reuse, recycling and recovery. Another priority was the further development of EU waste legislation.

Some of the objectives of the 6EAP in the waste field were achieved given that the disposal of waste in landfills has been reduced in favour of increased rates of recycling and recovery. Thus, in the field of waste management more sustainable patterns have been established. There are, however, large differences between Member States. Waste legislation still suffers from sub-optimal implementation and enforcement in the Member States, meaning less change on the ground than implied by the legislation.

A consistent trend to reduce waste has not (yet) been achieved. Overall the amount of waste generated has been slowly growing over the last 10 years although not as quickly as GDP (relative decoupling), and tended to decrease between 2006 and 2008. It is difficult to link this relative decoupling to specific measures or policies because is seems highly likely that the economic crisis contributed significantly to the decrease.

Waste legislation promoting reuse, recycling and recovery and forcing Member States to reduce waste disposal in landfills was one of the main drivers for better waste management.

5.3 Drivers and barriers

A number of factors have affected the achievement of the main objectives of the 6EAP. At least with respect to individual environmental issues, the impact of these factors on relevant EU policies has often been much stronger than the impact of the 6EAP itself. The drivers and barriers analysed include changes in the underlying context of policy-making, aspects of the decision-making process, implementation and enforcement, the level of funding in support of EU environmental objectives, public opinion, interaction with other EU policy priorities and pressure from international commitments.

The impact of these factors often varies significantly across and within the environmental priority areas. The different opportunity structures for policy-makers and stakeholders which they

helped to create partly explain the variation in the extent to which 6EAP objectives were achieved. However, the variation with respect to the impact of these factors in the different priority areas is smaller with respect to some factors than with respect to others. In addition, some factors have more consistently acted as either drivers or barriers than others. Most importantly, **implementation and enforcement** has, despite some variation, acted as a barrier with negative effects on the achievement of 6EAP objectives in all priority areas. The impact of international commitments, decision-making procedures and practices, and the underlying context varied more strongly than the role of implementation and enforcement. However, in some respects, there also appears to be considerable consistency regarding the impact of these factors:

- while the impact of **international commitments** varied considerably among priority areas and issues, these commitments mostly worked as a driver, supporting the achievement of 6EAP objectives;
- **decision-making procedures and practices**, in particular the co-decision procedure, affected goal attainment across the priority areas, but there is significant variation with respect to its role as either driver or barrier;
- **changes in the underlying context**, such as economic downturns, new scientific findings etc., affected policy across the priority areas. However, as with decision-making procedures and practices, there was little consistency in the way in which these changes affected the achievement of the objectives of the 6EAP.

The impact on 6EAP goal attainment of **public opinion, the level of funding, and other EU priorities** varied significantly both among the priority areas and in terms of whether these factors acted as drivers or barriers.

More specific findings with respect to the various factors, which have significantly affected the achievement of 6EP objectives, are presented in the following sections.

Changes in the underlying context

The EU is now operating in a different political and legal framework compared to that which existed when the 6EAP was adopted. Changes in the underlying context include

- shifts in political priorities at the EU, national and global levels;
- there have also been significant changes in the general legal and institutional framework, including the entry into force of the Lisbon Treaty, the election of two new Parliaments and two new Commissions and changes to the institutional architecture of the Commission services;
- improvements in the scientific knowledge base;
- changes in economic circumstances, including the 2008-2009 financial and economic crises.

Several of these changes have affected the achievement of 6EAP objectives in the different priority areas. However, their impact has been particularly striking in the field of EU climate change policy. In this area a shift in political priorities at national and EU levels has helped push forward ambitious targets and measures, such as the 20-20-20 climate and renewable energy

targets. More specifically, while the growing political emphasis on economic growth and competitiveness has weakened certain aspects of EU legislation to mitigate climate change, it has also helped to identify synergies between economic and environmental objectives in the field of climate change, for example with a view to technological solutions with attractive market prospects and efficiency gains. Technological advances (e.g. on CCS) and changes in the knowledge base (e.g. the 4th Assessment Report of the IPCC) supported the adoption of a number of ambitious actions, which overtook what was envisaged in the 6EAP; and the economic recession and its corresponding decrease in production output led to lower GHG emission levels. Various changes in the underlying context, for example new political priorities as a result of the formation of the new European Commission in 2004, also affected developments in the other priority areas, albeit to a significantly smaller degree than in the field of climate change. Favourable opportunity structures have thus far been available to a lesser extent in the biodiversity and natural resources areas. This partly explains slower progress towards the 6EAP objectives in these areas.

Aspects of the decision-making process

The co-decision procedure, which is commonly used for the adoption of EU legislation in the environmental field, involves the European Commission, the European Parliament and the Council in the decision-making process. Its impact with respect to the achievement of 6EAP objectives varied from case to case. For instance, the European Parliament significantly altered the proposal for the revised Waste Framework Directive by introducing *inter alia* concrete recycling targets for certain types of waste, thereby enhancing the contribution of the Directive to the relevant 6EAP objectives. In contrast, in the field of soil protection the participation of the Member States through the co-decision procedure acted as a barrier to the achievement of 6EAP objectives because it has allowed a minority group of Member States in the Council to block the adoption of the proposed soil framework directive.

The Thematic Strategy approach introduced by the 6EAP also shaped the decision-making process in ways which both contributed, but also to some extent undermined the achievement of the objectives of the 6EAP. Extensive stakeholder consultation as foreseen by the Thematic Strategy approach often - but not always - increased the level of ambition of the strategies and associated legislation. The Thematic Strategy approach also acted as a barrier to the achievement of 6EAP objectives in that it tended to lengthen the decision-making process which compromised the prospect of achieving the objectives of the 6EAP before its expiry in 2012.

