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Environmental policy integration in Europe

State of play and an evaluation framework

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1 Executive summary

The concept

Article 6 of the European Community Treaty states that 'environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities (...) in particular with a view to promoting sustainable development'.

Environmental policy integration (EPI) involves a continual process to ensure environmental issues are reflected in all policymaking. This generally demands changes in political, organisational and procedural activities, so that environmental issues are taken on board as early as possible and continuing during implementation. The product of EPI should be an overall improvement in policy and its implementation, in line with sustainable development needs.

National developments

Governments have taken great strides in terms of developing and agreeing high-level political commitments to environmental policy integration and sustainable development (SD), but much more can be done. Securing additional and lasting commitment is likely to require action on several fronts, including acceptance of clear objectives and targets in support of EPI, which can be used to build political commitment and convey a clear message to the public and to administrations.

Most of the 25 EU Member States have established national sustainable development strategies (NSDSs). The weaknesses of current NSDSs relate to their frequently 'soft' nature, and lack of vision and pathways for delivering on the objectives. There is little evidence of NSDSs being implemented and considerable opportunities exist for greater cross-country learning.

A few countries, most notably Norway and Sweden, also make extensive use of sector/environment integration strategies. Strategies for integrating environment in the transport sector and the agriculture/rural development sector are increasingly common.

Institutional coordination to support environmental integration could be improved. Since the early 1990s, many countries have developed committees that bring together political and/or administrative actors to address environmental integration and/or SD. Germany's Committee of State Secretaries for Sustainable Development is one such example. Other countries, such as Austria and Belgium, have established inter-ministerial commissions to support the implementation of sustainable development commitments. A large number of countries now have environment or SD advisory councils, with councils in Finland, Lithuania and Latvia also serving inter-ministerial coordination functions.

Changes have been introduced within sectoral ministries, with environment units now common. Environment ministries or parts thereof have also been merged with other departments, although the contribution of such mergers to EPI is not entirely evident. Overall, the emerging pattern is one of institutional adjustments to support EPI, even if progress is patchy and the effectiveness of different approaches unclear.

A few countries have started to exploit opportunities to link regular strategic planning, budgeting and auditing, with the delivery of overarching SD or EPI objectives. In the area of budgeting, good practice cases are emerging in Norwegian, Dutch and UK policy. The UK and Portugal have also instituted environmental auditing of (some) sector policies. Little progress has been made in developing green accounts although 'greening government' initiatives have been introduced (such as in Norway, Sweden and the UK). Overall this is a promising area for EPI.

How to improve coordination between different levels of governance for EPI is an area warranting further attention. Such 'vertical coordination' in relation to national SD strategies is visible in some countries.

Inadequate capacity and resources are believed to be dedicated to EPI, particularly

within sub-national institutions. Capacity building for EPI can be observed in some environment ministries. There are examples of targeted capacity building in support of environmental integration, for example, in the Netherlands and Belgium.

Several forms of 'regulatory' impact assessment are now used in as many as 15 countries. Ex ante project and strategic environmental assessment is becoming commonplace, and is supporting a more coordinated approach to policy-making. Public consultation and access to environmental data has also developed considerably, responding to EU and international commitments.

A growing range of policy instruments is employed at country level. Apart from environmental standards, funding programmes, spatial planning and research programmes, there is also a gradual move towards environmental taxes, environmental tax reform (ETR) and other market-based approaches that seek to 'get the prices right'. Progress with the internalisation of external costs has been variable across the EU.

Reporting on progress on SD is usually done using yearly or periodic reports, on the basis of indicators covering all three dimensions of sustainable development, as well as individual sectors or topics. Belgium has established procedures for independent evaluations. More general reporting on progress in relation to environmental integration is taken forward by the EEA, UNECE and the OECD, as well as by individual countries, such as in Slovakia.

Sectoral integration indicators are being developed and used in relation to transport, energy, agriculture and fisheries. Work on decoupling indicators is also being prioritised, for example by the OECD and the Danish government. Ireland and Italy are among the few countries considering aggregated indicators such as Green GDP or Ecological Footprint.

EU-level developments

Environmental policy integration is a feature of the basic EC Treaty, the sixth environmental action programme, the Cardiff integration process and the EU sustainable development strategy (SDS). It is promoted, indirectly, in the White Paper on European governance. Environmental objectives are, in principle, also to be fully embedded in the Lisbon process, the 10-year strategy to make the EU the world's most dynamic and competitive economy.

The roles and responsibilities for carrying forward the Cardiff process and EU SDS are unclear, and leadership is not consistent. The European Parliament has not engaged in these processes and, in contrast to national developments, an independent environment/SD advisory council has not been established at the EU level.

The EU institutions are gradually breaking down some administrative walls, for example, by establishing environmental units in the sector directorates-general (DGs) and reorienting some departments to address more integrated issues (for example, rural development and maritime affairs). The development of the environmental thematic strategies supports new cross-departmental and multi-stakeholder engagement. Increasing the institutional capacity to support EPI, in terms of human and financial resources, could offer additional rewards.

The EU's move towards multiannual and annual planning offers significant potential to promote environmental integration throughout the Commission and Council. Multiannual budgetary planning cycles and auditing systems similarly offer great scope for EPI.

The institutions have developed more or less effective procedures to support the general coherence of decision-making. In addition, the Commission has introduced an ex ante impact assessment system for major Commission documents. This system should allow the environmental dimension of decisions to be taken into consideration, alongside social and economic issues, as well as enhancing consultation. Existing weaknesses in the system should be addressed in what is a 'learning by doing' process.

There is potential to make greater use of the available market-based policy instruments, in addition to conventional 'command and control'-type measures, to ensure EPI is reflected when Member States implement policies. Opportunities exist in the area of damaging subsidies and the introduction of

positive financial incentives, other market-based instruments such as taxes and charges and market creation (for example, tradeable emissions), and supporting spatial planning.

The annual review of the Lisbon strategy (the 'spring report') has been identified as the mechanism for reviewing the SDS. The spring reports have, however, tended to treat environmental issues as secondary to the core issues of growth and competitiveness. The recent mid-term review of the Lisbon strategy has also sidelined environmental issues. The ongoing review of the SDS (to be concluded in 2005) is an opportunity to redress this imbalance.

Commitments to monitoring and review set out in the Cardiff integration strategies have been variable, and have not always been met. An annual Cardiff stocktaking exercise has been started, to feed into the annual environmental policy review and the spring reports. The Commission's stated intention is to develop, during 2005, a common framework and guidelines, identifying possible approaches to monitoring and review of the strategies, and updating the contents of strategies.

Key challenges and opportunities

Greater coherence and coordination within governments and between different levels of government will support the (cost-) effective delivery of increasingly interdependent environmental and sustainable development (SD) objectives. Clear internal mission statements, new structures and better coordination mechanisms within organisations, greater resources and capacity, and improved information, decision-support and public participation mechanisms can help to overcome existing 'compartmentalisation'. An overarching independent authority to push forward integration can also be valuable. The need for integration to be reflected across multiple levels of governance is also increasingly important.

Organisations can promote EPI by changing their own culture and practices, and by developing suitable policies or approaches that support integration when policies are implemented. In trying to identify opportunities to support EPI, it is valuable to consider how competencies are distributed between institutions and governance levels, as well as ways of harnessing the policy instruments most typically employed in different sectors.

The success of environmental policy integration will be affected by the very nature of the sector and the extent to which environmental impacts are inherent to the sector's activities. The perceptions of society at large and specific stakeholders will also be important, as will their ability to influence policy-making and implementation. Overall, efforts to support EPI need to be closely tailored to the particular sector and organisations involved.

A proposed framework for evaluating EPI

Building on previous work by the EEA and the OECD, and reflecting the national and EU practice summarised here, a framework is proposed for evaluating progress with EPI.

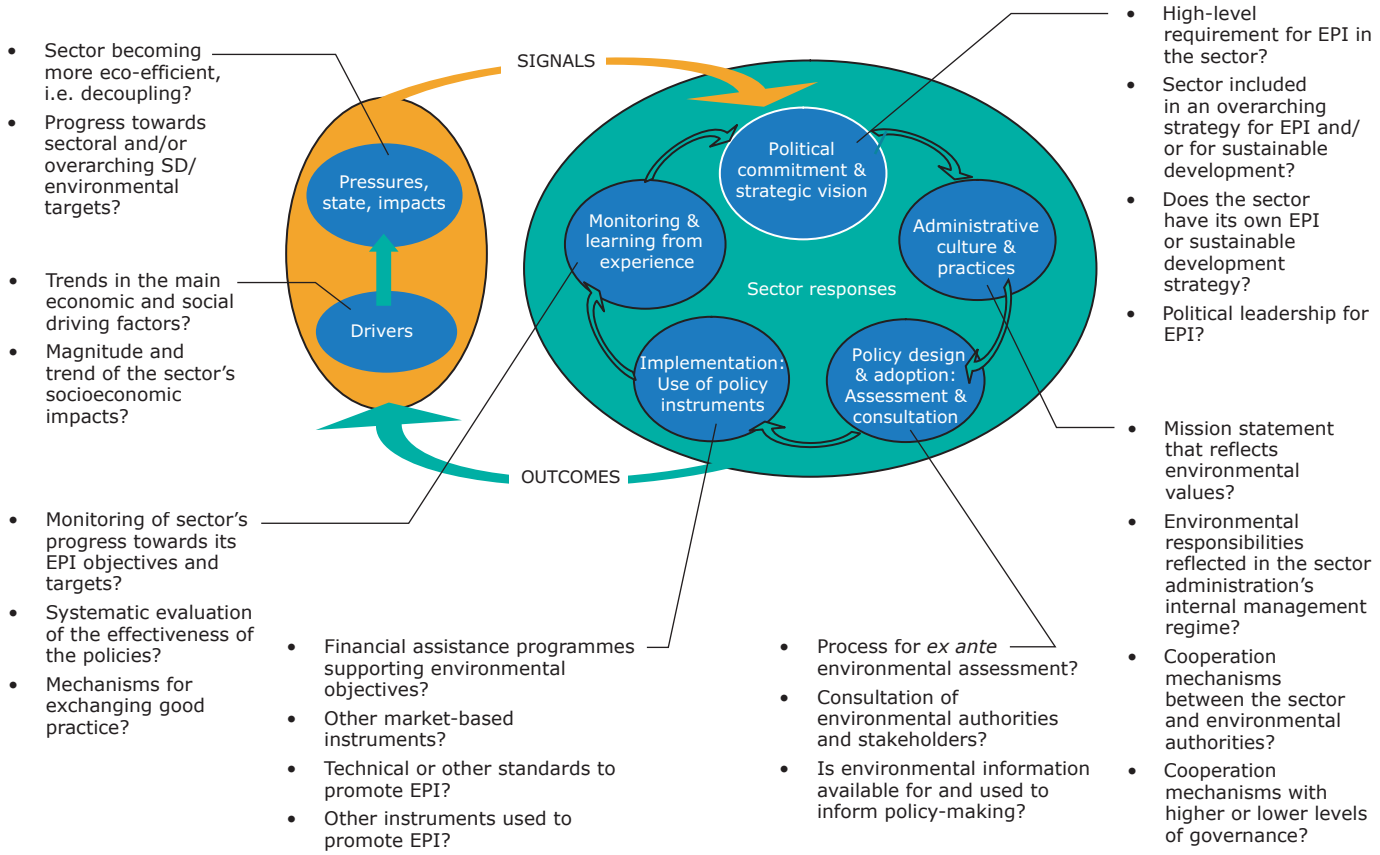
The framework focuses on the following six main areas: political commitment, vision and leadership; administrative culture and practices; assessments and information for decision-making; policy instruments; monitoring progress in integration; and the environmental context of EPI. The evaluation of progress in these six areas is supported by cross-sectoral and sectoral criteria, presented in the form of a 'checklist' (see Figure 1).

The framework serves two purposes: firstly, helping to understand how integration can be promoted; secondly, providing a single framework for undertaking evaluations of EPI in a consistent manner. The framework can thus support the work of the EEA and other organisations by allowing comparisons to be made between administrations and between sectors.

Next steps

This project has helped to identify a number of areas of the evaluation framework that are particularly promising for EPI but where progress is not sufficiently visible across the board. In these and other areas, additional analysis appears to be warranted, in order to deepen our understanding of whether and under what circumstances certain EPI mechanisms can be effective. Work should help with the identification of concrete examples of good practice covering both general and sector-specific activities, as well as supporting refinements of the EPI evaluation framework.

Figure 1 **Framework for evaluating integration of environment into sector policies**



2 Environmental policy integration — the concept

'Environmental policy integration' has emerged as a concept because conventional environmental policy has, in most cases, been unable to prevent pressures being exerted on the environment by society. Environmental concerns tend to be given insufficient weight in the policy and political process, and environmental policy has thus had to react to negative impacts caused by socioeconomic policies and practices, rather than being integral to their very design. Whereas incoherent and conflicting policies will be less effective, less cost efficient and generally bad for governance, integration offers the potential to avoid negative impacts and identify mutually beneficial solutions.

EPI involves a continual process to ensure environmental issues are taken into account in all policy-making, generally demanding changes in political, organisational and procedural activities, so that environmental issues are taken on board as early as possible and continuing during implementation. The product of EPI should be an overall improvement in policy and its implementation. The environment will not necessarily come out on top in every policy that is adopted and implemented, but the overall trend should certainly be in the direction of sustainable development. In reality, however, even if environmental issues are considered throughout the policy-making process, they may not be sufficiently reflected in decisions. Evaluations of EPI therefore need to consider both the policy-making process and the policies and their outcomes.

2.1 Introduction

The existence of a healthy environment is a necessary precondition for social welfare and economic development, and is also at the core of the sustainable development principle. While the social, economic and environmental elements of sustainable development are heavily interdependent, sustainability is simply not possible unless environmental issues are considered and reflected in social and economic activities and policies. Environmental policy integration or 'EPI' is about just that: taking environmental issues into account in the development and implementation of non-environmental policies.

The challenge of EPI has long been recognised as important in Europe and integration is now reflected in the European Community Treaty and the Kiev 'Environment for Europe' ministerial declaration. Key environmental trends suggest however that integration efforts have been insufficient to date and that further efforts are needed to bring Europe on track to sustainable development. Identifying more specifically where there has been progress in relation to integration, and how this has been achieved, is difficult given a lack of suitable monitoring and evaluation systems.

This report examines the state of play on environmental policy integration in Europe, including both national and EU-level activities. It builds on previous EEA work in this area, in particular the global assessment of the fifth environmental action programme, the *State of the environment report 1999* and the 2003 report — *Europe's environment: the third assessment*. It also builds firmly on the EEA's work on monitoring integration in specific sectors, notably transport, agriculture and energy. The project will strengthen the Agency's capacity on integration, providing a solid foundation for longer-term and cross-sectoral activities.

The report draws together the findings of many existing studies and reports on environmental policy integration in Europe. It reviews progress in implementing policy integration at country and EU level, in terms of political commitments, governance systems, policy instruments and monitoring, and evaluation of progress. The paper also identifies subjects that warrant further exploration, as well as suggesting a framework for evaluating and monitoring progress in integration, that can be used by the EEA and other organisations.

2.2 Why are we interested in EPI?

The concept of 'environmental policy integration' has emerged because conventional environmental policy and legislation has, in most cases, been unable — on its own — to prevent pressures being exerted on the environment by society. At the heart of the issue is the fact that there is a tendency for environmental goals and values to be ranked below issues of national security, economics and finance, labour relations, education and welfare ([1]). Environmental policies have thus had to 'react' to negative impacts resulting from unsustainable socioeconomic practices, rather than helping to shape policies and practices.