Implementation and enforcement

Encouraging more effective implementation and enforcement of EU environmental legislation is one of the strategic objectives of the 6EAP. However, despite some progress, inadequate implementation continues to be one of the main factors undermining the achievement of various environmental objectives of the 6EAP. Notwithstanding the measures taken by the EU to improve implementation and enforcement, including the introduction of new preventative tools and a more 'strategic' approach to enforcement activities, Member States' implementation record is not satisfactory. Consequently, environmental infringement procedures still account for approximately one third of all open cases for non-communication, non-conformity or bad application of EU legislation. Serious implementation problems have undermined the

achievement of the objectives of the 6EAP in each of the four environmental priority areas. Examples include the following:

- In the **Climate Change** area, the 2003 Emission Trading Directive faced significant implementation challenges, particularly in the early stages of its implementation.
- In the **Nature and Biodiversity** area many legal challenges have been brought against Member States relating to the incomplete transposition of the Birds or Habitats Directives, slow or incomplete identification and designation of sites for inclusion in the Natura 2000 network, inappropriate consideration of the economic issues when selecting sites, and inadequate management of habitats and species within Natura sites, especially in the wider environment. Several Member States have subsequently increased the number of Natura 2000 sites. However, the establishment of sites in the marine environment remains significantly below requirements.
- In the **Environment and Health** area several important pieces of legislation faced serious implementation problems. For example, the deadline for transposition of the Water Framework Directive in the EU 15 was poorly met, and there may be serious delays in the adoption of River Basin Management Plans in several Member States. With respect to air, the IPPC Directive faced implementation problems. The Commission has also taken enforcement action against 19 Member States for failure to bring air quality within the limits specified in EU air quality legislation. Implementation of the REACH Regulation is generally considered to be challenging.
- With over 20% of all EU environmental infringement cases relating to waste legislation, implementation is particularly problematic in the **Natural Resources and Waste** area. Waste legislation is still being poorly implemented and enforced in many Member States, particularly the Waste Framework Directive, the Landfill Directive and the Waste Shipment Regulation. As a result of *inter alia* inadequate waste treatment infrastructure in Member States and the lack of separate waste collections, reuse, recycling and recovery targets for waste streams such as WEEE, ELVs or packaging are being missed. There is also a high number of cases of illegal shipments of waste, mainly electronic waste and end-of-life vehicles, due *inter alia* to a lack of adequate controls and inspections.

Level of funding in support of EU environmental policy objectives

Adequate financial resources are an important element of effective implementation and in turn affect the achievement of 6EAP objectives. Despite a number of references related to funding of environmental measures, the 6EAP did not place much emphasis on the issue. Although Member States are obliged to provide the funds necessary to implement EU environmental legislation, EU funding instruments such as LIFE+, the Cohesion Funds, and the Research Framework Programmes have also provided financial support, thereby contributing to the achievement of 6EAP objectives.

However, insufficient funding also acted as a critical barrier to the achievement of 6EAP objectives in some of the Programme's environmental priority areas. This applies, in particular, to **Nature and Biodiversity**. EU financial resources for effective biodiversity protection are thought to be far below requirements. With respect to agriculture, the financial resources

provided through the funds for rural development are also insufficient. In the **Environment and Health** area, effective implementation of water legislation and REACH has suffered from insufficient funding along with several other measures. Similarly, insufficient funding for investment in waste treatment infrastructure and inspection of waste shipments has negatively effected the achievement of 6EAP objectives for **Natural Resources and Waste**.

Public opinion

Overall the impact of public opinion on the achievement of the objectives of the 6EAP appears to have been limited. However, in the area of **climate change** positive public opinion helped stimulate action beyond what was envisaged in the 6EAP. In contrast, inadequate financing of measures to protect **biodiversity** and a lack of political support for decisive action in this area partly reflects a low appreciation of the value of biodiversity and the socio-economic benefits that can arise from protection of habitats and species, as well as poor understanding of the resource requirements of effective conservation management, among the broader public.

Interaction with other EU policy priorities

EU strategies and priorities other than the 6EAP have affected the achievement of certain 6EAP objectives in several priority areas. For instance, the adoption of the EU's 20-20-20 climate and energy targets have been a key driving force behind developments in the climate change area, and are also influencing other policy areas and issues, such as energy and transport policy and forest protection.

Overarching strategies, in particular the Lisbon Strategy and the EU SDS, have also affected policy in certain areas. The Lisbon Strategy for instance acted both as a driver and as a barrier to the achievement of 6EAP climate change objectives. On the one hand, the Lisbon Strategy linked climate change and economic issues, e.g. by promoting low carbon technologies, thus providing a favourable context for the development of climate related targets and legislation. On the other hand, it raised concerns about the potential negative impacts on economic competitiveness of certain pieces of legislation. Corresponding modifications of, for example, the EU ETS reduced its environmental effectiveness.

The adoption of the EU SDS in June 2001 and its subsequent revision in 2006 had, among other things, a positive impact on the integration of environmental considerations in external policies and other sectoral policies such as agriculture, fisheries, and transport as well as in specific areas of environmental policy, such a biodiversity where the adoption by EU leaders of the target to halt biodiversity decline by 2010 was a major driving force (despite the failure to achieve the target).

Pressure from international commitments

International commitments have been important drivers helping to achieve certain 6EAP objectives. In particular, the joint emission reduction commitment of the EU-15 under the Kyoto Protocol was a critical driver behind the development and implementation of EU climate policies. In relation to biodiversity, the 2006 EU Biodiversity Action Plan was adopted as a follow-up to the 1998 Biodiversity Strategy which had been introduced to *inter alia* take forward the EU's international commitments under the Convention on Biological Diversity. International commitments have also helped push forward action in, for example, protection of the marine environment and fisheries as well as forestry. Various international events and commitments,

such as the world summits on sustainable development, the adoption of the Millennium Development Goals and of the Paris Declaration on Aid Effectiveness have contributed to the integration of the environment into the EU's development cooperation activities.

5.4 Added value of the 6EAP in the thematic areas

The 6EAP was helpful in mapping out the EU's commitments in different areas of environmental policy, thus providing a useful stock-taking exercise of existing commitments as well as planned actions. This consolidation process helped to reaffirm and reinforce existing commitments, allowed for the identification of overlaps and potential gaps in the coverage of EU policy, and enabled a comparison within and across the different thematic areas.

It is difficult to accurately establish the extent to which an overarching framework like the 6EAP has influenced specific policy developments. Nonetheless, the 6EAP provided added value in certain instances. The assessment in this report indicates that the 6EAP has contributed to the policy debates and developments in the Nature and Biodiversity, Environment and Health, and Natural Resources and Waste priority areas in particular through the development of the Thematic Strategies. Its impact was much more limited in the area of Climate Change. Even in the three priority areas on which the 6EAP had significant effects, the types of impacts frequently varied among the different areas. More specific key effects of the 6EAP in the thematic priority areas and the international area are set out below.

Climate Change

The EU has successfully adopted a variety of measures and to some degree mainstreamed the issue of climate change in other policies over the last few years. However, the assessment in this report shows that the 6EAP only contributed marginally to these developments. Other drivers were much more forceful than the 6EAP, in particular the European Climate Change Programme, the desire to exert leadership in international climate negotiations, the EU's international commitments under the Kyoto Protocol and, later, concerns related to energy security, new scientific findings and public opinion. Especially since 2007, the dynamics of climate change policy have changed in a way that could not have been foreseen in 2002. This led to an agreement on the ambitious '20-20-20' by 2020 targets by the Spring European Council in March 2007 and the adoption of the Climate and Renewable Energy Package in 2009. As a result, some targets set out in the 6EAP were subsequently surpassed by more ambitious measures. Nevertheless, the 6EAP helped to reflect the emerging political status of climate policy in Europe. Furthermore, although the 6EAP did not introduce any notable new objectives and priority actions in this area, it set out and reconfirmed a path for action and strengthened it through broader institutional support.

Nature and Biodiversity

The Nature and Biodiversity thematic area brought together a number of fairly discrete sub-areas under one umbrella, which in itself was a rather novel approach and helped provide a signal of overall political intention and ambition in this area. An added value of the 6EAP in this area was considered by stakeholders to be its role in placing nature and biodiversity issues on the same level as other environmental issues, in particular climate change. The inclusion of the 2010 biodiversity target in the proposal for a 6EAP was an important factor influencing

subsequent developments in this area, as seen by the reference to the 6EAP in the 2001 Gothenburg European Council conclusions in which EU leaders endorsed the 2010 target.

The value of the 6EAP can also be seen in some of the processes it instigated, in particular the development of the soil and marine Thematic Strategies. In the case of soil, the 6EAP helped position soil on the EU policy agenda, thus raising the profile of an issue which had previously not been considered in an integrated manner at EU level and helped create a strong community of soil experts across Europe better able to debate and address emerging issues such as the role of soils in the delivery of climate change objectives. The proposal for a soil framework Directive and the Marine Strategy Framework Directive were a direct result of the processes set in place by the 6EAP and the analytical and consultation processes to develop the Thematic Strategies. It is unlikely that similar measures would have been introduced without the Thematic Strategy process. Both Strategies extended the reach of EU environmental policy into areas in which the EU had previously been much less active and established communities of experts across Europe. Stakeholders also perceived the 6EAP to have been helpful in promoting coordination and initiating new policy developments in forestry, which is an area of limited Community competence.

The 6EAP can be seen to provide a useful statement of Community objectives in the agriculture and fisheries sectors which can be used to justify certain actions and ensure that attention continues to be paid to the environment as the CAP and CFP evolve and are subject to reform. Nonetheless the 6EAP did not play a major role in influencing the integration of environmental considerations in the agriculture and fisheries sectors, which have mostly been influenced by a number of other internal and external factors, including the strength of environmental movements in Member States, integration requirements in the Treaty, and international commitments.

Environment and Health

A number of developments in this area had their own drivers and institutional points of debate which were in place prior to the adoption of the 6EAP, e.g. REACH and the Water Framework Directive (WFD), and thus the added value of the 6EAP in these instances was virtually non-existent. Although one could argue that many of the developments in this area would have happened regardless of the 6EAP given the pre-existing processes they were part of, this does not make their inclusion in the 6EAP irrelevant. The 6EAP brought together disparate issues under an overarching objective of improving quality of life and reducing the harmful effects of pollution, thus providing a useful stock taking exercise of existing commitments and planned actions in this area and a useful point of reference for subsequent developments.

Moreover, there are instances where the 6EAP played an influential role and helped push forward action, which may not have happened at all or may have taken longer without the impetus of the 6EAP. In particular, the 6EAP requirement to adopt Thematic Strategies in this area helped move forward action which otherwise may not have taken place at all. Measures similar to the Urban Environment Thematic Strategy would probably not have been adopted in the absence of the 6EAP. Although the outcome of the Urban Thematic Strategy is largely viewed as disappointing, cities and their networks involved in the process appreciated the opportunity of being able to engage with the Commission and some stakeholders suggested that cities have used the Thematic Strategy to justify actions to improve their urban

environment. Thus the Thematic Strategy has provided at least some sort of strategic direction for EU and national action on the urban environment. In the case of pesticides, although some developments may have taken place without the 6EAP, given the growing recognition of the need to revise EU pesticides legislation and various studies conducted prior to the 6EAP, it is unlikely that the same standard and strategic approach to the issue as set out in the Pesticides Thematic Strategy and accompanying legislation would have been adopted were it not for the 6EAP. With respect to air quality, the Commission had created the CAFE Programme prior to the adoption of the 6EAP. CAFE can be regarded as a predecessor of the Thematic Strategy approach and would probably have led to similar results as the Air Thematic Strategy. However, the fact that the Air Thematic Strategy was a key element of the 6EAP helped to keep it on the agenda in the face of strong political opposition.

Natural Resources and Waste

The 6EAP created a close link between waste policy and resource policy, highlighting the resource potentials and qualities of waste by promoting waste prevention, reuse and recycling/recovery. The 6EAP provided the basis of the Thematic Strategies on resources and on waste, which, in turn, increased the transparency of EU policy-making in these areas and offered insights into the position of the Commission on various waste- and resource-related issues.

In the field of waste management, the 6EAP principally builds on and perpetuates policy choices, which had been made prior to its adoption – e.g. prioritising waste prevention and recycling over the disposal of waste, and reducing hazardous waste. The clear objectives of the 6EAP served to reinforce these choices and helped to defend them against competing approaches, in particular those based on a significantly stronger reliance on the market. The Thematic Strategy on the prevention and recycling of waste contributed, in particular, to the adoption of the revised Waste Framework Directive.

Faced with limited political support, methodological difficulties, and the absence of concrete objectives, the Thematic Strategy on Resource Use did not succeed in shaping European resource policy. However, the Strategy inspired further research and led to the creation of new institutions and forums, but failed to produce the targets for resource use as originally envisaged.