EPI means moving environmental issues from the periphery to the centre of decision-making, whereby environmental issues are reflected in the very design and substance of sectoral policies. Conventional environmental policies remain just as relevant, but need to be complemented by sectoral efforts to ensure their effectiveness. EPI offers the following particular benefits.

1. EPI allows environmental issues to be tackled in a more proactive, and less ad hoc way ([2]), by ensuring that they are fully considered throughout the policy process, including before and during the design of sectoral policies.

2. EPI offers an opportunity for environmental policy, which often influences behaviour using 'command and control'-type measures, to work with sectoral policies to the mutual benefit of the environment and economy. In particular, environmental objectives may become easier to reach by harnessing the power of alternative instruments, especially market-based instruments, for example by making agricultural aid conditional on compliance with environmental requirements ([3]).

3. In instances where environment and sector policies are in conflict, EPI should help to reorient policies, preventing environmental damage and putting sectors on the path to long-term sustainability.

4. EPI helps to ensure coherence across different policy areas ([4]), which is a prominent feature of 'good governance'([5]). The more integrated and mutually reinforcing are the policies, the more effective (and cost-efficient) their delivery.

5. EPI measures should also strengthen transparency and public participation, by bringing decisions out into the open and involving a wider group of interests and expertise in informing decision-making.

2.3 Defining environmental policy integration

Environmental integration is widely and routinely promoted as an essential ingredient in the transition to sustainable development. Yet there is little agreement on the meaning of EPI, which has been defined as a concept, principle, strategy, duty and process ([6]), with different interests interpreting it differently ([7]). This ambiguity may have made it more acceptable to policy-makers, but it also makes it more difficult to put into practice ([8]) and to evaluate progress.

The European Community Treaty provides helpful guidance as to the meaning of EPI. Article 6 states that 'Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities (…), in particular with a view to promoting sustainable development'. Whilst falling short of defining 'integration', Article 6 tells us what integration is intended to do — to

([1]) Lafferty, 2004.
([2]) Collier, 1994.
([3]) Lundquist forthcoming, based on Knoepfel, 1995.
([4]) Peters, 1998.
([5]) The European Commission White Paper on European governance COM(2001) 428 identified coherence as one of five principles of good governance.
([6]) Bär *et al.*, 1998; Hession *et al.*, 1998; EEA, 1999; Lafferty and Hovden, 2002.
([7]) Persson, 2003.
([8]) Lenschow, 2002b.

contribute to sustainable development, and how this should be done — by inserting environmental requirements into policy-making and policy implementation (Figure 2). Although the Treaty is relevant only to the EU, similar wording has also been included in the pan-European 'environment for Europe' declarations.

EPI cannot be seen as a one-off event but is a continual process to ensure environmental issues are taken into account in all policy phases, from the very beginning of the policy process ([9]). Importantly, EPI needs to lead to overall improvements in policy, policy implementation and policy outcomes ([10])([11]). Environment will not necessarily come out on top in every policy that is adopted and implemented, but the overall trend should certainly be in the direction of sustainable development.

There are many ways in which political and administrative systems can be organised to facilitate policy integration, for instance by raising the political profile of environmental and sustainable development issues, securing adaptations in the way governments are organised and decisions are taken, and improving the information used to inform decisions, as well as the level of public engagement.

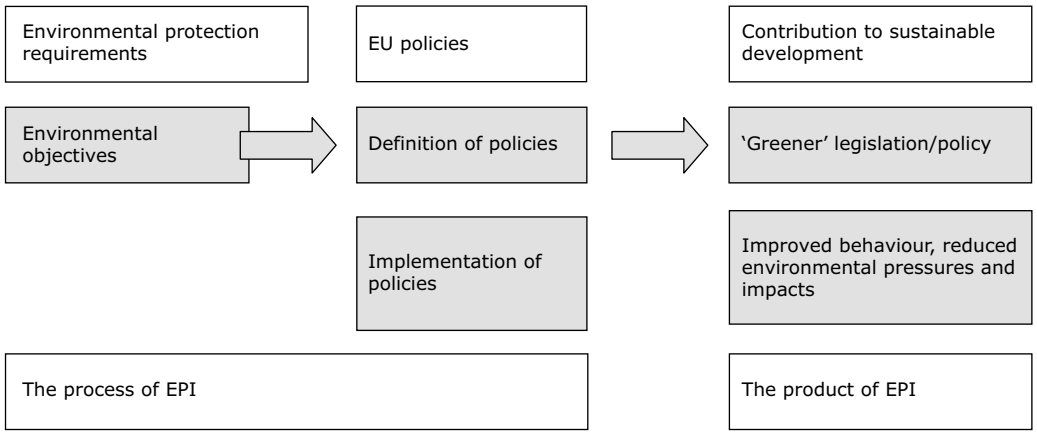
2.4 Policy integration versus environmental policy integration?

Whereas the general concept of 'policy integration' suggests a coming-together of different policies, with no specific direction, and without explicitly prioritising one policy over another, 'environmental policy integration' suggests that environmental requirements are specifically to be integrated into other policies and activities.

Despite this emphasis on environmental policy, EPI does not exist in a vacuum but sits alongside other EU policy objectives that seek to promote the integration of economic and social objectives into other policy areas. Indeed, the integration and coherence of all three dimensions of sustainable development is at the core of the EU sustainable development strategy and the European governance agenda (see Section 5). In practice, this suggests a two-way integration — from environment into sectors and vice versa, to ensure mutually beneficial policies that deliver social, economic and environmental objectives together in a coherent way.

Whilst recognising the need for such 'two-way' integration, environmental policy integration is specifically justified by the fact that environmental concerns have persistently been underplayed in other policies ([12]).

Figure 2 Environmental policy integration — according to Article 6 of the EC Treaty



([9]) 'Much of the failure to work horizontally in government is at the policy level as opposed to the management or implementation level', Peters, 1998.
([10]) Bär *et al.*, 1997.
([11]) Lafferty and Hovden, 2002.
([12]) Lafferty and Hovden, 2002.

3 National developments in EPI

Countries have taken great strides in terms of generating political commitments to environmental policy integration and sustainable development. Most of the 25 EU Member States have established sustainable development and/or environmental integration strategies. The new EU Member States have been able to build on national environmental action plans or national environment and health action plans, which have provided a strategic approach to environmental objectives in the context of economic transition. The greatest scope for developing national strategies now lies with the Balkan countries.

Existing national sustainable development strategies (NSDSs) could be strengthened in several ways, for example, moving towards 'harder' documents, developing visions and pathways for delivering SD objectives, and securing better monitoring of their implementation. Opportunities for cross-country learning could be better exploited, with Belgium and Estonia among those countries demonstrating good practice. A few countries, most notably Norway and Sweden, also make extensive use of sector/environment integration strategies. Strategies in other sectors, notably transport and agriculture/rural development, are increasingly common.

With this considerable strategic framework in place, national-level EPI would benefit from greater institutional and administrative coordination. Since the early 1990s, many countries have developed committees that bring together political and/or administrative actors to address sustainable development issues. One prominent example is Germany's Committee of State Secretaries for Sustainable Development. Other countries, such as Austria, Belgium, Denmark and Ireland, have established inter-ministerial commissions to further work on implementation. A large number of countries have also established environment or SD advisory councils, with councils in Finland, Lithuania and Latvia also serving inter-ministerial coordination functions. Environment units are common in many sectoral ministries. Environment ministries or parts thereof have also been merged with other departments, although the contribution of such mergers to EPI is not entirely evident. Overall, the emerging pattern is one of institutional adjustments to support EPI, even if progress is patchy and the effectiveness of different approaches unclear.

Few countries have exploited opportunities to link regular strategic planning, budgeting and auditing, with the delivery of overarching SD or EPI strategies. Good practice cases in relation to budgeting are emerging in Norwegian, Dutch and UK policy. The UK and, to a lesser extent, Portugal have also instituted environmental auditing systems. Little progress has been made in developing green accounts although 'greening government' initiatives have been introduced, including Norway's Green State initiative launched in 1998.

How to improve coordination between different levels of governance for EPI is an area warranting further attention. Such 'vertical coordination' is usually weak or non-existent in relation to national SD strategies, although Austria, Finland, Germany and Switzerland appear to be among the exceptions. Even where organisational changes have been made to support vertical coordination, inadequate capacity at the lower government tiers can be a weakness, as is the case in the Czech Republic and Poland, for example. Lessons can be learnt from the cooperation agreement between the Flemish government and local authorities (Belgium).

On the whole, based on the limited information available, capacity and resources dedicated to EPI appear to be inadequate. The need to adopt EU environmental legislation has been an important pressure for change in many countries. Apart from building capacity in environment ministries, there are examples of targeted capacity building to support environmental integration in sectoral ministries. In the Netherlands, for example, a learning programme has been established to support the SD transition process.

Several forms of impact assessments are used in 15 countries to support environmental assessment, including in Finland, the Netherlands, the UK and Slovakia. This includes regulatory impact assessments, strategic environmental assessment and project-level assessments. The latter two are becoming commonplace, and are supporting a more coordinated approach to policy-making. Public consultation and access to environmental data has also developed considerably, partly in response to EU and international measures.

A growing range of policy instruments is being employed, at the national level, which should support EPI. Apart from environmental standards, funding programmes, spatial planning and research programmes, there is also a gradual move towards environmental taxes, environmental tax reform (ETR), and other market-based approaches. Progress with the internalisation of external costs has been variable across the EU.

National-level reporting on progress on SD is usually done using yearly or periodic reports. Belgium has also established procedures for independent evaluations. National strategies are usually accompanied by indicators covering all three dimensions of sustainable development — economic, social and environmental — as well as relating to individual sectors or topics. Ireland and Italy are among the few countries considering aggregated indicators like Green GDP or Ecological Footprint. More general reporting on progress in relation to national environmental integration is taken forward by the EEA, UNECE and the OECD. Sectoral integration indicators are being developed and used in relation to transport, energy, agriculture and fisheries. Work on decoupling indicators is also being prioritised, for example, by the OECD and the Danish government.

3.1 Political commitment and strategic vision

The EU-25 countries are all committed to implementing the sustainable development and integration provisions of the EU Treaties. These and other European countries have also signed up to the integration concept within the context of the pan-European 'environment for Europe' process (see Box 3.1).

3.1.1 National SD strategies (NSDSs)

According to a recent Commission review of NSDSs, 19 of the EU-25 Member States have adopted national strategies or similar, and are in the process of implementing them. Other strategies relating to Spain, the Czech Republic, Estonia, Hungary, Malta and Slovenia are under preparation. Some of the NSDSs were developed around the 1992 Rio Summit (the Netherlands, Sweden, Finland and the UK) and have since been updated. Several countries also reviewed or prepared their NSDSs ahead of the 2002 World Summit on Sustainable Development ([13]).

It is important to note that most of the new EU Member States (with the exception of Malta) have benefited in this development from earlier preparation of national environmental action plans

Box 3.1 EPI and the 'environment for Europe' process

At the first Environment for Europe Conference in Dobris in 1991, ministers recognised the importance of promoting, from the beginning, environmental concerns in the transition of central and east European countries from centrally planned to democratic political systems and market-oriented economies. Successive conferences, in Lucerne (1993), Sofia (1995) and Kiev (2003) added further support to environmental integration.

The Kiev ministerial declaration states that 'further integration of environmental considerations into policies in all sectors is of critical importance to the improvement of the environment'. It was also agreed that assessments of international sectoral policies, plans and programmes in the UN/ECE region were needed in areas such as transport, energy and agriculture, as a matter of priority.

([13]) CEC, 2004a.

Box 3.2 'Hard' frameworks for sustainable development

In Belgium, the Act on the Coordination of Federal Sustainable Development Policy, of 5 May 1997, establishes a strategic process of consecutive rounds of reporting, planning and consultation, implementation and monitoring for sustainable development. According to the Act, the goals of sustainable development and policies should be structured along the lines of Agenda 21 and other international commitments that Belgium has signed up to.

Estonia, in 1995, adopted an Act on Sustainable Development, which was the first of its kind in Europe. This was a political declaration that introduced the concept of integration of environmental, social and economic concerns into all sectors of activities. The Act defines the basis of the national sustainable development strategy. In 1997, it was amended in favour of the elaboration of master plans for the most important branches of the economy (energy, transport, agriculture, forestry, tourism, chemicals industry, building materials industry and food industry sectors). The Act also called for the introduction of spatial planning into counties and communities.

Source: Farmer, 2004.

(NEAPs) and national environment and health action plans (NEHAPs), which have provided a strategic approach to targeted environmental objectives in the wider transition development context. No NSDS has yet been adopted in the Balkan countries, although new legal changes, strategies on poverty, NEAPs, etc., will form a good basis for their future development, as will shortly be the case in Macedonia.

NSDSs of the EU Member States contain framework strategies, action programmes, or both. The three dimensions of sustainable development are usually covered, in many cases accompanied by additional sections relating, for example, to cultural issues, regions, the international dimension, education and governance. The earlier strategies tended to focus on the environmental dimension of sustainable development, but have gradually evolved to include stronger social and economic dimensions, as well as being updated in light of new information and changing national and international contexts. In some cases, considerations relating to competitiveness, innovation and economic growth are prominent. The issue of cost-effectiveness of environmental policies is less well developed ([14]).

The Commission has identified a number of weaknesses in relation to many NSDSs. This includes their usually 'soft' nature (see Box 3.2). Documents could benefit from greater ownership, long-term vision, a clear path to achieving objectives and prioritisation of objectives. Resources and costs associated with implementation are often insufficiently addressed, and the integration of the different elements of sustainable development is often also missing. There is also little real evidence of action to implement the NSDSs, hampered by a lack of effective monitoring and review. There is also an opportunity to increase opportunities for Member States to learn from one another, by identifying and exchanging information on good practice.

3.1.2 Sectoral integration strategies

The strategic framework for integrating environmental considerations into other sectoral policy areas is primarily provided by the NSDSs and NEAPs/NEHAPs. Many additional or subsequent sectoral plans have been produced, such as for the transport, energy, agriculture and tourism sectors, although these tend not to be sectoral environmental integration strategies. A recent survey revealed that of 29 OECD countries, less than a third had made use of sector integration strategies at the beginning of 2004, including Denmark, Finland, Norway, Sweden and the UK ([15]). A particularly comprehensive approach to developing sector environment strategies is evident in some countries, notably Norway (see Box 3.3) and Sweden. The new EU Member States have also made some progress in this direction. Slovakia, for example, has a transport and environment action programme and an action plan for environment and health.

([14]) CEC, 2004a.
([15]) Jacob and Volkery, 2004.

Box 3.3 Sector/environment management plans in Norway

The Norwegian government uses sectoral environmental action plans to clarify sectoral responsibilities. The Ministry of Transport and Communications and the Ministry of Defence presented environmental action plans in connection with the 1999 central government budget. The Ministry of Petroleum and Energy and the Ministry of Fisheries followed suit in connection with the 2000 budget. Also, in connection with the 2001 budget, action plans were presented by four ministries: the Ministry of Agriculture, the Ministry of Education, Research and Church Affairs, the Ministry of Trade and Industry, and the Ministry of Local Government and Regional Development. The remaining ministries were to present environmental action plans in 2002 and 2003. The ministries are required to report on the implementation of these plans and any minor revisions in their annual budget proposals. There appears to be no system, however, for conducting reviews or audits of the plans ([16]).