International

Despite a separate article dedicated to objectives and priority actions on international issues, the 6EAP has not been a major driver or vehicle for EU action in the international area. Objectives and policy priorities relating to the international dimension were to a large extent integrated in the framework of the EU's environmental policy before the adoption of the 6EAP and a number of initiatives were already underway to integrate environmental considerations in the EU's external policies. Integration requirements in the Treaty, commitments towards the external dimension in the renewed EU SDS, developments in the international agenda and the EU's desire to shape its identity as a global 'green leader' have been the main factors driving forward action in relation to the EU's development and trade policies and have played a role in the EU's approach towards international environmental governance. There are however some examples where the 6EAP appears to have played a role in the international area, for example in the area of investment within the EU, the 6EAP is viewed as a cornerstone of the EIB's

environmental lending practices. The external consequences of internal policies have an effect on the achievement of the international objectives of the 6EAP. While one could argue that setting out the EU's international commitments alongside its wider environmental objectives could help reduce the possibilities for incoherence between internal and external actions, this does not seem to have been the case given the seemingly limited awareness of the 6EAP among the majority of actors involved in this context. Where the 6EAP may have played a role has been in reiterating certain commitments of the EU, in particular the requirement to integrate environmental considerations in all the EU's external relations, thus acting as a further justifying factor for action in this regard.

5.5 Added value of the 6EAP in the context of the SDS and Lisbon Strategy

The 6EAP provided critical substantive input for the formulation of the environmental dimension of the 2001 EU Sustainable Development Strategy (EU-SDS) and the objectives of the renewed SDS continue to be closely aligned to the objectives of the 6EAP. The 6EAP complements the EU-SDS in several ways. While there is a strong overlap between the environmental objectives and aims of both strategies, the 6EAP is frequently more specific and provides concrete policy-making approaches and tools, such as the Thematic Strategies. Given the overlap between the objectives of the 6EAP and the environmental objectives of the EU-SDS, implementation of the former tends to benefit the latter and vice versa. The added value of the 6EAP in comparison to the EU SDS is that it was more specific and thus provided a much more operational framework for programming European environmental policy discussions. A similar effort would not have been possible with the EU SDS as it lacked a governance approach for identifying and filling in gaps in the overall environmental policy framework. This is, of course, quite logical, as the 6EAP and the EU-SDS represent different documents with different functions in the EU policy-making process. The EU SDS was designed to help with better aligning and integrating strategic environmental objectives and headline indicators with other strategic social and economic objectives and headline indicators. Due to its specific design it was not suitable for fulfilling the same programmatic function for European environmental policy in the way that the 6EAP was.

Another important function of the 6EAP is related to the role it plays together with the EU-SDS with regards to the Lisbon strategy. By strengthening and complementing the EU-SDS the 6EAP at the same time strengthens the environmental pillar of the Lisbon strategy and is a vital means for complementing the jobs and growth agenda with an environmental dimension. Through its tools, its independent agenda and strong formal power (having been adopted as a decision) which allows it to act alone, the 6EAP provides a focused plan of environmental protection which the EU-SDS can benefit from. Both the 6EAP and the EU-SDS however failed to attract a similar degree of political attention as the Lisbon Strategy, both within Member States and the European institutions and some environmental issues have proved more compatible with the dynamics of the Lisbon Strategy than others. Climate change is an example where the identification of the economic benefits of appropriate environmental commitments helped drive forward progress in this thematic area. Increasing recognition of the economic

value of biodiversity and ecosystem services has also helped to raise the political profile of biodiversity issues in recent years.

5.6 Added value of the 6EAP in relation to EU environmental governance

Aspects of EU environmental governance, for example broad stakeholder involvement and an improved knowledge base, form important 6EAP priorities. Besides the direct effects of the 6EAP on the formulation and adoption of relevant EU measures and processes, the assessment also focuses on how policy-makers and stakeholders perceive the role of the 6EAP and its added value. The analysis of these subjective aspects is based on the results of an electronic, three stakeholder workshops an expert interviews.

The assessment shows that the 6EAP provided policy-makers and stakeholders with orientation and a better understanding and sense of direction of EU environmental policy. The Programme also helped to increase the legitimacy of EU environmental policy. In relation to a number of other aspects, the 6EAP affected EU environmental governance, albeit often only to a less significant extent. These areas concern the provision of input for policy-making through participation and science, the range and choice of instruments, priority setting, policy coherence, and providing resilience for, and advancing environmental protection.

Orientation: providing a sense of direction for EU environmental policy

The 6EAP provided stakeholders and policy-makers with the opportunity to achieve a better understanding of EU environmental policy and its future direction. The Programme sent a clear signal that its four environmental priority areas and the policy-making approaches and instruments outlined in the Programme, in particular the Thematic Strategies, would be relevant areas of policy development in the coming years. While the 6EAP fulfilled its basic **orientation function**, its performance suffered from the fact that the Programme is not very transparent and has a complicated structure. Similarly, the 6EAP has not been communicated very well. This applies in particular to communication to actors, who do not have a direct interest in learning about, and predicting the adoption of new EU environmental measures and/ or who operate at national or sub-national levels.

The orientation function of the 6EAP suffers from the fact that the Programme has a complicated structure. For example, it requires a detailed reading of the 6EAP to find out which Thematic Strategies the 6EAP calls for, even though the Strategies are key elements of the Programme. According to some observers, this **lack of transparency** can partly be attributed to the fact that the Programme was adopted through the co-decision procedure which introduced many changes and new provisions to the Programme.

In principle the 6EAP could further enhance orientation if it could be used as a yardstick for the ex-post evaluation of EU environmental policy based on the general aims, specific objectives and priority actions which the 6EAP sets out. However, the complex structure of the 6EAP, its large number of partly overlapping objectives and often vague priority actions significantly reduces its value in this respect.

Legitimacy: increasing the acceptance of EU environmental policy

The 6EAP appears to have made a significant positive contribution to the legitimacy of EU environmental policy in two ways: First, from a legal-procedural point of view the Programme was adopted through the co-decision procedure which involved the democratically elected European Parliament in decision-making. Second, the 6EAP seems to have had a positive effect on the perceived legitimacy of EU environmental policy as a result of several factors, such as its adoption through the co-decision procedure, the continuation of the long tradition of EU environment action programmes, and the perceived relatively strong impact of the 6EAP on the performance and predictability of EU environmental policy.

There appears to be a gap between the perceived and actual impact and predictive capacity of the 6EAP. While the perceived relatively strong impact and high predictive capacity of the 6EAP probably to a large extent reflects social-psychological factors, such as the high visibility of the Thematic Strategies and cognitive dissonance reduction, rather than the actual performance of the 6EAP as a whole, it nevertheless has a positive impact on the legitimacy of the 6EAP and of EU environmental policy more generally.

While it is difficult to identify concrete effects on specific measures, the legitimacy enhancing function of the 6EAP, statements by a number of stakeholders suggest that the fact that the Thematic Strategies were key elements of the 6EAP helped to defend the Strategies in the face of strong political resistance against some of them.

Participation: mobilising input and support for EU environmental policy

The process of formulating the 6EAP through the co-decision procedure enabled direct contributions by Member State officials and the European Parliament and also provided additional or alternative channels of information and influence for external stakeholders and experts. Although the 6EAP strongly emphasises the role of participation and best available scientific input, its contribution to the adoption of relevant legislation in this regard was relatively marginal in comparison to other factors, such as implementation of the Aarhus Convention, the EU SDS and the Better Regulation initiative. The Thematic Strategy approach arguably provided the 6EAP's most important contribution to stakeholder participation and improved scientific input. The inclusive, sub-sectoral perspective of the Thematic Strategies enabled structured consultation and scientific input on wider issues. Openness also benefited from the fact that the Thematic Strategies aimed at identifying suitable measures, targets etc. rather than adopting specific proposals submitted by the European Commission. In the process of developing the Thematic Strategies, participation and scientific input often played an important role, for example contributing to the decision to propose the Marine Strategy Framework and the Soil Framework Directives. In contrast, conflicting opinions among certain stakeholders constrained the development of a more far-reaching Urban Thematic Strategy.

Instruments: translating environmental objectives into outcomes

The 6EAP refers to an extensive range of environmental policy-making approaches and instruments, in particular in Article 3. However, the programme only establishes an implicit, rudimentary hierarchy among them. It is therefore not surprising that the overall **impact of the 6EAP on the choice of approaches/instruments frequently appears to have been limited** to providing a certain reinforcement of support through the inclusion of a particular

approach/instrument in the Programme. Nevertheless, in at least two cases - the Thematic Strategies and, to a more limited extent, integration of environmental requirements into sector policies - the 6EAP had a stronger impact. The added value of the 6EAP in relation to policy integration is discussed in more detail in the section on policy coherence below.

The 6EAP codified the **Thematic Strategy** approach and led to its broader application. This development constituted an important impact of the 6EAP on the choice of approaches and instruments. In turn the Thematic Strategies themselves exerted a considerable influence on the choice of instruments in the areas, which they covered. They created and/or reinforced European networks of policy-makers, stakeholders and experts and frequently led to the adoption of legislation, in particular relatively broad and flexible framework directives, which delegated important responsibilities to the networks while at the same time extending EU environmental policy to sensitive areas, such as the marine environment, which are characterised by strategic sensibilities and/or subsidiarity concerns on the part of many Member States. In other cases, the Thematic Strategies supported the adoption of legislation, which revised pre-existing measures and filled certain gaps.

Priority setting: making EU environmental policy more effective

The four **environmental priority areas** of the 6EAP are widely seen as appropriate and continue to be of relevance today. However, although the 6EAP does not introduce a hierarchy between the thematic areas, the individual areas have enjoyed different levels of political support since the adoption of the 6EAP. This is partly due to different political opportunity structures, which resulted from changes in internal and external drivers of action. In particular, climate change has had a much stronger overall impact on the EU environmental policy agenda than the remaining three priority areas. While the thematic areas provided a useful overall frame for EU environmental policy, operational programming occurred through more specific processes which also determined the balance between the four thematic areas in actual policy-making.

The seven **Thematic Strategies** form a second, more specific, *de facto* layer of priority setting within three thematic areas, the only exception being climate change. However, climate change relied on the European Climate Change Programme (ECCP), which was similar to the Thematic Strategy process. The 6EAP required the Thematic Strategies to be adopted within the first three years of the duration of the Programme. Although the 6EAP deadline for presenting the Thematic Strategies was missed, the existence of a deadline helped ensure that the development of the Thematic Strategies formed a key component of EU environmental policy-making in the years immediately following the adoption of the 6EAP. Despite the overall positive impact of the Thematic Strategies on priority setting, not all the Thematic Strategies were equally effective. In particular the Strategies on the urban environment and natural resources failed to meet expectations.

The contribution of the 6EAP **priority actions** to priority setting is difficult to assess due to the fact that their specificity varies widely, ranging from general statements, to the adoption or revision of particular pieces of legislation, which in some cases was almost completed at the time of the adoption of the 6EAP. Many priority actions were either too vague or were heavily conditioned by processes that pre-dated the 6EAP. Overall, the priority actions had little impact on effective priority setting in practice.

Adoption of the 6EAP through the co-decision procedure contributed to the shortcomings of the 6EAP in terms of priority setting by adding many specific provisions to the Programme, thereby threatening to turn it into a 'shopping list'.

Coherence: integrating EU environmental policy

The preparations for the adoption of the 6EAP offered an opportunity to **consider EU environmental policy as a whole** and, based on this, increase policy coherence, in particular within the environmental sector itself. Partly as a result of the adoption of the 6EAP through the co-decision procedure, these debates involved a broad range of actors; they could also build on experience with the previous 5EAP and its evaluation. This provided a useful starting point and umbrella for taking stock of existing and planned EU environmental measures, and identifying gaps, cases of incoherence and overlaps in different policy areas.

Nevertheless, overall the 6EAP's contribution to improving policy coherence was mixed and **differed between different aspects of coherence**. As illustrated below, the Programme probably had the strongest impact on coherence *within* the environmental priority areas of the 6EAP. It also had some positive effects on one aspect of coherence between the environmental and non-environmental sectors, i.e. the integration of environmental requirements in non-environmental policies, such as agriculture and cohesion policy. However, regarding coherence *between* the environmental priority areas of the 6EAP as well as comprehensive policy coherence - which implies mutual coherence of environmental and non-environmental policies - the 6EAP provided little added value.