Box 3.4 Rural development plans

The main policy statements for assessing current integration practices in agriculture policy are the rural development plans (RDPs) for expenditure to 2006 under the rural development regulation (Regulation (EC) No 1257/1999).

Examples of different approaches are seen in Latvia and the Czech Republic with regard to integration in RDPs. The Czech Republic goes into detail on the relationship to other plans and environmental agreements, and refers to the need for sustainability throughout the RDP, whereas Latvia hardly mentions sustainability, either in the introduction to the plan, or consistently throughout the document. Also, Latvia identifies environmental impacts resulting from agriculture, but does not find opportunities in the RDP to address these issues. The Czech Republic, on the other hand, has used environmental experts to carry out the prior evaluation of the plan. Environmental issues are identified, along with opportunities offered by the rich natural resources, and the RDP describes measures to promote environmental protection alongside and as a means to rural development.

Among the different sectors, most prolific activity is noted in relation to transport and environment integration strategies. By 2001, four of the new EU Member States had introduced a legal requirement to produce an integrated transport and environment strategy (Estonia, Lithuania, Poland and Slovakia), although only Poland and Slovakia had developed such strategies. Estonia, Latvia and Slovenia had drafted transport development plans that also include some environmental considerations. Of the EU-15 Member States, seven had adopted such strategies (Austria, Finland, Germany, Ireland, the Netherlands, Sweden and the UK) and others were being developed in Belgium, France, Luxembourg and Spain.

EU rural development plans are also acting as a sort of strategy for integrating environmental objectives within at least part of the agriculture sector, with plans now covering all 25 EU Member States (see Box 3.4).

3.2 The administrative culture and practices

Integration has been difficult to achieve at the national level due to a long-standing lack of institutional coordination ([17]). Some important steps have been taken since the early 1990s to change the way administrations are structured or connected in order to improve environmental integration. Further coordination among different departments and administrations is, however, apparently still needed ([18]).

([16]) Hovden and Torjussen, 2002.
([17]) OECD, 2001.
([18]) For example, see OECD, 2003.

3.2.1 Cross-governmental leadership and coordination

The EU Member States have, in many cases, developed cross-governmental structures or committees that bring together political and/or administrative actors to address sustainable development issues in a more coordinated way.

An inter-ministerial body composed of high-level representatives from all relevant ministries has typically been involved in preparing NSDSs, with Italy, Slovenia, Ireland and Luxembourg the exceptions. Coordination structures are either composed exclusively of government representatives or of government representatives and stakeholders.

Lead responsibility for coordinating NSDSs sometimes lies with the Prime Minister's office, as is the case in Estonia, Finland, France, Germany, Latvia, Lithuania, Malta and Portugal. More often, however, environment ministries play a lead or at least a supporting role.

As regards the implementation of NSDSs, several countries (Greece, Hungary, Italy, Lithuania and Slovakia) have vested overall responsibility for coordinating implementation in one minister, but the whole government retains political responsibility.

France has set up a network of high-level administrators in each ministry responsible for coordinating implementation. In Austria, Belgium and Ireland, government departments or inter-ministerial commissions lead in the development of more detailed annual working programmes. In the UK, a cross-departmental sustainable development unit issues guidance, promotes best practice and reports on departmental progress ([19]).

There are now also a large number of advisory sustainable development commissions or councils, including social partners, NGOs and academics ([20]) (see Box 3.6).

The above political and administrative coordination mechanisms have largely had a cross-sectoral focus, and must be seen in addition to the more specific environment/sectoral mechanisms that have been established. In Slovenia, for example, the integration of environmental considerations into sectoral policies is supported by more specific inter-ministerial working bodies and inter-departmental commissions. The inter-departmental commission responsible for drafting Slovenia's agri-environment programme was headed by the agriculture ministry in close cooperation with the environment ministry.

3.2.2 Restructuring ministries

There has also been some restructuring of existing departments, including the establishment of environmental units in other departments and the creation of 'mega-ministries'. In Belgium, for example, every ministry has sustainable development 'cells'. Although the establishment of environment units is now standard in OECD countries, studies suggest that such units have generally not been willing or able to influence the overall policy orientation in their respective departments ([21]).

Box 3.5 High-level inter-ministerial coordination for EPI

In Germany, the Committee of State Secretaries for Sustainable Development brings together high-level politicians from 10 ministries, chaired by the Minister of State serving the Chancellery. The German Committee is also the driving force behind the NSDS implementation process.

The UK Cabinet Sub-Committee of Green Ministers considers the impact of government policies on sustainable development, and seeks to improve the performance of government departments in contributing to sustainable development.

National Councils for Sustainable Development in Finland and Lithuania, and the Council of National Economy in Latvia also fulfil coordinating functions at the political level.

([19]) CEC, 2004a.
([20]) Steurer *et al.*, 2004.
([21]) Jacob and Volkery, 2004.

Box 3.6 Environmental Advisory Councils: the Czech Republic and Poland

In the Czech Republic, an Environment Council was formed in the early 1990s and in 1998 this was followed by the Committee on Environmental Impact Assessment, both within the Academy of Sciences. In 2000, the Governmental Council on Social and Economic Strategy (RASES) was established as an advisory body. In May 2000, the Ministry of Environment established the Council on Sustainable Development to support the work of RASES, but it has proved weak in adding the environmental 'dimension'.

A Commission on Sustainable Development was established in Poland in 1994, chaired by the Environment Minister. This was replaced in 1998 by the Committee for Regional Policy and Sustainable Development — a permanent Committee of the Council of Ministers. In 2002, the Council for Sustainable Development was created, to advise the Council of Ministers and Prime Minister. It has the critical responsibility of examining draft legislation and examining whether it is compatible with the principles of sustainable development, as well as wider analyses. It is chaired by the environment minister and the deputy Chair is the Under-Secretary of State of the Ministry for Infrastructure.

Source: Rynda *et al.,* 2003; Kamieniecki, 2003.

Examples of 'mega-ministries' are the Ministry of the Environment and Land Use Planning in Portugal; the UK's Department of the Environment, Food and Rural Affairs; the Ministry of Environmental Protection, Natural Resources and Forestry in Poland; the Ministry of Public Health, Food Safety and the Environment in Belgium; the Ministry of Agriculture, Natural Resources and Environment in Cyprus, the Ministry of Housing, Physical Planning and the Environment in the Netherlands, and the Sustainable Development Ministry in Sweden.

Such restructuring efforts, however, can be rather disruptive, without necessarily generating more environmentally-integrated thinking and policies. A possible example is the recent merger in Turkey to produce the Ministry of Environment and Forestry, where there is concern that, far from allowing an integration of environment into forestry management, the merger could reduce the effectiveness of an already weak environment ministerial function.

Whether or not structural changes such as these are beneficial, environment departments or ministries (or parts thereof) can only merge with a limited number of other departments. What may be more critical is whether existing departments reorient their focus, moving away from narrow sectoral objectives and instead taking on a more issues-oriented approach, such as rural development, marine or urban issues.

The scope of environment ministries can also be important in delivering integration. In some countries not all 'environment' issues are within the governance of an environment ministry. A common example is water management, which is not totally under the environment ministry in countries as diverse as the Netherlands, the Czech Republic and Croatia. This can lead to difficulties in integrating environmental objectives or understanding the importance of water protection in comparison with its role as a resource, for example, for agriculture. Having said this, close inter-ministerial cooperation in the Netherlands is believed to be helpful. The lesson is that ministerial structures alone are not a sufficient determinant of integration, but assessment must be coupled with an analysis of inter-ministerial relationships.

3.2.3 Planning, budgeting and audit

Despite the potential for doing so, few countries have exploited opportunities to link governmental planning cycles and budgets, with the delivery of overarching SD strategies or sectoral environmental integration strategies. There is little information available on resources being made dependent on environmental integration efforts although cases of interesting practice

Box 3.7 Linking planning and budgetary mechanisms to EPI

Denmark was one of the pioneer countries in terms of linking budgets, planning and environmental impacts, although this is no longer done. From 1997 to 2001, it produced an annual environmental impact assessment of the country's Finance Act, analysing the environmental impacts of the budget proposal for the following year.

Norway's cyclical action plans and the Finance Ministry's lead on the NSDS make sure that the NSDS is integrated into the budgetary process.

In the Netherlands, every ministerial department has to explain, in its financial statements for the coming year, how it will take account of the different dimensions of SD in preparing and implementing policy.

The UK Department for Environment, Food and Rural Affairs has established a close cooperation with the Treasury (UK Finance Ministry). Government departments have to report on the sustainable development impacts of measures for which government funds are requested, as part of the two-yearly spending review.

Sources: CEC, 2004a; Danish Finance Ministry, 2001.

are emerging, notably in Norway, the Netherlands and the UK ([22]) (see Box 3.7).

Environmental auditing of policies — distinct from environmental management systems — is also carried out in several countries, including by the UK's Parliamentary Environmental Audit Committee. The latter is a cross-party committee, established in 1997 to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development. The committee is to audit performance against such targets as may be set for them by ministers.

Portugal has introduced environmental auditors in the transport and the agriculture ministries, attached directly to the ministers' office. The auditors are to review sectoral policies with respect to their potential environmental impacts.

3.2.4 Environmental management systems

Little progress has been made in developing government accounting systems that take due account of resource depletion ('green accounts'). A number of OECD countries have, however, launched 'greening government' initiatives to improve the environmental sensitivity and impact of government operations. These seek to stimulate greater environmental awareness in government operations, and in government policies. Usually agreed at the cabinet level, such initiatives have then been adopted by departments for their own procurement and housekeeping practices. The aim is to get government departments to improve energy savings, reduce waste generation and to submit their decisions to impact assessments ([23]).

3.2.5 Coordination between administrative levels

Within countries, environmental integration efforts involve a number of different administrative levels. Regional and local governments are assuming a more important role in EPI due to the growing tendency to devolve certain policy-making responsibilities, as well as the role of regional and local government in delivering key environmental services such as water supply, wastewater collection and treatment, and municipal waste management, and in spatial planning, nature conservation and some natural resource management issues ([24]).

In relation specifically to the NSDSs, several countries have secured some sort of coordination between national and sub-national authorities. Switzerland has a Sustainable Development Forum, for the

([22]) Jacob and Volkery, 2004.
([23]) OECD, 2001.
([24]) OECD, 2004a.

Box 3.8 Selected environmental management initiatives

The Norwegian project 'Green State' was launched in 1998, aimed at testing systematically how environmental considerations can best be integrated into State-sector activities. Ten State-sector agencies have been taking part in the project. The measures implemented are in areas where each agency has decision-making authority, and focus, for example, on energy use, procurement, buildings, transport, the use of ICT and waste strategies. There have been many positive developments: for example the Government Administration Services has received certification from Ecolabelling Norway, and can now use the Nordic Swan Label on its products. The Norwegian National Rail Administration and the Directorate of Public Construction and Property are cooperating on eco-efficient procurement. The Norwegian Petroleum Directorate has identified ICT as an important means of reducing environmental impact, and has been able to use computer-based solutions to reduce emissions related to travel and travel costs.

In Sweden, some 230 government agencies have been given the task of introducing an environmental management system (EMS) based on ISO 14001 and the EU's environmental management and audit system. The first agencies received this assignment in 1996. The government offices (that is, all the government ministries) are also in the process of implementing environmental management. All the agencies concerned are to report annually on what has been achieved to their respective ministries. These reports provide Parliament, the government and individual ministries with information on how EMS implementation is progressing. The Environmental Protection Agency provides support to the agencies and monitors the process by submitting a combined annual report to the government.

The UK government has developed a 'joint note on environmental issues in purchasing', published in October 2003, which provides guidance and practical examples of how sustainable development objectives can be embedded in public procurement. It aims to demystify the complexities of procurement for non-specialists and guide them towards more sustainable purchases. From 1 November 2003, all new contracts by central government departments must also apply minimum environmental standards (such as on energy efficiency, recycled content and biodegradability), as well as value for money when purchasing certain types of product. The product specifications can be found on a website and in the Sustainable Procurement Group report.

Source: Norwegian Ministry of the Environment, 2001; SWEPA, 2004; Defra, http://www.sustainable-development.gov.uk/ar2003/02.htm.

Box 3.9 Belgian experience in supporting 'vertical' integration

In Belgium (Flanders), there is a cooperation agreement between the Flemish government and local authorities, to enhance the coordination between administrative levels. This agreement encourages local environmental policy to focus on sustainability and integration. Local authorities signing up to the agreement commit themselves to conducting a sustainable local (environmental) policy, and to further developing their environmental department. In return they receive financial support. The system has proved to be a great encouragement for local environmental policy and the development of related expertise.

exchange of information and good practice, and aims for the adoption of common targets and coordination of common projects.

Even where organisational changes have been made to support vertical coordination, environmental or sustainable development objectives are not necessarily being taken on board. This can in part be due to weaknesses in the capacity of sub-national institutions, which is common in countries such as the Czech Republic and Poland where decentralisation has placed many additional responsibilities on lower governmental tiers. The Flanders region of Belgium has developed an innovative approach to strengthening environmental integration and sustainable development capacity at lower levels (see Box 3.9). In

Box 3.10 Building capacity within administrations: the Netherlands and the UK

The Dutch Ministry of Housing, Spatial Planning and the Environment, in association with the Dutch National Initiative for Sustainable Development, has established a learning programme for ministries and actors involved in the sustainable development transition. The programme has covered topics such as organising commitment in transition processes. It regularly organises consultations between relevant ministries at various levels, as well as communicating with non-governmental interests.

The UK 'green ministers' made a commitment to have strategies to raise awareness of sustainable development in place by 31 March 2000. Departments are also seeking ways to raise staff understanding and awareness and ownership of sustainable development: most use intranet sites, posters and leaflets to convey key messages; some have appointed local 'champions' who lead in their areas and establish links between the central team and the wider department; a few have started to introduce regular seminars and formal training, for example on staff induction courses.

Source: Nooteboom, 2004; Defra, 2004.

Italy, implementation of a new strategic approach to environmental concerns in regional planning is going in the right direction, but implementation will require a substantial strengthening of regional and local institutional capacities ([25]).

Regional (i.e. multi-country) strategies have also been developed, relating to the Nordic and the Baltic countries. Many of the EU-25 national sustainable development strategies also cover the same areas as the EU SDS, if not actually containing references to the EU SDS ([26]).

3.2.6 Investing in capacity and resources for EPI

Environmental administrations do not have responsibility for defining and enforcing all pertinent regulations or for carrying out the procedures required to pursue integration effectively. In the countries of central and eastern Europe, institutions responsible for environmental protection rarely had sufficient status to have any impact on economic sectors. In the early 1990s, the establishment of separate ministries of environment, where these did not exist, helped to raise the profile of the environment. The status of such ministries can, however, still be 'low' in the ministerial hierarchy in these countries.

An important pressure for change has been the need to adopt EU environmental legislation, which has assisted in raising the profile of the environment and in highlighting environment requirements in policy areas covered by other ministries, such as agriculture.

Apart from building sufficient capacity within environment ministries, there are examples of targeted capacity building to support EPI in other sectors (see Box 3.10). As with vertical coordination, however, cross-governmental coordination in the new and old Member States is believed to be hampered by inadequate organisational or administrative resources. For example, in Belgium, staff working on sustainable development are confronted with a lack of availability of time and means for these new types of tasks, including high-level officials and members of the Interdepartmental Commission. Budget cut-backs have also been known for those institutions dealing with sustainable development, for example, in the Netherlands ([27]).