The Thematic Strategies contributed significantly to coherence **within the priority areas**. Some of the strategies mainly focussed on improving coherence by closing important gaps in the respective priority areas. This applies to the strategies on the marine and urban environments, on soil and on resources, dealing with areas, where the EU had previously not been very active. In contrast, the air, pesticides and waste prevention and recycling strategies focussed more on revising existing measures to improve coherence among these measures and to address smaller, more specific gaps. The overall extent to which these initiatives managed to improve coherence remains to be seen, not least because a number of relevant measures have only recently been adopted. Although the Strategies covered relatively broad areas, their scope was often too narrow to sufficiently increase the overall internal coherence within the four priority areas of the 6EAP in areas such as Environment and Health.

The 6EAP had some positive effects on the **integration of environmental requirements in non-environmental sectors**. Various EU measures e.g. in the energy and agriculture sectors and to a lesser extent in cohesion and transport policy increasingly aim to take environmental, and in particular climate change concerns, into account. The environmental dimension of the 2001 EU Sustainable Development Strategy (EU SDS) was also influenced considerably by the proposed 6EAP.

According to some stakeholders the 6EAP provided support for environmental policy **integration in negotiations within the Commission**, among other things, because the comprehensiveness of the four thematic areas strengthened the case for consideration of environmental aspects in sectoral policies touching on these areas. The 6EAP also served as an important **point of reference** for non-environmental actors and agencies, such as the

European Investment Bank, seeking to integrate environmental requirements into their respective activities.

However, while environmental policy integration in certain sectoral policies appears to have improved at the agenda setting and policy formulation stages, this was often not the case for **implementation** of these policies at Member State level. Moreover, **policy-specific circumstances** which were unrelated to the 6EAP, such as the adoption of the 20-20-20 climate and renewable energy targets, often had a much stronger impact on environmental policy integration than the 6EAP.

Despite certain efforts, the 6EAP did not sufficiently recognise the **links between its four thematic areas** and failed to make a strong contribution to increasing the coherence between the different environmental priority areas. The three Thematic Strategies, which could have contributed to a significant improvement of coherence at this sub-sectoral level - the Soil and Natural Resources Strategies and the Urban Strategy - have so far not resulted in sufficiently concrete measures. For example, the Soil Thematic Strategy calls for initiatives to address interactions with fields such as climate change and river basin management, which, however, are hampered by the fact that the Soil Framework Directive has so far not been adopted. Thus, policy coherence across the thematic areas of the 6EAP remains a challenge. It might also be argued that the 6EAP does not sufficiently address the links between the protection of biodiversity and certain measures to mitigate climate change.

Partly reflecting the 6EAP's limited attention to **comprehensive, cross-sectoral policy integration**, its overall impact on relevant initiatives, such as environmental, economic and social impact assessment of major policy proposals and the EU Environmental Technology Action Plan (ETAP) adopted in 2004, was small. However, the Thematic Strategies to some extent enabled mutual integration of policies. As mentioned above, on the one hand they had some positive effect on environmental policy integration. On the other hand, also reflecting their broad approach to agenda setting and policy formulation, the development of the Thematic Strategies included a broad range of actors and perspectives, including non-environmental ones, thereby leading to better representation of their concerns in the debate.

Although the 6EAP acknowledges the importance of the international dimension of environmental policy, the 6EAP's contribution to improving coherence between the EU's **internal and external policies** remained limited.

Sustaining and advancing environmental protection: providing resilience and increasing the reach of environmental policy-making

Faced with changing political priorities and external developments, the 6EAP made a significant contribution to keeping environmental requirements on the EU agenda, although its impact differed between different priority areas. The 6EAP had a relatively strong impact in the waste sector and in certain areas relating to the nature and biodiversity thematic area. Although the 6EAP provided additional support for the 2°C target, it played a less significant role in climate change policy, but in hindsight was also less necessary given the dynamism of the area. The Thematic Strategies were one important area where the 6EAP helped to keep environmental protection requirements on the EU agenda. Given the strong opposition, which some of the Strategies at times faced from various actors and in inter-service consultations, several stakeholders maintained that it seems likely that the Strategies would not have been adopted -

or would at least not have been adopted in their present form - had they not been enshrined as key elements of the 6EAP.

The 6EAP also made a contribution to advancing EU environmental policy, albeit in different ways and to a different extent in the different priority areas. It had a significant impact in this respect in the biodiversity area. The two Thematic Strategies on soil and the marine environment extended the EU environmental agenda to areas in which the EU had previously not been very active. A basically similar, though due to their relatively modest outcomes weaker argument applies to the Thematic Strategies on natural resources and the urban environment. The remaining thematic strategies on air, pesticides and waste focussed on traditional areas of EU environmental policy. Nevertheless, they too contributed to advancing EU environmental policy, albeit to different degrees, by improving co-ordination and updating existing measures, and by adding a limited number of new requirements.

The 6EAP's effects on sustaining and advancing environmental protection declined significantly in the years following the adoption of the Thematic Strategies. As argued in more detail in the section on the 6EAP timeframe below, the 2007 mid-term review of the 6EAP did not provide a sufficiently strong impetus to reinvigorate the 6EAP.

5.7 Overall approach of the 6EAP

The overall approach of the 6EAP can be assessed in terms of some of the programme's key functions and characteristics, i.e. its character as a strategic framework foe EU environmental policy; its level of ambition; the 10-year timeframe; the co-decision procedure; and its policy-making approaches and instruments.

The 6EAP as a strategic framework

Based on its priority areas and governance principles, the 6EAP offered a useful strategic framework for EU environmental policy which provided a sense of direction among policy-makers and stakeholders and enhanced the legitimacy of EU environmental policy more generally. The development of the seven Thematic Strategies offered clear priorities in terms of follow-up in the first years after the adoption of the 6EAP. However, the fact that the relevance of the 6EAP declined significantly after the Thematic Strategies had been adopted, reduced its utility as a strategic framework. Although the declining relevance of the 6EAP can to a large extent been attributed to external factors, such as a new Commission and European Parliament and the growing political emphasis on climate change, the decline could arguably have been less pronounced, if the 6EAP had provided clear priorities for its large number of priority actions beyond the adoption of the Thematic Strategies and/ or if the Programme had been subjected to a more effective mid-term review which could have established clearer priorities for the period following the adoption of the Strategies. Although the mid-term review identified several areas where additional efforts were required, these were too broad to allow for effective priority setting with respect to the 6EAP's priority actions.