Overall, there is little information on the environmental resources needed for or allocated to EPI. Identifying what EPI resources already exist may be impossible, particularly given that environmental capacity should ultimately be peppered through departments and staff.

([25]) OECD, 2002e.
([26]) CEC, 2004a.
([27]) OECD, 2004b.

3.3 Assessment and consultation to underpin policy and decisionmaking

3.3.1 Ex ante assessment of policy proposals

In recent years, governments around the world have applied a variety of *ex ante* assessment processes to support their policy-making. Often these are variants of two basic approaches — regulatory impact assessment (RIA) which (as originally conceived) sought to minimise regulatory burdens on businesses; and strategic environmental assessment (SEA), which seeks to ensure the full consideration in advance of the specifically environmental impacts of plans, programmes (and less frequently, policies) in order to ensure that environmental considerations are, as far as possible, reconciled with other social and economic objectives. SEA is required in EU countries from mid-2004. RIA and SEA are, in addition to project-based environmental impact assessments, regulated by Directive 85/337/EEC.

Box 3.11 Strategic environmental assessment (SEA) in the 'new' EU Member States

SEA has a long history in the 'new' EU Member States. For example, requirements for strategic environmental assessment were already included in Czechoslovak legislation in 1992. In the Czech Republic, the existing SEA is being applied to several policies, specifically to transport policy, energy policy and agriculture policy as well as to land-use planning documentation of large territorial units. Slovakia also inherited the Czechoslovak Act. However, a special act on EIA was issued in 1994 which defines the principles of SEA which apply to strategy documents, in particular sectoral policies but also the land-use planning documentation of greater territorial unit and settlement formation as specified in the Act.

In Estonia, the 1995 Act on Planning and Building requires authorities to conduct an environmental impact assessment concerning plans and programmes. A strategic plan for Naissaar Island was subject to a trial EIA, making it the equivalent of an SEA. The SEA was considered successful. It was felt that it had encompassed all relevant issues, and early involvement of stakeholders had been especially beneficial, leading to the avoidance of conflicts. Importantly, facts were documented at each stage and all conclusions, etc., were given in written form and made available. Authorities were also impressed by the rational use of both time and material resources throughout the process.

Box 3.12 Impact assessments in Finland, the Netherlands, Slovakia and the UK

Finland's national regulatory policy aims to improve the quality of new primary legislation. Guidelines for the preparation of proposals consequently call for an examination of economic, organisational resources, and environmental impacts, as well as effects on different sectors of the public. In some cases, assessments may be done of human social and health impacts, effects on SMEs, and regional policy. Instructions are being developed for assessments of gender equity. An extensive RIA is required in those instances where the minister is advised that the likely impacts of a proposal are 'significant'.

In 1989, the Netherlands had already recognised the need for environmental assessment of new policies. The 'e-test' was finally introduced in 1995, at the same time as another tool for economic evaluation — the 'business effects test'. A joint centre was established to give guidance in the application of these tools.

In the UK, the Cabinet Office Regulatory Impact Unit in 2004 revised its guidance on regulatory impact assessment to include a broader range of sustainable development considerations among policy impacts that needed to be considered.

In Slovakia, the government is required to produce a statement for each new development policy of its compatibility with the principles, objectives and priorities of the NSDS.

Sources: http://www.smartregulation.gc.ca/en/03/01/bk-07.asp; Jacob and Volkery, 2004.

Box 3.13 Consulting the French public

A National Commission for Public Debate was set up in France in 1997. It is a tripartite independent administrative body that conducts public consultation at an early stage of proposed infrastructure projects and land-use change. Public consultation has also been extended several times in recent years, to draft legislation and policy formulation (OECD, 2005).

A number of countries (Belgium, Finland, France, Luxembourg, the Netherlands, Sweden and the UK) have broadened the scope of the above two approaches (RIA and SEA) to consider a wider range of impacts related to sustainable development. In other words, they have sought to include a balanced consideration of economic, social and environmental impacts — a procedure often termed 'sustainability impact assessment' (SIA).

3.3.2 Consultation and participation procedures

Public consultation in Europe has developed considerably and now takes place in almost all OECD countries. In a growing number of countries, consultation is used in the development of policies. The regulatory framework for public participation and consultation has been strengthened over the years, in response to EU legislation and the Aarhus Convention on Access to Information, Public Participation and Access to Justice, although much of this is applicable to the implementation of policies and not their actual formulation.

Much progress has also been made in relation to access to environmental data that is held by public authorities. Authorities should also increasingly report information under EMAS or ISO 14001.

3.4 Policy instruments to deliver EPI

Conventional environmental policy has been dominated by standard setting including both 'hard' and 'soft' standards, although this has increasingly been accompanied by the development of procedural requirements and broader strategic environment and sustainable development plans and programmes. EU environmental standards have been a major factor influencing national environmental standards, in EU countries and those preparing for EU accession.

3.4.1 Financial mechanisms to support environmental improvement

In addition to EU-driven funding programmes, national funding programmes and projects also support or encourage certain activities. Even where government funding accounts for only part of the total financing, this can nevertheless act as an important catalyst to attract funding from other sources. Government or public investments have also been used (tentatively) to indicate broader investment trends.

Environmentally motivated financial incentives are geared towards encouraging the development and diffusion of new, sustainable technologies or the provision of public environmental goods. As such, they support the 'internalisation' of environmental costs and benefits. On the other hand, economically motivated subsidies with harmful implications for the environment have increasingly come under scrutiny. Most of this financial aid is provided to the agriculture, transport and energy sectors.

At the fifth ministerial conference 'Environment for Europe' in Kiev (March 2003), ministers recommended that future OECD and UNECE environmental performance reviews (EPRs) should, among others, examine issues of financing, including the generation and allocation of public domestic financing for the environment, the position of environmental funds, funds derived from the private sector, donor support, foreign direct investment, etc.

3.4.2 Other market-based instruments

Environmental policy in Europe has undergone a big transformation regarding the use of other market-based instruments

over the last 10 years. More environmental taxes and charges are used as a way of 'getting the prices right' so that they reflect environmental values. New applications include taxes on CO_2, on waste to landfills and incinerators, and differentiated taxes to promote the early market penetration of low-sulphur motor fuels. Taxes on leaded petrol have significantly contributed to the phasing out of this motor fuel, and are disappearing in the EU-25. Price schemes to internalise external costs from the use of infrastructure, making costs to society more visible to motorists, are beginning to gain ground, although European legislation does not allow for inclusion of environmental costs in road pricing.

Emissions trading schemes have become 'acceptable' options. In fact, the first 'European' market-based instrument is the EU emissions trading scheme for greenhouse gases that started on 1 January 2005. In addition, there is a growing but slow move towards environmental tax reform (ETR) as countries change their tax base, reducing labour-related taxes and increasing taxes and charges on environmental pollution, resources and services ([28]). Increasingly, socioeconomically motivated subsidies come under scrutiny, where they are considered as environmentally harmful as well as halting economic progress.

One criterion for assessing EPI is the extent to which environmental externalities, for example, the costs of damage to the environment due to a certain activity or product, are internalised in the market prices of the given activity or product. An EEA report exploring the use of green taxes and looking more specifically at the transport, energy and agriculture sectors, found that, although most environment tax revenue comes from energy and transport taxes, progress with the internalisation of external costs is variable across Member States but generally not great ([29]).

Where environmental taxation is applied, such taxes are frequently differentiated not according to the environmental impact but to the economic vulnerability of the activities they are imposed on. More recently though, new initiatives to better account for the level of external costs have been appearing.

The Norwegian tax on pesticides is differentiated according to the environmental and health risks of groups of plant production products. The UK tax on aggregates (sand, gravel, crushed rock) has been explicitly based on social costs of excavation (such as damage to landscapes). The Austrian and German road charge systems for heavy lorries, although not explicitly including environmental costs, make external costs flexible with road use and its environmental consequences. London introduced a congestion charge for cars entering the inner city, making motorists pay for their use of London's environment. Finally, Ireland's plastic bag charge resulted in a dramatic decrease of use and littering.

3.4.3 Spatial planning to integrate sectoral and environmental issues

Spatial planning can serve as an important instrument for EPI, at various levels (local, regional, national, sectoral, etc.). Within countries, competence for spatial planning is very variable, depending on the type of spatial planning and the cultures or traditions of the countries. It is consequently difficult to develop universal evaluation criteria, to assess the role of spatial planning in EPI. However, strategic environmental assessment (see above) aims to integrate environmental concerns into the development of spatial plans, and should therefore provide a useful focus for evaluation purposes.

Spatial planning can involve a number of different elements, from detailed, comprehensive national plans, to sectoral or issue-specific plans, such as those based on river basins. Coastal, rural or urban planning is also prevalent. Each type of plan is an opportunity to bring together policy and decision-makers from different fora. Generally, the more integrated the plan, the greater the possibility for delivery of EPI. Close coordination of separate planning, however, can also deliver EPI, and this is particularly important in large countries or those with federal systems, such as Germany.

3.4.4 Environmental management instruments

Environmental management instruments adopted at EU level have and continue

([28]) Eurostat, 2003.
([29]) EEA, 2000.

Box 3.14 Spatial planning as an instrument for integration: Slovenia

Slovenia has developed a fully integrated spatial planning system following more than a decade of consultation and development. The system includes a detailed national plan, regional plans and municipal plans, which are fully integrated vertically. All sectoral plans (transport, energy, agriculture, etc.) have to be consistent with the overall plan. This provides a mechanism to ensure that critical environmental objectives (e.g. protected areas) are achieved and that these are priorities within sectoral ministerial objectives.

Source: Farmer, 2004.

to play a central role at national level, in addition to national or international approaches/standards that have been adopted. This includes EMAS/ISO which is being applied to private as well as some public bodies, and access to information, participation and justice in line with the UNECE Aarhus Convention. Particular improvements should result from consultation and participation mechanisms associated with strategic, project and sustainability impact assessment procedures.

Project-based environmental impact assessments, regulated by Directive 85/337/EEC, are now applied extensively in the EU-15 Member States. These are used to assess the environmental impacts of both public and private projects, early on in the process. From mid-2004, the 25 EU Member States also have to introduce strategic environmental assessment (SEA) of plans and programmes. A new regional agreement relating to SEA was signed in Kiev in 2003.

3.4.5 Other instruments to promote EPI

Negotiated environmental agreements have been applied throughout most of the EU-15, particularly in the Netherlands, Germany and more recently the UK. There have been far fewer applications in the new Member States. Recent growth has focused on addressing climate change. Views are variable as to their performance, however, with agreements increasingly seen as suitable if there is not enough political will or information to adopt 'harder' instruments.

3.5 Monitoring and review mechanisms

3.5.1 Reporting on national SD strategies

Institutional responsibility for reporting on progress on sustainable development frequently rests with inter-ministerial groups, using yearly or periodic reports. Some countries have also created procedures for independent evaluations, for example, the Belgian Federal Planning Bureau periodically reports on achievements and on the quality of federal government policies for sustainable development. These reports feed into preparations for the next national sustainable development strategy.

NSDSs are usually accompanied by indicators to facilitate monitoring. These include both core and detailed sustainable development indicators, usually covering all three 'dimensions' of sustainable development but emphasising environmental issues. Most indicators relate to individual sectors or topics, and do not provide information on =interlinkages between the different social, economic and environmental dimensions, although work is proceeding in this regard ([30]).

A few countries, notably Ireland and Italy, also consider aggregated indicators like Green GDP or Ecological Footprint ([31]).

3.5.2 Reporting on environmental policy integration

A number of international organisations have made efforts to report on national

([30]) CEC, 2004a.
([31]) Steurer *et al.*, 2004.

progress in relation to environmental policy integration. The EEA has, since 1999, included sectoral reporting in its main reports, as well as reporting individually on a number of sectors (see Section 5.5).

The OECD and UNECE environmental performance reviews (EPRs) currently represent the most systematic effort to report on and assess the integration of environmental and socioeconomic policies, although approaching this from an economic perspective. The EPRs are published for all OECD member countries, including the EU and accession countries. At the fifth ministerial conference 'Environment for Europe' (Kiev, March 2003) a number of recommendations were adopted concerning future reviews, including that they should give greater emphasis to environmental integration at all decision-making levels.

OECD work on indicators to measure the relationship between environmental and sectoral activities (in particular transport and agriculture) is ongoing and the indicators are regularly used in the environmental policy reviews. The 2002 OECD report on 'Decoupling indicators' examines 31 indicators covering the general decoupling of environmental pressures from total economic activity under the headings of climate change, air pollution, water quality, waste disposal, material use and natural resources, as well as production and use in four specific sectors: energy, transport, agriculture and manufacturing ([32]). The UNECE's Transport, Health and Environment Pan-European Project (THE-PEP) also covers indicator development, with a particular emphasis on the newly-independent States and the south-east European countries.

There is some evidence of sector/environment reporting at the national level. In Slovakia, for example, environmental integration is partly evaluated within the context of sectoral integration reports prepared by the Slovak Environment Agency under the surveillance of the Ministry of Environment. The structure of these reports is comparable to the EEA's 'transport and environment reporting mechanism' concept, with reports prepared for transport, energy, agriculture, tourism, industry and forestry. The Danish Government has also put forward 14 key indicators, including decoupling indicators relating to greenhouse gases, runoffs of nutrients into the sea, emissions of acidifying compounds and emissions to air ([33]).

([32]) OECD, 2002d.
([33]) http://www.mst.dk/news/pdf/Indikatorrap_UK.pdf.

4 European Union developments in EPI

Since 1973, the EU has identified environmental integration as an issue to be tackled. EPI has progressively featured in the EU's environmental action programmes and has been a Treaty requirement since 1987. The 1997 Amsterdam Treaty helped to raise the profile of EPI significantly, spawning the Cardiff integration process (initiated in 1998) that led to the adoption by the EU Council of nine sectoral integration strategies. This process has faltered since 2001, when attention also turned to the EU sustainable development strategy (SDS). The nine sector strategies are variable in content and quality, and they are by now also in need of revision. An annual stocktaking process was launched in 2004 and identified several ways of improving the strategies and the process as a whole.

EPI is central to achieving sustainable development and therefore also features in the EU SDS, as well as the European Governance White Paper. An environmental dimension was also added to the EU's 10-year Lisbon strategy to bolster European competitiveness, jobs and growth. Annual spring summits are to review progress on both Lisbon and the SDS, taking account, amongst other things, of the Cardiff stocktaking. But opportunities presented by the annual review mechanism have not been exploited effectively. The sixth environmental action programme and its thematic strategies should support the development of more holistic environmental objectives and policies to manage the EU's environment, thereby making an important contribution to integration efforts.

The unclear relationship between these various strategic frameworks and the political dominance of the Lisbon strategy, has tended to cloud the strategic SD and the environmental integration message. The EU SDS and the Cardiff process could benefit from greater clarification as to roles and responsibilities for carrying them forward, and more consistent high-level leadership. Opportunities to better engage the European Parliament and to establish an EU environmental or SD advisory council could be exploited.

Some efforts have been made to bring the EU institutions and their respective departments closer together, including the establishment of environmental units in a range of Commission directorates-general (DGs) and a reorientation of some DGs to address issues in a more integrated way (for instance, rural development and maritime affairs). Work on the environmental thematic strategies is supporting new cross-departmental working, as well as engaging external stakeholders. Member States are also engaging in the thematic strategies and in other groups and networks such as the Joint Expert Group on Transport on the Environment and the Green Diplomacy Network. The use of the 'open method of coordination' in environmental policy is also being explored, initially in the framework of the environmental technologies action plan. This should strengthen member state involvement in EPI.

Specialist sector/environment expertise has been expanded within the Environment DG and in sectoral DGs. Further increases in institutional capacity to support EPI could be explored. The European Commission and several other EU bodies are in the process of applying EMAS to their activities, which should strengthen internal management systems in favour of EPI and act as a model for the Member States.

The EU's move towards multiannual and annual planning offers significant potential for environmental integration throughout the Commission and Council. The same is true for budgetary planning cycles and auditing.

The institutions have developed more or less effective procedures to support the general coherence of decision-making. The Commission has additionally introduced a system of ex ante impact assessment for major Commission documents. This system should allow the environmental dimension of decisions to be given greater consideration, alongside social and economic issues, as well as enhancing consultation. Existing weaknesses in the system should be addressed in what is a 'learning by doing' process.

There is potential to make greater use of the available policy instruments, in addition to conventional 'command and control'-type measures, to support EPI when Member States implement policies. Opportunities exist in the area of funding, taxes and charges, and supporting spatial planning.

The annual review of the Lisbon strategy (the 'spring report') has been identified as the mechanism for reviewing the SDS. The spring reports have, however, tended to treat environmental issues as secondary to the core issues of growth and competitiveness. The recent mid-term review of the Lisbon strategy has also sidelined environmental issues. The ongoing review of the SDS (to be concluded in 2005) is an opportunity to redress this imbalance.

An annual Cardiff stocktaking exercise has been started, to feed into the annual environmental policy review and the spring reports. The Commission's stated intention is to develop, during 2005, a common framework and guidelines, identifying possible approaches to monitoring and review of the strategies, and updating the contents of strategies.

4.1 Political commitment and strategic vision

Already in 1973, the Commission recognised the need for environmental issues to be considered in all 'technical planning and decision-making processes' at national and EU level ([34]). EPI attracted further attention in a 1980 Commission report ([35]), and subsequent EU environmental action programmes (EAPs).

The EU's longstanding interest in EPI has arisen for a number of reasons. One has been the existence of strong environmental movements in several Member States and the related emergence of increasingly sophisticated EU environmental policies and programmes. At the same time, the traditional focus of the EU has been on supporting agricultural production, and generating internal and international trade, both with significant potential for environmental impacts. The whole approach to EU policy-making and administration was also intentionally compartmentalised, with the Commission, Council and Parliament structured along strictly sectoral lines.

4.1.1 EC Treaty — Article 6

EPI was formally accepted as an EU principle by the 1986 Single European Act. The 1997 Amsterdam Treaty gave the integration principle a much higher profile, as well as making an explicit link between integration and sustainable development. Article 2 of the Treaty now places sustainable development among the EC's primary objectives, followed by Article 6, which specifically requires that 'environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities (...) in particular with a view to promoting sustainable development'. The new European Constitution — if ratified by all 25 Member States — will retain the principle but move it towards the back of the Treaty.

4.1.2 Sectoral integration strategies: the Cardiff process

In 1998, at their summit in Cardiff, the Heads of State or Government requested all relevant Councils of Ministers to develop environmental integration strategies covering their respective policy areas. Progress on implementing the strategies was to be monitored, taking account of the Commission's guidelines and using indicators. All EU Council Presidencies between 1997 and 1999 took the process forward. The Commission has been engaged in developing and reviewing the strategies; the Parliament has engaged in a more ad hoc fashion.

Nine sectoral Councils are involved: Agriculture, Transport and Energy, Development, Internal market and Industry, and Fisheries, General Affairs and Ecofin (predominantly involving economic/finance ministers). The last two strategies were completed by March 2002. It is important

([34]) Lenschow, 2002b.
([35]) Communication (COM(80) 222) on progress made in connection with the environmental action programme.

Box 4.1 Key milestones in developing EU environmental integration strategies

October 1997 Amsterdam European Council — signature of Amsterdam Treaty, including Article 6 on environmental integration.

December 1997 Luxembourg European Council — Commission requested to produce strategy to integrate environment into other policy areas.

June 1998 Cardiff European Council — Commission communication on 'partnership for integration' (COM(1998) 333) presented. Heads of State or Government launched the Cardiff environmental integration process, identifying a first wave of three Councils (Transport, Energy, Agriculture) to develop integration strategies, and to monitor progress using Commission guidelines and identifying indicators. Major Commission proposals to be accompanied by an assessment of their environmental impact.

December 1998 Vienna European Council — identified a second wave of Councils (Internal market, Industry, Development), and request to the Commission to make a report on environmental appraisals of major policy proposals by June 1999, and a coordinated report on indicators by December 1999.

May 1999 Commission working paper to the Cologne European Council 'Mainstreaming of environmental policy' (SEC(1999) 777).

June 1999 Cologne European Council — identified Fisheries, Ecofin and General Affairs as the third wave of Councils; called for a report in 2000 on integration.

December 1999 Helsinki European Council — Commission reports submitted on progress on integration (SEC(1999) 1941) and indicators (SEC(1999) 1942). Final strategies from transport, agriculture and energy submitted.

2001 Gothenburg European Council — asked for the finalisation and further development of sector strategies, implementing them as soon as possible and presenting the results before the spring European Council in 2002. Council Secretary-General asked to present detailed suggestions on *inter alia* effective coordination between different Councils.

March 2002 Barcelona European Council — noted that Ecofin and General Affairs Council had adopted their strategies, and that the Fisheries Council had taken the necessary steps for integration.

March 2003 European Council — referred to strengthening the Cardiff process, developing overall and sector-specific decoupling objectives, as well as improving environment-related structural indicators, monitoring progress and identifying best practices. Commission to carry out an annual stocktaking of the Cardiff process. The 'road-map on the follow-up to the Gothenburg conclusions' to be updated and reviewed annually, and used as a practical and dynamic implementation instrument giving a clear overview on goals, targets and respective responsibilities.

June 2004 Commission stocktaking report — first annual stocktaking report published by the Commission.

to note that integration activities are ongoing outside the nine 'Cardiff' sectors, for example, in relation to employment, research and tourism.

A 2001 review (Table 5.1) showed that the sector strategies were varied in terms of content and quality. While they tended to acknowledge the need for changes in policy, they did not promise action within agreed timetables. There was also a tendency to reflect agreed EU policy positions rather than longer-term visions of sustainable development ([36]).

Although the process received significant attention under the Swedish Presidency in the first half of 2001 ([37]), it has meanwhile

([36]) Fergusson *et al.,* 2001; Kraemer *et al.*, 2001; SERI, 2000.
([37]) IEEP, 2001.

Table 4.1 Cardiff integration strategies — state of play, as of 1 June 2001

Criteria for strategy analysis	First wave Councils			Second wave Councils			Third wave Councils		
	Agriculture	Energy	Transport	Development	Industry	Internal market	Ecofin	GAC	Fisheries
Strategy content									
Scientific/research basis for formulating problem	—	—	—	—	—	—	—	—	—
Problem formulation	•	⊙	⊙	•	●	⊙	•	•	•
Risk assessment and option appraisal	—	—	•	—	—	•	—	—	—
Aims/objectives/guiding principles	⊙	⊙	●	⊙	⊙	⊙	•	•	⊙
Targets	•	—	⊙	—	—	•	—	—	•
Measures/actions — including beyond existing commitments	⊙	⊙	⊙	⊙	⊙	⊙	•	⊙	⊙
Recognition of the extra-Community/global dimension	•	•	⊙	⊙	⊙	•	⊙	⊙	⊙
Reference to other relevant EU/international policy agendas	⊙	⊙	⊙	⊙	●	•	•	⊙	⊙
Resource implications	—	—	•	⊙	⊙	•	•	—	—
Timetables	⊙	⊙	⊙	•	•	•	•	•	—
Procedural characteristics									
Roles and responsibilities for ensuring implementation	⊙	●	•	⊙	⊙	⊙	⊙	⊙	•
Monitoring and review arrangements	⊙	⊙	●	⊙	•	•	●	•	—
Indicators — extent and nature	⊙	⊙	●	•	⊙	⊙	⊙	•	•
Reporting mechanisms/requirements	•	⊙	⊙	⊙	•	•	•	—	—
Future milestones	•	●	⊙	•	•	•	⊙	•	•

Source: Wilkinson *et al.*, 2002.

Key: — Not addressed

• Little attention to this aspect

⊙ Some effort to address this aspect, but incomplete

● Relatively full treatment of this aspect

faltered. The strategies have also since been followed by agreement on the sixth environment action programme, the World Summit on Sustainable Development, and reforms of key EU sectoral policies, notably agriculture, fisheries, transport and regional development.

The Commission's first annual stocktaking of the implementation of the strategies in 2004 concluded that the Cardiff process has helped to bring about concrete improvements in some sectors ([38]). 'Environmental commitments are, however, still largely to be translated into further concrete results for the environment.' In addition, the Commission identified the following issues in its stocktaking:

- inconsistency between strategies — ranging from fully developed sets of environmental commitments, to declarations of intent;
- political commitment is lacking — the process appears to have been seen by some as a pro forma exercise, and the pace of progress seems to have varied, depending on the Presidencies' commitment to integration;
- delivery, implementation and review mechanisms — many Councils appear to have interpreted Cardiff as a one-off exercise, with few strategies setting out plans for regular reviews;
- clearer priorities and focus — many strategies failed to clearly identify priority areas for focused action;
- strategic forward-looking approach — the most significant steps are responses to crisis situations, rather than the integration strategies; more focus on a strategic approach would increase the cost-effectiveness of environmental integration.

The Cardiff integration process is considered to be an innovative and ambitious environmental policy tool ([39]). Environmental considerations have been put firmly on the agenda of a number of other Council formations, as well as involving respective Commission directorates-general. An increased understanding and sense of ownership of environmental issues has been promoted in several sectoral policy areas, and an important learning process encouraged. Integrative mechanisms and procedures have been stimulated in the EU and Member States.

4.1.3 The EU sustainable development strategy (SDS) and the Lisbon strategy

The Lisbon agenda

In 2000, the European Council in Lisbon set out a 10-year strategy for the EU. The goal is to make the Union the most dynamic, competitive knowledge-based economy, enjoying full employment and strengthened economic and social cohesion ([40]).

The EU SDS

Partly on the basis of a Commission proposal ([41]), the European Council in Gothenburg agreed on elements of a sustainable development strategy in June 2001 ([42]). Like most European countries, the EU produced its strategy to feed into the 2002 Johannesburg World Summit on Sustainable Development. A coordination role for the SDS was given to the Council of Ministers (General Affairs). Annual spring summits are to give policy guidance to promote sustainable development in Europe.

The EU SDS focuses on four key environmental issues: combating climate change, ensuring sustainable transport, addressing threats to public health, and managing natural resources more responsibly. A connection is also made to national sustainable development strategies, as well as to plans for introducing sustainability impact assessments of major policy proposals. In implementing the strategy, the Council was asked to examine the Commission's proposal, the sixth environment action programme and the Cardiff integration strategies.

([38]) CEC, 2004c.
([39]) Wilkinson *et al.*, 2002.
([40]) http://europa.eu.int/comm/lisbon_strategy/index_en.html.
([41]) May 2001, COM(2001) 264.
([42]) http://europa.eu.int/comm/sustainable/pages/strategy_en.htm.

The external dimension of the SDS

In May 2002, the Development Council added an external dimension to the EU sustainable development strategy, following the Commission communication 'Towards a global partnership for sustainable development' ([43]). The Barcelona spring 2002 summit made some refinements to the Gothenburg text. The SDS is also being interpreted in light of the 2002 World Summit on Sustainable Development (Johannesburg) commitments.

Evaluating progress

When adopting the SDS, the Gothenburg Council added an environmental dimension to the Lisbon strategy. The move should provide an opportunity to continue the impetus for SD and EPI. But the opportunity presented by the Lisbon strategy to operationalise sustainable development does not seem to have visibly grasped ([44]).

There have been few attempts to evaluate the EU SDS, its implementation or its effectiveness in relation to environmental policy integration. Those that have been made refer to the 'strategic jigsaw' of the strategy and the consequent difficulty of engaging citizens and others ([45]). The relationship between the Lisbon strategy and the SDS could be further clarified. Major reviews of the SDS and the Lisbon strategy should be concluded in 2005.

4.1.4 Sixth environmental action programme (EAP) and thematic strategies

The EU's environmental action programmes (EAPs) suggest specific environmental proposals for legislation that the Commission intends to put forward, and discuss broadly the shape, content and direction of EU environmental policy.

Third EAP (1982–86)

The third EAP placed integration at the top of its list of items declared to be important.

Fourth EAP (1987–91)

The fourth programme (1987–91) proposed the development of internal procedures and practices to ensure integration took place routinely in relation to other policy areas.

Fifth EAP (1992–2000)

The fifth EAP (1992–2000) gave special attention to five sectors: agriculture, energy, industry, tourism and transport ([46]). A 1994 Commission review of progress in implementing the fifth EAP noted the 'lack of willingness to adequately integrate environmental and sustainable development considerations into the development of other policy actions' ([47]).

Sixth EAP (2002–12)

The sixth EAP (2002–12) focuses on four priority issues: climate change, nature and biodiversity, environment and health, and natural resources and waste. It proposes a number of strategic approaches, including integrating environment into other EU policies. The Cardiff integration strategies and the EU SDS are both to be informed by the sixth EAP.

The sixth EAP takes a thematic rather than sectoral approach to environmental issues, with a series of thematic strategies to be developed by mid-2005. The thematic strategies are to cover soil, the marine environment, pesticides, air quality, urban environment, natural resource management, and waste prevention and recycling. An action plan on environment and health, and the biodiversity strategy are being treated as thematic strategies.

It is not clear how the thematic strategies and their implementation will relate to the existing Cardiff integration strategies and the EU SDS, and, in turn, how effectively these will link to the 'mega-strategies' including the EU Treaties themselves, the European governance agenda and the Lisbon strategy (Figure 3).

([43]) COM(2002) 82 final.
([44]) EESC, 2003.
([45]) Baldock, 2002; EEAC, 2003.
([46]) Haigh, 2003.
([47]) COM(94) 453.