Level of ambition

The varying progress in the different policy areas of the 6EAP can in part be explained by the different levels of ambition across the thematic areas. The identification of an appropriate level of ambition for a comprehensive programme with a 10-year timeframe, such as the 6EAP, is a

challenging task. At the time the 6EAP was adopted, there were mixed views about the level of ambition set out in the Programme. This partly reflected the tension between setting a level of ambition which is aspirational in view of the scale of the environmental challenge and what is achievable in view of political realities. In retrospect, the level of ambition in some areas appears to have been too low, for example, climate change turned out to be a much more dynamic area than originally anticipated and the objectives set out in the 6EAP were subsequently overtaken. In other areas the 6EAP turned out to be overly ambitious. For instance, the 2010 biodiversity target was unachievable, particularly given insufficient political support and action by Member States. 6EAP objectives on natural resources were also too ambitious insofar as they did not take into account the knowledge gaps and methodological challenges in this policy area. In certain areas, the level of ambition of the 6EAP was regarded as being too high and was subsequently revised, e.g. in relation to air quality. Some gaps between objectives and outcomes have arisen more from the protracted implementation of several EU measures, such as REACH. Political impediments have also played a role in relation to some goals, for instance concerns relating to subsidiarity have limited action in relation to forestry and the urban environment.

Timeframe of the 6EAP

The 10-year timeframe of the 6EAP had both advantages and disadvantages and was more appropriate for some priority areas of the 6EAP than for others. Similarly, it was also more appropriate for some issue areas within the priority areas than for others. In hindsight, the 10-year timeframe was perhaps least appropriate for the area of climate change. As a result of the fast evolution in this area developments quickly overtook the respective 6EAP objectives. A shorter timeframe - or a more effective mid-term review - would have enabled the 6EAP to keep pace with the dynamic progress of climate change policy although this was not predictable at the time of the adoption of the 6EAP. Within the Natural Resources and Waste priority area the 10-year timeframe was broadly appropriate with respect to the Waste Thematic Strategy, which was able to build on the extensive body of EU waste legislation. However, it was not sufficient for the Resources Thematic Strategy, which constituted a development in a relatively new direction and which was therefore faced with methodological difficulties as well as a lack of sufficient political support. Consequently, the Strategy failed to meet expectations.

For a comprehensive programme, such as the 6EAP, it seems to a certain extent unavoidable that the appropriateness of any given timeframe will differ according to issue area. Whether fully intentional or not, selecting a timeframe that broadly corresponds to the key instrument chosen for the implementation of the programme (in the case of the 6EAP the Thematic Strategies) rather than the specific dynamics and requirements of particular areas appears to have certain advantages. However, for the Programme as a whole, the emphasis on the Thematic Strategies also implied that once they had been adopted, much of the momentum behind the Programme was lost. This tendency was reinforced by changes in the wider context of the Programme as well as by changes in the Commission, the Parliament and at Member State level, which implied that many actors, who had been involved in the formulation of the 6EAP, were no longer involved in its implementation. A relatively weak mid-term review process of the 6EAP failed to provide a new impetus for the Programme. Given the dynamic developments in the field of climate change but also in other areas, a substantial review of the 6EAP would have allowed it to adapt to changed circumstances and to provide new impetus for the Programme. This

opportunity was largely missed for various reasons: Substantial changes in the 6EAP itself would have required passing through the legislative procedure, which was – according the the Impact Assessment – considered to be lengthy and was expected to lead to fruitless debates.

The co-decision procedure

The 6EAP was the first Environment Action Programme to be adopted through the **co-decision procedure**. The process of developing the 6EAP helped **stimulate interest** in the other European institutions and among stakeholders, which afforded them more of a say in the priority setting process, with the Parliament for example insisting on the inclusion of a Thematic Strategy on the Urban Environment. It may also have given the Parliament, Council and stakeholders the time to adopt a more strategic, coherent view on certain policy areas, which could subsequently be applied in discussions on specific pieces of legislation.

The co-decision procedure provided the 6EAP with a higher degree of political importance, inter-institutional authority and democratic legitimacy compared to its predecessors, which tended to strengthen the **Programme's resilience in the face of political opposition**. When the adoption of the Air and Marine Thematic Strategies faced strong opposition by some actors and in inter-service consultation within the Commission, the requirement to adopt the Strategies set out in a formally adopted, intra-institutional document provided DG Environment with a strong mandate to defend the strategies.

In some cases the amendments to the Commission proposal introduced during the co-decision procedure **enhanced the 6EAP's characteristics and functions** by, for example, adding strategically important issues. For instance, at Parliament's request the final 6EAP included provisions on the identification and phasing-out of environmentally harmful subsidies and on the introduction of environmental taxes. At the same time, the large number of additional provisions which were incorporated in the Programme as a result of negotiations during the co-decision process can be seen as diluting the focus and clarity of the 6EAP. In addition, the process to agree the 6EAP was quite costly in terms of the time and resources absorbed.

Policy-making approaches and instruments

The policy-making approaches and instruments proposed in the 6EAP, in particular the characteristic Thematic Strategy approach, appear to be broadly appropriate in view of the Programme's main objectives. Nonetheless, goal attainment would probably have benefited from a stronger emphasis on implementation and enforcement, comprehensive cross-sectoral policy coherence, and market-based and economic instruments.

The 6EAP contains only a few concrete environmental targets. At the time of the adoption of the Programme the **Thematic Strategies** were widely expected to propose additional targets and timetables. However, the Thematic Strategies did not live up to these expectations. Instead their adoption was often accompanied by concrete legislative proposals, in particular broad framework directives – despite the fact that the Thematic Strategies had originally been expected to merely identify and define the need for legislative and other measures. The formulation of legislation in the framework of the Thematic Strategies can in a technical sense be regarded as a useful 'second-best solution', which created opportunities to address and gradually remove some of the underlying reasons for the failure to produce targets and timetables, i.e. the optimal solution. More specifically, the networks of policy-makers, experts

and stakeholders, which were established on the basis of the Thematic Strategies and further institutionalised through associated framework directives created opportunities to gradually strengthen the knowledge base and build the political will for the adoption of effective targets, timetables and indicators, and their subsequent implementation. However, several stakeholders also pointed out that these advantages of the Thematic Strategy approach in a context which was often characterised by, among other things, political constraints and knowledge gaps, also came at significant costs because the development and implementation of the Strategies and associated legislation absorbed considerable resources in terms of time and manpower.