4.2. The administrative culture and practices

4.2.1 Cross-governmental leadership and coordination

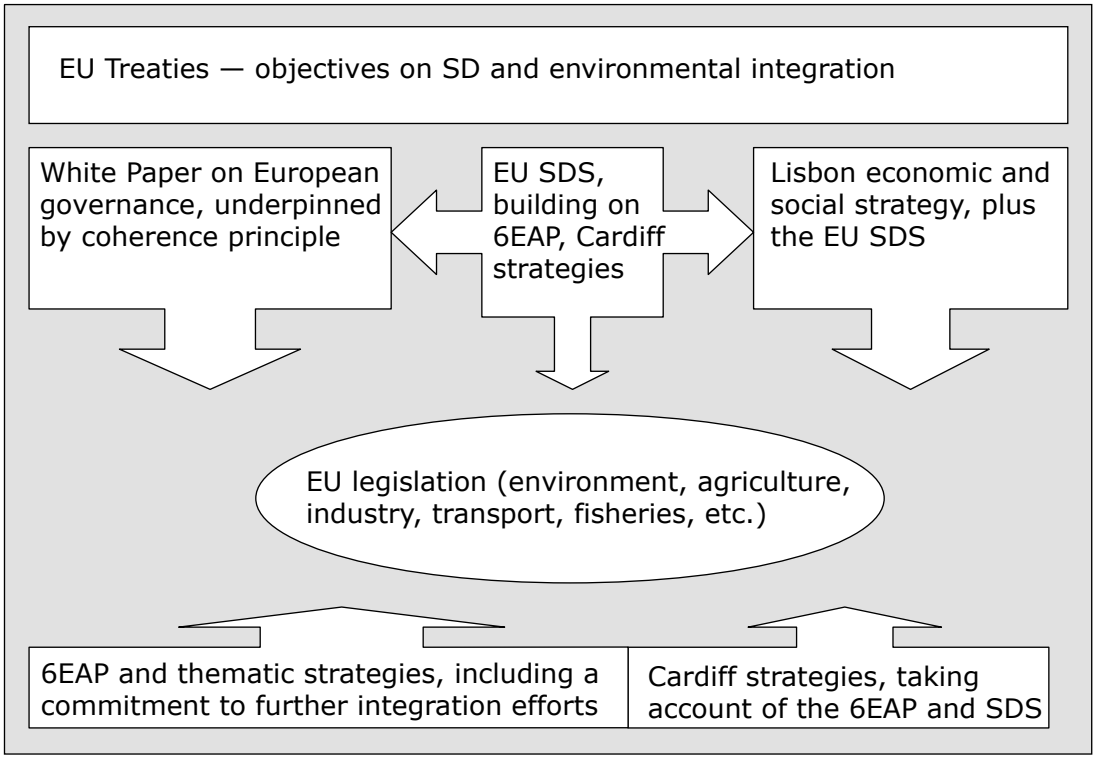
The EU's SDS and Cardiff integration strategies provide an important strategic framework for integration. But changing presidencies and their varied interest in integration and sustainable development, as well as poorly defined roles as between the Commission and Council, coordination within the Council and leadership issues have weakened the Cardiff process in particular ([48])([49]).

The spring summit is assigned an environmental role in terms of steering and reviewing the EU SDS, but in practice political priorities tend to focus on the economic and social agenda of the Lisbon strategy. The General Affairs and External Relations Council has been assigned a coordinating role, but it has not been prominent in strengthening the EU SDS. Within the Commission, it has been the Commission President and the Secretariat-General that have formally been responsible for the EU SDS process, with the Environment DG contributing in relation to the environmental dimension of the process.

The Cardiff integration process has depended on the priorities of six-monthly Council Presidencies, that is, the shifting priorities of just one of the EU institutions. Responsibility for developing individual strategies has been given to the sector Councils themselves, frequently supported by the parallel Commission departments. The Environment Council and the Environment DG have not had an explicit role in overseeing the process, although the Environment DG is now involved through its annual stocktaking of progress. The 2004 stocktaking of the Cardiff process referred to weaknesses in leadership and suggested that the Commission would come forward with suggestions for improving coordination and oversight of the process, although it stopped short of proposing ways to improve active steering.

The institutional arrangements for both the EU SDS and the Cardiff integration strategies have, above all, lacked clarity, while the Environment Council and Commission DG have had limited ability

Figure 3 EU strategic framework for environmental integration and SD



([48]) Wilkinson *et al.*, 2002.
([49]) CEC, 2004c.

to 'enforce' responsibilities. Meanwhile, the European Parliament has not been particularly engaged in this area and, in contrast to the national level, there is no independent SD or environmental advisory council or similar body to follow and review progress on integration and sustainable development issues ([50]).

4.2.2 Coordinating specific sector and environment interests

Some EU organisational measures have been put in place to help 'break down the walls' between specific sector and environment departments, in support of environmental integration. Several sectoral Commission directorates-general (DGs) now have units dedicated to environment and/or sustainable development, including the DGs responsible for enterprise, development, transport, energy, fisheries and agriculture. Two DGs have also assumed a more issue-focused remit: the Agriculture and Rural Development DG, and Fisheries and Maritime Affairs DG.

At the Council level, joint formal and informal meetings have been used to support closer working between environment and other officials. There has been occasional attendance by environment officials at non-environment Council meetings.

The environmental thematic strategies under the sixth EAP are providing new institutional settings for advancing the integration agenda, as they bring together stakeholders, the scientific community and different DGs to define the issues, and develop suitable policy options. Some thematic strategy working groups are chaired by sectoral DGs.

The focus of thematic strategies on environmental themes rather than sectors gives the Environment DG a stronger role in integration issues, in many ways complementing the more 'devolved approach' taken under the Cardiff integration process. Thematic strategies also demand strong Member State involvement, notably in relation to soil and urban policies where EU involvement is quite limited. They consequently provide an opportunity to integrate both across sectors and across levels of government.

Other examples of mechanisms that address EU/national integration include:

- the Joint Expert Group on Transport and Environment formed by the Commission in 1997. It consists of one expert from the transport side and one from the environment side from each Member State. The group advises the Commission in relation to the transport/environment integration strategy;

- the Green Diplomacy Network, an informal network of environment experts within foreign ministries established in 2003. This aims to promote the use of the EU's extensive diplomatic resources (diplomatic missions, development cooperation offices) in support of environmental objectives. The network is also to consider how foreign ministries are integrating environmental concerns into their working processes across the spectrum, including organisational and procedural aspects of their work.

These initiatives are believed by many to represent important advances in support of integration. There is, however, significant potential for further development of mechanisms that coordinate EU and national environmental integration efforts ([51]). The role of the open method of coordination in environmental policy — involving coordinating national action rather than imposing legal requirements on Member States — is being explored in relation to the environmental technologies action plan ([52]).

4.2.3 Planning, budgeting and audit

There is great potential to link strategic sustainable development or policy integration commitments to annual or multiannual policy cycles. This is perhaps all the more relevant where several sets of 'competing' strategic objectives have been identified, as is the case with the EU SDS and the Lisbon strategy. But there is currently little coordination between, on the one hand, the EU SDS and the integration

([50]) EEAC, 2003.
([51]) Kraemer *et al.*, 2003.
([52]) CEC, 2003.

strategies, and on the other hand, the new multiannual strategic policy planning processes of the Commission and Council (see Box 4.2).

The Commission's work programme for 2003 made no specific reference to taking forward the sectoral environmental integration strategies, simply referring to developing 'measures to ensure sustainability and coherence in and between a number of internal and external policies (…) as well as effective follow-up to the Gothenburg conclusions'. The Commission also recognised the need for coherence and integrated implementation of agreed priorities by all EU institutions. To that end, the 2003 work programme included a 'structured dialogue' with the Council and the European Parliament over policy priorities.

Future environmental priorities identified in the framework of the EU SDS can, at the same time, be taken fully into account in the parallel cycles for strategic planning and programming, within both the Commission and Council ([53]). This is equally applicable to budgetary planning cycles. EU expenditure plans are set out in seven-year financial perspectives (e.g. 'Agenda 2000'). These are politically agreed at Heads of State or Government level, with expenditure ceilings identified in relation to broad policy areas. According to Article 3 of the sixth EAP, its objectives should be taken into account in future financial perspective reviews of Community financial instruments. One of the main headings of the proposed financial perspectives covering the period 2007–13 is 'sustainable development' although many of the priorities under this heading correspond to the growth and competitiveness objectives of the Lisbon strategy.

Another area showing potential for improvement is auditing. Reports of the EU Court of Auditors have contributed valuable information on environmental aspects of EU expenditure programmes or other budget items. But reports normally examine whether specific expenditure regulations are being complied with, rather than considering wider EU objectives, such as those set out in the EU Treaties or in secondary EU environmental legislation. The Court's contribution will therefore tend to be limited to evaluating policies that have already been 'greened', such as the rural development programmes or the Cohesion Fund.

4.2.4 Investing in EU institutional capacity and resources for EPI

It is important to allocate resources to support the environmental integration or sustainable development agenda. In addition to the environment units that have been established in sector directorates-general, specialist sectoral expertise has also been expanded within the Environment DG. The DG now has staff working full or part-time on agriculture, fisheries,

Box 4.2 European governance reforms — towards strategic planning

The Prodi Commission (2000–04) has seen the introduction of a number of strategic changes, notably in relation to the EU's governance structure. Among these was the White Paper on European governance ([54]) and the 'future of Europe' discussions that led to the draft constitution for Europe. In addition to these higher profile initiatives, there has been a quiet revolution in the strategic management and coordination of Commission and Council activities. New Commission strategic planning and programming cycles were introduced, resulting in the production of Commission legislative and work programmes. An action plan on 'better regulation' sought to improve the efficiency of EU interventions, leading to the introduction of new impact assessment procedures.

In addition, changes to the Council were agreed at the Seville summit, formally giving the General Affairs and External Relations Council a more prominent and strategic coordination role. This Council has also been given responsibility for developing strategic and annual operating programmes.

(53) Wilkinson et al., 2002.
(54) CEC, 2001a.

trade, development, industry, economics, transport, etc. A further increase in capacity to handle environmental integration may improve coordination and consultation.

The Cardiff integration strategies do not address resource needs associated with strategy delivery ([55]). The exception is the Development Council integration strategy which pointed out that the capacity of the Commission services required for effective environmental integration both in Brussels and in the delegations should be ensured through the allocation of appropriate human resources, as well as training, knowledge-sharing and the proper use of feedback mechanisms.

4.2.5 Green housekeeping and environmental management

The EU eco-management and audit scheme (EMAS) is a management tool for public administrations as well as private companies (Regulation (EC) No 761/2001). EMAS covers both internal management and indirect effects such as those related to financial services or administrative and planning decisions. EMAS certification could therefore be taken as reflecting at least an ambition to integrate environmental issues within an administration's internal management system.

The European Commission's aim is to obtain EMAS registration in two phases. During the 'EMAS in the European Commission — first pilot phase', the European Commission will apply EMAS to three of its services in Brussels. These are: the Secretariat-General, the Environment DG and the Administration DG. On the basis of the results gathered in the first phase, the Commission will decide on whether to extend the application of EMAS to all its departments and request EMAS registration. The Commission is hopeful that its work will set an example that will be followed by national public organisations.

The Committee of the Regions, together with the European Economic and Social Committee, started to implement EMAS in early 2002. The European Parliament and the EEA are also preparing for EMAS registration.

4.3 Assessment and consultation to underpin policy and decision-making

4.3.1 Ensuring coherent decisions

The European Parliament and Commission have introduced procedures for dealing with subjects that are of direct relevance to different departments or committees, although it is not clear how effective these are in furthering policy coherence. In the Commission, the principal mechanisms involve establishing ad hoc task forces bringing together different directorates-general, as well as standard inter-service consultation procedures giving all DGs an opportunity to comment on draft documents before these are adopted by the Commission as a whole. Although decisions are not always based on unanimity, the collegiate nature of the Commission should also support relatively coherent documents from being agreed.

The Parliament's plenary voting system ensures that all MEPs have an opportunity to vote on amendments to legislation, even though the detailed work on reports is undertaken in committee. For dossiers affecting the interests of several committees, the Parliament has established a more formalised process. Although only one committee is designated as the 'responsible' committee to examine a particular proposal, other interested committees may also examine proposals and give their opinion. In cases where a question falls almost equally within the competences of two committees, or where different parts of the question fall under the competence of two different committees, the 'enhanced cooperation' procedure applies. This includes a requirement that the rapporteur (from the responsible committee) and the draftsman (from the committee asked for an opinion) 'endeavour to agree on the texts they propose to their committees and on their position regarding amendments' (EP Rules of Procedure, Rule 162a). Finally, the Parliament has established a temporary cross-cutting committee to respond to the Commission's proposals on the financial perspectives. The temporary committee

(55) Fergusson *et al.*, 2001.

consists of representatives from several permanent committees, including the environment committee.

4.3.2 *Ex ante assessment of policy proposals*

Ex ante assessment is a process that should ensure that decisions are underpinned by an assessment of the potential impacts of the policy proposal and its alternatives. This typically includes provisions for stakeholder involvement, public consultation, quality control and monitoring. Depending on the role of the assessment (ensuring that environment is integrated in the policy and/or ensuring the overall sustainability of the proposal) *ex ante* assessments can either focus on environmental impacts (such as strategic environmental assessment) or be broader in scope and include social, economic and environmental impacts (sustainability impact assessment, regulatory impact assessment).

While the EU Member States now have a legal obligation to undertake strategic environmental assessments (SEAs) ([56]), within the European Commission itself there has only ever been an administrative requirement to undertake SEAs of EU legislative proposals. This was signalled in the fifth environmental action programme in 1992 which was introduced in 1993, and reinforced from time to time by declarations from EU Heads of State or Government. In several documents, the Commission profiled strategic environmental assessment as a means to help ensure the implementation of the Treaty's Article 6 on environmental policy integration. In practice, attempts to install a system of SEA for Commission proposals have not been successful.

Building on previous failed attempts, the EU SDS (Gothenburg, 2001) called for the introduction of 'mechanisms to ensure that all major policy proposals include a sustainability impact assessment covering their potential economic, social and environmental consequences'. This coincided with broader discussions on European governance where improved coherence and efficiency in policies were identified as a priority. Subsequently, the Commission proposed that 'a coherent method for impact analysis' would be introduced for all major Commission proposals, by the end of 2002 ([57]). This led to the introduction of a new system seeking to integrate all existing internal procedures for impact assessment. An interinstitutional agreement on better regulation has subsequently been agreed, between the Parliament, Council and Commission, committing all institutions to using impact assessments.

The new Commission impact assessment procedure should ensure that environmental information is given greater consideration in the decision process. The process was initiated with a view to 'learning by doing'. A recent report ([58]) concludes that, during the first year of the system's operation, the quality of extended assessments has been uneven, and several of them have been poor. There has been no formal mechanism for ensuring quality control, resources for undertaking assessments, and for the provision of advice, guidance and training are limited, and there appears to be no institutional framework within which 'learning by doing' can take place in practice. There are also no formal arrangements for involving Member States in impact assessments, even though it is often only Member States who are able to provide the Commission with national data, and details of likely implementation arrangements and their consequences. Approaches to stakeholder consultation have also varied widely between directorates-general.

4.3.3 *Consultation and participation procedures*

Unlike in many European countries, there are no formal structures in place to engage national or non-governmental actors in either the EU SDS ([59]) or Cardiff integration processes. Some efforts were made to engage stakeholders during the development of the SDS, and this was followed by a European Economic and Social Committee stakeholder event in 2002. The Committee has also prepared an exploratory opinion for the 2004/05 SDS review ([60]).

Stakeholder engagement in the Cardiff integration strategies has been variable,

([56]) Directive 2001/42 regarding the environmental assessment of certain plans and programmes.
([57]) CEC, 2001b.
([58]) Wilkinson *et al.*, 2004.
([59]) EEAC, 2003.
([60]) EESC, 2004.

frequently depending on the existence of already established consultation mechanisms in the Commission, and the initiative of Presidencies. Membership of some permanent Commission advisory bodies has been extended beyond the traditional industry representatives. For example, the official Advisory Committee on Fisheries and Aquaculture now includes a representative of environment NGOs. NGO representation on a wide range of other working groups has been extended significantly in recent years.

Further efforts to engage stakeholders are being made in follow-up to the Commission's European governance initiative, as well as the Community's signature of the Aarhus Convention concerning access to information, public participation and access to justice. One of the main ways in which consultation is now to be secured is through the Commission's new impact assessment system.

4.4 Policy instruments to deliver EPI

All EU policy ultimately takes the form of legislation, but the nature of that legislation varies greatly, with existing measures relating to funding and even tax harmonisation, as well as more traditional 'command and control' type measures setting out environmental objectives and/or standards to be achieved. Command and control legislation also includes more procedural environmental management measures relating to planning, environmental impact assessment and strategic impact assessment, public participation and information, and environmental management and audit.

The existence of comprehensive legal and other standards is seen as an important driver for environmental policy integration, and an important ingredient in the policy mix. In addition to 'stand alone' standards, there is often also a need to have these or additional standards reflected in sector policies.

The aim, from an environmental integration perspective, is to ensure the appropriate mix of instruments is being used to 'push' environmental integration at national and local levels, given the nature of the environmental challenge, the characteristics of the sector, and other considerations such as cost-effectiveness. Opportunities under the Treaties to adopt measures will also be a consideration.

4.4.1 Financial mechanisms to support environmental improvement

The removal of damaging subsidies or the introduction of positive financial incentives is important in order to internalise environmental costs. Funding is an important EU policy instrument; 80 % of the EU's annual EUR 100 000 million expenditure are dedicated to agriculture and regional development (Structural and Cohesion Funds). The European Investment Bank and the European Bank for Reconstruction and Development also make funding available.

Most funding is delivered through multiannual expenditure programmes, with access to EU funds dependent upon national and private co-financing. Over the years, increasing amounts have been used specifically to support environmental programmes or projects within the Member States and in developing countries, for example through the tropical forest budget line, the LIFE financial instrument and the Cohesion Fund. However, 'environmental' funding still represents a relatively small proportion of total EU expenditure.

The 'greening' of mainstream EU funding has been a key focus of EU integration efforts. In the 1990s, parts of the Commission and the European Parliament threatened to withhold funding unless environmental considerations were taken on board. Partly as a consequence of this, progressive improvements have been made in relation to funding rules, including recent revisions to the common agricultural policy and the common fisheries policy, to reduce environmentally damaging subsidies.

Apart from altering the type of funding available, EU cross-compliance mechanisms have been progressively introduced to promote integration in the development and implementation of national funding programmes. For the 2000–06 spending period, Member State access to EU regional and rural funding was made subject to national compliance with important provisions of the EU habitats and birds directives, and the nitrates directive, following changes agreed in 1999.

'Cross-compliance' provisions are also a feature of the common agricultural policy (CAP) with farmers having to meet environmental conditions, in order to access certain subsidies. Cross-compliance provisions were strengthened in 2003 by the mid-term review of the CAP, with Member States now required to have systems in place by 2005.

The potential role of cross-compliance in furthering EPI is significant, although clearly dependent on there being sufficiently integrated EU funding rules in the first place, sufficient support for promoting environmental integration within the 'enforcing' Commission departments, and adequate monitoring at the local and Member State level.

4.4.2 Other market-based instruments

The EU does not raise taxes itself although part of its resource base derives from import duties and national contributions based on VAT and GNI. For all sectors, the scope for the EU to introduce or strengthen national market-based instruments such as taxes and charges to internalise environmental externalities and thus 'get the prices right' is very limited, although some progress has been made with the adoption of the energy products directives. Further progress in harmonising national efforts is as good as prevented due to the requirement for decisions to be adopted by unanimity in the Council of Ministers. The Commission is taking the role of 'encouraging' the use — by Member States — of taxes and charges, most notably in its broad economic policy guidelines that are issued annually.

On the other hand, current and proposed legislation on road user charging (Eurovignette directive) does not allow for the inclusion of environmental costs (with the exception of costs of infrastructural measures to combat noise nuisance) in road user charging schemes on the national level. Only infrastructure costs may be included. Member States are, however, allowed to differentiate charges according to environmental characteristics of the heavy goods vehicle.

In addition, there are some other interesting cases where the EU has agreed measures or provisions that support the internalisation of external environmental costs, notably through the end-of-life vehicles directive, the waste electronic and electronic equipment directive, the water framework directive (full cost pricing for water supply) and the sulphur in mineral oils measures. The latter encourages tax differentials for zero sulphur fuel, which actually are in force in many Member States.

The EU introduced a major market-based instrument in its common climate change policy with the emissions trading directive ([61]). The trading scheme for CO_2 allowances started its first phase in January 2005.

4.4.3 Spatial planning to integrate sectoral and environmental issues

As with fiscal measures, the EU has limited competence to intervene in spatial planning directly, due to requirements in the Treaty for planning measures to be agreed by unanimity in the Council. The effect is that the EU has used alternative means to promote its planning objectives.

EU funding and specifically the Structural Funds and the Rural Development Fund have been used to promote integrated spatial development plans. In this way, the EU has also supported innovate sustainable development projects, for example, under the Urban community initiative. The EU has also adopted a recommendation on the integrated management of coastal zones, although, as its name suggests, this is not binding on Member States.

4.4.4 Environmental management instruments

The EU has adopted a suite of directives supporting or demanding other aspects of environmental management. These include: the eco-management and audit scheme (EMAS) for public administrations as well as private companies; project and strategic environmental assessment; the 'Flower' eco-label system and other product specific labelling schemes; and various measures concerning access to information, participation in decision-making and environmental justice. Some of these measures or similar instruments are being applied at the EU level directly, although most are aimed at the national level.

([61]) Directive 2003/87/EC.

4.4.5 *Other instruments to promote EPI*

Voluntary agreements have also been formed at the EU level, notably an agreement aimed at reducing CO_2 emissions by new passenger cars through technological development and market changes, concluded with the European, Japanese and Korean car industries. Numerous initiatives have also been introduced to raise awareness, such as the car-free day, or to exchange information on good practice.

4.5 Monitoring and review mechanisms

4.5.1 *Reviewing the EU sustainable development strategy*

The EU's spring summits of Heads of State or Government are to evaluate the implementation of the Lisbon objectives and the SDS on the basis of annual spring reports prepared by the Commission. These reports are based on regular, separate policy reviews and guidelines produced each autumn by the Economic and Finance, and Employment Councils. No similar procedure exists in relation to environmental policy, and so far, the spring reports have devoted relatively little attention to the environment, compared with economic and employment priorities.

Two new EU reports were to strengthen the environmental component of the 2004 and subsequent spring reports: the environment policy review and the 'stocktaking' of the Cardiff integration process. In practice, neither the 2003 environment policy review ([62]) nor the 2004 Cardiff stocktaking ([63]) were produced in time for the 2004 spring report. Reports will also not be available in time to inform the 2005 spring report. Their continued production and timing may be reviewed as part of the review of the EU SDS.

The spring reports include reporting of progress against a number of 'structural indicators'. A separate set of sustainable development indicators (SDIs) is also under development. Both indicator sets are outlined in the following boxes.

In order to improve the existing approach to sustainable development indicators, it has been suggested that SD indicators should be balanced to reflect equally the environmental, economic and social dimensions of SD, and including indicators reflecting the contribution of sectoral policies to SD. In the long term, the mutual effects between all three dimensions should be monitored using a systemic set of indicators developed according to a general framework of sustainability goals ([64]).

4.5.2 *The mid-term review of the EU SDS, Lisbon and 6EAP*

SDS mid-term review

According to the Commission's 2001 proposal for an EU SDS, the strategy is to be 'comprehensively reviewed at the start of each Commission's term of office.' A review was initially planned for May 2004. In practice, a consultation exercise was initiated in the summer of 2004, with a review expected in 2005. The SDS review is an opportunity to further integrate the internal and international dimensions of the EU SDS ([65]). It may also draw on Eurostat's work on SD indicators and the EEA core set of indicators. It is be informed by an exploratory opinion of the European Economic and Social Committee that was requested by the Commission ([66]) and a stakeholder conference being organised jointly between the Committee and the Commission.

Lisbon strategy mid-term review

The Lisbon review process was launched in March 2004, when the European Council established a High Level Group (the 'Wim Kok Group') to examine ways of improving the delivery of the Lisbon objectives, and to assess the instruments and methods used so far. In the Group's report ([67]) environmental sustainability was included among the main areas where action was needed to meet

([62]) CEC, 2003.
([63]) CEC, 2004c.
([64]) SERI, 2003.
([65]) CEC, 2003.
([66]) EESC, 2004.
([67]) High-Level Group, 2004.

Box 4.3 The structural indicators

The European Council requested the Commission to evaluate the implementation of the Lisbon objectives and the SDS in an annual synthesis report — known as the 'spring report' — on the basis of a set of structural indicators.

The structural indicators were established before the environmental dimension was added to the process in 2001.The indicator set was adjusted at the Barcelona summit in March 2002, however, to include seven environment-related indicators — out of a total of 42 indicators.

The indicators presented for the spring Summit 2004 were reduced from 42 to a shortlist of 14 'core' structural indicators. Three of these 14 indicators are environment-related, namely covering greenhouse gases emissions, energy intensity of the economy and volume of transport.

Box 4.4 Sustainable development indicators

After the adoption of the EU SDS, the Community's Statistical Programme Committee agreed to set up a task force under Eurostat — the Commission's statistical service — to develop a common response from the European statistical system to the need for sustainable development indicators (SDIs). The task force is to play an active role in identifying SDIs. The medium-term goal of the task force is to have a first portfolio of SDIs ready in 2004.

the Lisbon strategy goals of growth and employment. However, environment was presented mainly as an opportunity for eco-industries. The recently issued Commission communication to the 2005 spring Council 'Working together for growth and jobs — a new start for the Lisbon strategy' ([68]) reinforces the focus on achieving greater economic growth and higher employment — the environmental dimension of the strategy is hardly addressed. The review of the SDS is an opportunity to redress this imbalance.

Sixth EAP mid-term review

The Commission is to submit a mid-term report of the sixth environment action programme (6EAP), together with proposals for amendment, in 2006. Progress in implementing the 6EAP is to be evaluated, together with associated environmental trends and prospects. This is to include a review of the thematic strategies, on the basis of a comprehensive set of indicators. In 2012, the Commission is to submit a final assessment of the programme and the state and prospects for the environment.

4.5.3 Reviewing the Cardiff integration process and strategies

The Commission communication 'Partnership for integration' ([69]) included a call for the European Council to undertake periodic reviews of environmental integration into key sectoral policies. Subsequent European Council meetings have also requested specific reviews of progress.

Initial progress reports were submitted by the Commission in May 1999 for the Cologne summit, and in November 1999 on progress on integration ([70]) and integration indicators (COM(1999) 1942), for the Helsinki summit. A number of external reviews of all or parts of the Cardiff process have been commissioned by various national ministries (notably Austria in 2000, UK in 2000 and 2001, Germany in 2001, and Denmark in 2002). Some of these reports have formed the basis of Presidency reports on progress. Most focused on the content and form of the strategies, rather than assessing the results of integration efforts in terms of changes in policies.

In a bid to revitalise the Cardiff process, an annual stocktaking was confirmed by the 2003 spring summit. The first stocktaking presents a summary review of the status of integration in each of the nine Cardiff sectors, as well as drawing conclusions as to how to take integration forward at the EU level ([71]). Importantly, the stated aim is to assess the implementation of the Cardiff strategies and related commitments.

([68]) CEC, 2005.
([69]) COM(98) 333.
([70]) SEC(1999) 1941.
([71]) CEC, 2004c.

Table 4.5 Commitment to and state of play of Cardiff strategy reviews

	First wave Councils			Second wave Councils			Third wave Councils		
	Agriculture	Energy	Transport	Development	Industry	Internal market	Ecofin	GAC	Fisheries
Commitment to review	Review due end-2003	Second review due 2002	Regular review	First review end-2004	CEC to report every two years	Comprehensive review end-2003	BEPGs ([72]) to be used to review progress	First review due 2003	Review on environmental performance of CFP end-2005
State of play by mid-2004	None produced	Paper in 2001; no second review	Reviewed 2001; no second review	–	None produced	Review 2002; no further review	Environment part of BEPGs since 2001	None produced	–

Source: Adapted from CEC, 2004c.

As noted in 2001, the treatment of monitoring and review arrangements in the individual sector strategies was very variable across the different sectors, with only a few strategies setting out plans for regular reviews ([73])([74]). Furthermore, in most cases, deadlines for reviews have not been met. Table 4.5 gives an idea of the commitments and state of play as regards reviews of the nine Councils. More detailed information is set out in Annex B. Where reviews have been completed, they are very variable between sectors, frequently couched in very general terms, and containing little substantive information or data ([75]).

In the context of its new annual stocktaking, the Commission has indicated its intention to develop a common framework and guidelines during 2005, identifying possible approaches to monitoring, review and updating the content of the Cardiff integration strategies.

4.5.4 Sectoral integration indicators

Within the context of the Cardiff process, the Helsinki European Council in 1999 asked the Council to develop integration strategies with the possibility of including a set of indicators for the sectors. This helped to generate new sectoral indicator work, with the European Commission and the EEA having been particularly active in taking forward work in relation to agriculture, energy and transport, and, to a lesser extent, fisheries. Prior to the Cardiff process, there was rather limited work on relevant EU sectoral indicators ([76]).

One of the best-known indicator reporting mechanisms that has been developed alongside the Cardiff process is 'TERM' (transport and environment reporting mechanism), although indicators are also being developed for other sectors (see Box 4.5). TERM is often presented as a

([72]) Broad economic policy guidelines.
([73]) Fergusson *et al.*
([74]) CEC, 2004c.
([75]) A factor, which may cause some confusion, is that in a number of sectors the Councils have merged their contribution to the Cardiff process with their contribution to the follow up of the WSSD and the commitments made at the WSSD.
([76]) Fergusson *et al.*, 2001.

Box 4.5 Developing sectoral indicators — transport, energy, fisheries and agriculture

Transport:

A distinctive element of the 'Cardiff' strategy for transport was the early adoption of an indicator-based transport and environment reporting mechanism (TERM). This was promoted by the EEA, working closely with the Commission (Environment DG, Transport and Energy DG and Eurostat) and others. A joint Transport and Environment Council meeting in 1998 first called for TERM. The EEA conceptual framework provided the basis for subsequent work ([77]). In addition to indicators on the sector's development and environmental pressures and impacts, it includes integration indicators covering the presence of national integration strategies, integration procedures and cooperation, transport/environment monitoring systems and the uptake of strategic environmental assessment in the transport sector and policy responses such as progress in internalising external costs. Starting in 2000, reports have been published on an annual basis, the most recent one being TERM 2004 ([78]).

Energy:

The EEA, in 2002, produced the report 'Energy and environment in the European Union', which is an assessment of progress by the energy sector towards environmental integration and follows the TERM model. A multi-thematic pocketbook titled Energy, transport and environment indicators has been published comprising data collected by Eurostat and the EEA. The objective of the publication is to provide an overview of the most relevant indicators on energy, transport and environment, with a particular focus on sustainable development. It presents data for the EU Member States as well as the accession and candidate countries and the EFTA countries. Data of the former pocketbook Integration — indicators for energy have been integrated into this new publication.

Agriculture:

Work on agri-environmental indicators is ongoing under the IRENA project — 'Indicator reporting on the integration of environmental concerns into agricultural policy'. This is led by the EEA in partnership with Agriculture DG, Environment DG, Eurostat and the Joint Research Centre. IRENA seeks to describe the link between agriculture and the environment in the EU-15 Member States, as well as certain policy responses.

The EEA is also working on indicators to help track the environmental performance of European marine fisheries and aquaculture, and in parallel, Fisheries DG (European Commission) is working on integration indicators.

model for sectoral integration indicators, covering both institutional and procedural aspects of integration, as well as the 'results' of integration efforts. Lessons from TERM suggest that a further broadening of its geographical coverage could be beneficial, as could a focus on progress (rather than the status quo) in procedural integration and resulting policy responses. It has also been suggested ([79]) that a limited direct policy use of TERM occurs when so-called 'symbolic' use is detected, which might be explained by the fact that TERM represents a 'hybrid 'of an information and a monitoring framework, with few formal control mechanisms available, and is also still a relatively new tool.