While, at least in hindsight, the Thematic Strategy approach appears to have been broadly adequate in view of constraints at the time, the analysis of the drivers and barriers to the achievement of 6EAP objectives suggests that a stronger reliance on certain other approaches and instruments set out in the 6EAP would probably have improved goal attainment further. In particular, implementation problems at Member State and/or subnational level were an important factor undermining the achievement of 6EAP objectives. This suggests that the 6EAP's focus on **implementation and enforcement** should probably have been stronger.

The 6EAP strongly focuses on complex and far-reaching persistent environmental problems, such as climate change and the loss of biodiversity. Against the background of the potentially high economic costs associated with effective measures to address these problems, a clearer emphasis on **comprehensive, cross-sectoral policy coherence** could have increased cost-effectiveness and synergies between the economic and environmental sectors as well as the acceptability of environmental measures to key stakeholders and the general public. Similarly, given the negative effects of environmentally harmful subsidies; the potential of environmental tax reform to achieve largely cost-neutral positive impacts on the environment; and the potential cost-effectiveness of emission trading and other market-based instruments, better utilisation of **market-based and economic instruments** appears to be necessary to achieve the transformation to a low-carbon economy and to effectively address the persistent environmental problems highlighted by the 6EAP.

5.8 Conclusions

The main focus of this assessment is on the added value of the 6EAP and its role in **leveraging the adoption of EU environmental policies** for the achievement of the 6EAP's environmental objectives. The assessment shows that the 6EAP's leverage capacity was moderate overall and declined significantly during the second half of the duration of the 10-year Programme. Moreover, the contribution which the most important 'leveraged' policies - the Thematic Strategies and associated measures - are likely to make to achieving the main 6EAP environmental objectives before the 6EAP expires in July 2012 also appears to be moderate, while the extent of later contributions often remains somewhat unclear.

More specifically, the 6EAP had a strong impact on the adoption of a relatively small number of key priority actions, mainly the Thematic Strategies and associated measures. Despite at times strong political resistance to some of the Thematic Strategies, all of them were eventually adopted. However, this strong performance must be weighed against the fact that for the large

majority of other, less prominent but more numerous 6EAP priority actions the leverage capacity of the 6EAP appears to have been small or not identifiable.

The Thematic Strategies and associated measures can be expected to make only moderate contributions to the achievement of 6EAP environmental objectives, at least until the end of the Programme in 2012. One reason for this is that some of the Thematic Strategies have so far only led to the adoption of non-binding measures which have few direct effects on environmental quality, such as additional research. Although the majority of the Thematic Strategies led to the adoption of legislation, effects on 6EAP environmental objectives in these cases often remain somewhat unclear. This is due to the procedural character of the broad and highly flexible framework directives which were developed in the context of most of these Thematic Strategies. While these measures have extended EU environmental policy to areas in which the EU had previously been relatively inactive and provide a platform for, *inter alia*, increasing policy coherence and the adoption of additional measures, concrete environmental effects will depend on the lengthy and relatively open process of implementing these directives beyond the end of the 6EAP.

The analysis of the drivers and barriers to the achievement of 6EAP objectives suggests that the moderate performance of the 6EAP with respect to leveraging of EU environmental policies needs to be seen in the context of a highly challenging environment: the persistent environmental problems addressed by the 6EAP call for far reaching responses which pose major challenges both in terms of technological and economic development and with respect to the creation of a sufficient knowledge base; globalisation, the financial and economic crisis, and the rise of new economic players on the world stage have pushed issues of economic growth and competitiveness to the top of the political agenda in Europe, while the capacities of the EU for internal and external interventions remain constrained by, among other things, the division of competencies with Member States and subsidiarity concerns. Given these circumstances, one should be realistic as to what the 6EAP could achieve. In particular, the moderate leveraging performance of the 6EAP appears in a more positive light against this background. Nevertheless, it might still have been possible to increase the leveraging capacity of the 6EAP over its actual performance, in particular if the Programme had provided a clear hierarchy of priorities beyond the Thematic Strategies for the second half of its duration by focussing more strongly on, for example, measures to improve implementation, comprehensive, cross-sectoral policy coherence, and the use of economic and market-based instruments.

Compared to the variable and overall moderate added value of the 6EAP in terms of leveraging the adoption of EU environmental policies, the analysis yields a more positive assessment with respect to **EU environmental governance**. In particular, the 6EAP created added value for EU environmental governance in two respects: it provided a strategic framework, which offered orientation and a sense of direction to policy-makers and stakeholders, and it helped to increase the legitimacy of EU environmental policy. In respect to a range of other factors - input and support through participation, policy instruments and approaches, priority setting, coherence, and sustaining and advancing environmental protection - the impact of the 6EAP was significantly smaller. As with the capacity to leverage the adoption of environmental measures, impacts of the 6EAP were mainly delivered through the Thematic Strategies in these respects.

This assessment leads to the overall conclusion that the added value of the 6EAP was variable and, overall, moderate in terms of objective factors, such as leverage capacity and impacts on priority setting and coherence. However, if subjective factors, i.e. the perceptions of relevant actors, are also taken into account in the assessment, then the role of the 6EAP appears in a significantly more positive light, because of its beneficial effects in terms both of providing orientation to policy-makers and stakeholders and of enhancing the legitimacy of EU environmental policy. Even if, as the moderate impact of the 6EAP with respect to objective factors suggests, the perceptions of the performance and predictive capacity of the 6EAP are more positive than reality, such perceptions play an important role in generating support for, and engagement with, EU environmental policy.

ANNEXES

ANNEX A: AREA SPECIFIC ASSESSMENT OF THE ACHIEVEMENTS OF THE 6EAP

ANNEX B: BIBLIOGRAPHY

ANNEX C: INVENTORY OF MEASURES

ANNEX D: LIST OF PRIORITY MEASURES

ANNEX E: RESULTS OF ELECTRONIC SURVEY

ANNEX F: DETAILED SURVEY RESULTS

ANNEX G: SUMMARIES FROM THE THREE WORKSHOPS

ANNEX H: COMPARATIVE ANALYSIS OF THE 6EAP AND THE EU-SDS