The EEA is also working on indicators to help track the environmental performance of European marine fisheries and aquaculture, and in parallel, Fisheries DG (European Commission) is working on integration indicators.

([77]) EEA, 1999b.
([78]) EEA, 2004.
([79]) Gudmundsson, 2003.

5 Achieving EPI: key challenges and opportunities

There are many ways in which bodies — including both political and administrative elements — are organised that make it more difficult to taken environmental issues fully on board.

High-level political commitment to environmental policy integration is critical. Great strides have been taken in Europe in terms of adopting national sustainable development strategies, but further and ongoing political commitment is needed. Securing this calls for action on several fronts. Among these is the articulation of objectives and targets in support of EPI specifically, which can be used to build political commitment and convey a clear message to the public and to administrations.

Within administrations, there remains a tendency for governments to be structured and organised in a way that affects the delivery of increasingly interdependent environmental and sustainable development objectives. Greater coherence and coordination within and between levels of government will support more (cost-) effective policies. Clear internal mission statements, restructuring and/or better coordination within organisations, greater resources and capacity for EPI, and improved information, decision-support and public participation mechanisms can help to make a real difference. An overarching independent authority to push forward integration can also be valuable.

Organisations can promote EPI by changing their 'internal' culture and practices, and by developing policies or approaches that support integration when policies are being implemented. In trying to identify the most promising approaches to support EPI, it is valuable to consider how competencies are distributed between institutions and governance levels, as well as ways of harnessing the policy instruments typically employed in the different sectors.

EPI is, of course, also affected by important factors outside of governments, such as the very nature of sectors causing environmental impacts and the extent to which these impacts are 'inherent' to the sector's activities, for example, where EPI demands a limitation in the volume of production or fundamental changes to patterns of consumption, rather than simply 'win–win' or 'win–neutral' adjustments. The perceptions of society and specific stakeholders are also important, as is their ability to influence or inform policy-making and implementation. Overall, efforts to support EPI need to be closely tailored to the particular sector and organisations involved.

5.1 'Internal' challenges and opportunities for EPI

There are a number of factors internal to political and administrative systems, which can prevent governments and other organisations from taking environmental issues fully into account in their day-to-day workings. The specific nature of these 'internal' challenges will vary from one country or organisation to another, depending also on cultural or governmental styles, as well as personalities. For example, promoting the concept of improved communication and coordination between government departments is likely to be easier in smaller countries with progressive political environmental awareness (for example, Austria, Sweden and Finland).

Nevertheless, most governments or organisations will tend to face challenges and opportunities for EPI in one or more of the following areas.

5.1.1 High level and clear political commitment to EPI

The public and administrations could often benefit from clearer messages about the importance of EPI. Such messages may be lost due to fears of the (particularly short-term) social and economic implications of

EPI, or at least its political ramifications. Environmental issues may simply not be on the political agenda or may be on the agenda, but be seen as a long-term issue. The weaker the high-level political commitment, the more important it is to find other ways to promote EPI across organisations ([80]).

Political commitment can be secured, for example, through information on the consequences of action and inaction, or simply through political pressure. Strategic statements or commitments are often used as a way of securing — even if only gradually — political commitment, and can subsequently be used to guide the work of organisations. Strategic commitments and objective setting can also help to establish the political and thus public legitimacy of sustainable development ([81]).

5.1.2 'Compartmentalised' government

There can be a tendency for ministers and officials to focus on the delivery of sector-specific objectives, despite the increasingly interdependent nature of sustainable development objectives and principles. Even if environmental concerns are high on the political agenda, departments may resist taking on new objectives and perspectives ([82]) or may take them on, but only in very marginal ways ([83]) Environmental authorities can lack sufficient authority to insert environmental objectives into the decision-making of other sectoral authorities ([84]).

Compartmentalisation can be addressed by: developing clear internal missions and strategies; restructuring and better coordination within organisations. Resources and capacity can often be enhanced to support learning and to get people to work across departmental boundaries, and various information, management, decision-support and public participation mechanisms can help to ensure that information, knowledge and decisions reflect environmental considerations more appropriately. The responsibility for driving forward integration can also be anchored in an overarching authority, which can take an independent and long-term perspective.

5.1.3. Integration between levels of governance

Getting integrated decision-making and implementation at different levels of governance, including the national and regional levels, can be challenging, particularly when EU policies appear to be sending differing signals to actors, that is, Member States or local authorities. The need for integration efforts to cut across different governance levels — vertical integration — is increasingly important, particularly given the tendency for policies and governance to be devolved.

Multi-level structures, committees and communication channels, as well as policy instruments, can be used to promote integration during the policy-making and implementation stages. EU funding and the creation of a right for environmental organisations to participate in national and local decision-making, are examples.

A number of other important dimensions need to be considered when trying to identify and address both the internal and external challenges and opportunities for EPI.

5.1.4 Multitude of institutions involved

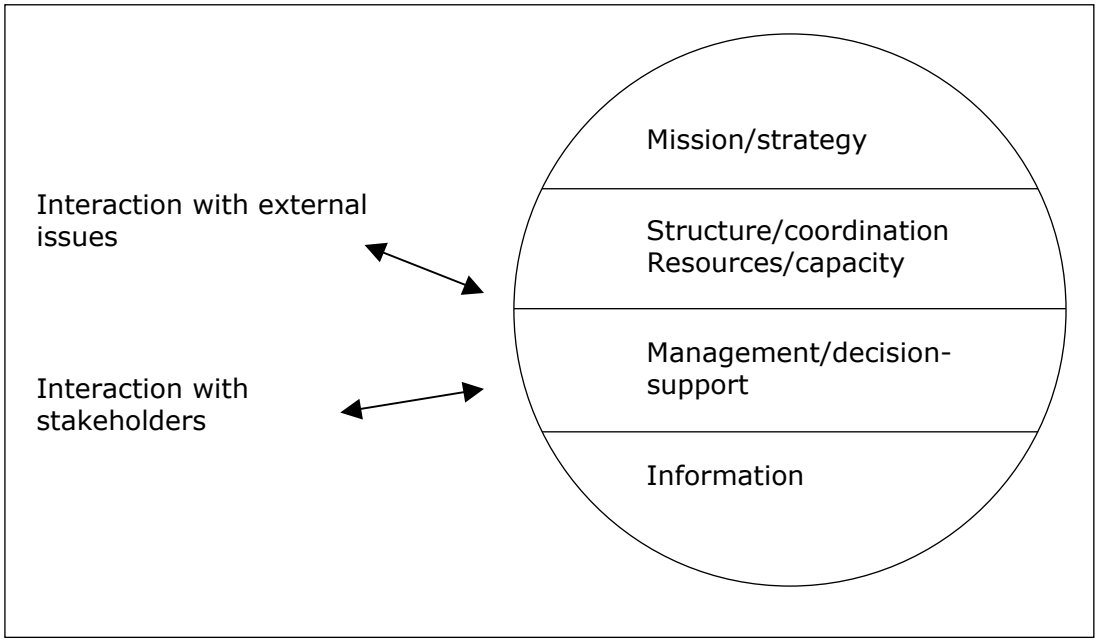
The EU, the Commission, Council of Ministers (and European Council) and European Parliament each have a role to play in EPI. Environmental integration efforts also need to take account of the multi-level governance of the EU itself, since national and regional interests are involved in EU policy-making ([85]). In addition, EPI is not limited to governments but also needs to reach to private organisations.

5.1.5 Sharing out of competences

EPI efforts have to reflect the sharing out of competencies between the EU, countries and regions — within the EU, Community and Member State competence or involvement in policy varies significantly between different policy areas, for example from a framework consisting largely of Commission papers plus Council conclusions (such as transport), to areas of very detailed legislation (such as internal market) ([86]).

([80]) Steurer *et al.*, 2004.
([81]) Lafferty, 2004, after Lafferty and Meadowcroft, 2000.
([82]) Wandén, 2003.
([83]) Sørensen, 2003.
([84]) Lafferty, 2004.
([85]) Jordan *et al.*, 2000.
([86]) Wilkinson *et al.*, 2002.

Figure 4 Key organisational issues affecting EPI



5.1.6 The use of specific instruments

Different types of instruments are principally employed in different sectors and at different levels of governance. These variously include spatial planning, command and control-type instruments, and market-based or economic instruments, with the EU, for example, having limited opportunity to employ either fiscal or planning instruments.

5.2 Key 'external' factors affecting EPI

The impact of strengthening political and administrative arrangements in support of EPI will depend on the 'external' context within which governments operate. This includes the very nature of the sector being addressed, and the role and views of society and different interest groups.

5.2.1 The nature of the sector

EPI will be influenced by the existence of policy differences, for example, where EPI demands a limitation in the volume of production or fundamental changes to patterns of consumption, rather than just 'win–win' or 'win–neutral' adjustments ([87]). Some sectors are more easily managed due to the nature and number of key actors and their willingness to change, as well as the technologies, investment and research available to the sector. For example, the challenges for the agriculture sector and the energy sector will be very different. An additional issue is that in some cases, 'sectors' are defined according to administrative divisions, such as 'General Affairs' or 'External Relations', rather than actually relating to specific economic groupings or activities.

5.2.2 Views of society and of different interest groups

Depending on their political power, these views can be important. Relatively small interest groups or sectors can have a major impact on EPI. The fishing industry illustrates that, even where the sector has a lot to gain in the long term from sound resource management, short-term losses dominate political discussions.

There are ways to ensure that decisions are not adversely influenced by lobbying, for example by opening up decision-making processes and making available better information, including information on scenarios and options, so that issues are

([87]) Wandén, 2003.

prepared and debated in as balanced a way as possible, but without infringing on the political nature of decisions.

5.2.3 International commitments

The existence of environmental commitments and the wider international context within which policies and political discussions are framed, will be important here. Thus, the body of environmental laws that new EU Member States have had to comply with in order to accede to the EU has had a major influence in many cases. The World Trade Organisation discussions relating to agricultural subsidies are another good example of this, acting as a driver for 'greening' EU agricultural subsidies ([88]).

5.3 Tailoring EPI responses

Given the numerous challenges facing EPI, and the different potential ways in which EPI can be promoted, efforts need to be combined and tailored, differentiating in particular between the different sectors, policy areas and organisations that affect the success of integration efforts. In some cases, environmental standards alone may be suitable but, in other cases, combinations of instruments may be called for. Opportunities to support greater integration can be tackled on a cross-sectoral, sectoral or measure-specific basis ([89]).

In relation to the transport sector, for example, integration initiatives need to consider actions that can target the public at large as well as specific groups of transport users. Measures would need to 'bite' at the local, regional and national levels, due to the limited direct role of the EU in land-use planning and fiscal policy. If EU-level activities are to be pursued, these would need to take account of the fact that various Commission departments or 'directorates-general' are involved in EU transport policy.

The following Table 5.3 gives a broad indication of differences between sectors that would need to be taken into account in developing EPI responses. The sectors are those covered by the EU's main EPI initiative — the Cardiff integration process (see Section 4). The target actors are those who are directly engaged in the activity of the sector. In the case of transport, this will include large sections of the public and providers of transport services.

([88]) Nilsson *et al.*, 2003.
([89]) Lafferty and Hovden, 2002; Persson, 2003.

Table 5.3 Addressing EPI — differences between selected 'sectors'

	Target actors	Number of actors	Technological/ scientific issues	Member State-level intervention	EU-level intervention	Policy instruments at EU level
Agriculture	Producers Processing Consumers	Many but cohesive	Low significance	High	High	Financial support
Transport	Governments Producers Oil Industry Operators/Public	Many	Long lead time for change	High (national, local)	Low	Limited financial support Regulation
Energy	Governments Producers Consumers	Few	Long lead time for change	High	Low	Financial support Regulation Fiscal measures
Industry	Producers Consumers	Few (but varies among sectors)	Medium lead time for change	Medium	Medium	Regulation
Internal market	Producers Consumers	Many	Medium — scientific issues	Low	High	Regulation
Development	Governments Producers NGOs/public	Relatively few	Low	Medium	Medium	Financial support/trade
Economics and finance	Governments Public/taxpayers	Few	Low	High	Low	Fiscal measures/ regulation
General affairs and external relations	Governments (regional policy) Governments and international organisations (trade/foreign policy) Producers Consumers	Relatively few	Low	Low (trade) High (regions) High (foreign policy)	High (trade) Medium (regions) Low (foreign policy)	Financial support, trade, diplomacy.
Fisheries	Producers Processing Consumers	Many but not very cohesive	Science — high significance	Low	High	Regulation

6 Proposed framework for evaluating EPI

As noted by the Commission in its 2004 Cardiff stocktaking report, there is no consistent framework for evaluating environmental integration.

The findings of this review were used to improve upon the main existing sets of evaluation criteria, in particular those developed formerly by the EEA (1999) and OECD (2002). A revised framework is consequently proposed, focusing on the key steps of the policy-making process where environmental issues need to be considered, and on the institutional structures and processes that underpin policy-making.

The following main areas are considered to be key elements of this evaluation framework: political commitment, vision and leadership, administrative culture and practices, assessments and information for decision-making, policy instruments, monitoring progress in integration and the environmental context of EPI. Evaluation of progress in these areas is supported by cross-sectoral and sectoral criteria, presented in the form of a 'checklist'.

The framework serves two purposes: firstly, helping to understand how to promote integration; and secondly, providing a single framework for undertaking evaluations of EPI in a consistent manner, and thus supporting comparisons between administrations and between sectors.

6.1 Developing a consistent framework for evaluating EPI

This report has identified a wide range of approaches and methods employed in support of EPI at both the national and EU levels. Although further progress is needed, some important examples of good practice are now emerging. But, as also noted by the Commission in its 2004 Cardiff stocktaking report, there is no consistent framework for evaluating environmental integration. This makes is difficult to capture improvements in practice, and to compare progress and exchange lessons between sectors and between countries. The Commission therefore suggests that approaches should be explored, to promote good practice and consistency between strategies in terms of monitoring and review.

The purpose of this state of play review was to revisit the reasons for pursuing EPI, as opposed to conventional environmental policy, and to review our understanding of what it means. In effect, this was used as a basis for examining actual efforts being made at the national and EU levels, and to identify areas of good practice. A further key step has been to examine the state of play as regards evaluating developments in this area. The review of existing practice has supported the development of a more systematic approach to identifying key opportunities and challenges facing EPI in Europe.

The whole report has been produced not simply to up-date the state of play, but to inform and strengthen existing evaluation frameworks. By developing a comprehensive approach to evaluation and a mechanism for highlighting and exchanging good practice, the report should also make a significant contribution in terms of the needs identified by the Commission.

There have been several earlier attempts to come up with EPI criteria. Perhaps the most comprehensive and prominent among these are (see also Annex A):

6.1.1 EEA set of criteria to monitoring progress towards integration (1999)

A set of 20-odd criteria developed to analyse progress under the fifth environmental action programme, and subsequently

informing the EEA's sectoral analysis. These related to four categories — institutional ('cultural change'), market ('getting the prices right'), management ('the tools for change') and monitoring ('tracking progress'). These criteria focus to a significant degree on policies and their effectiveness, reflecting issues identified in, for example, the fifth environmental action programme, the 'Environment for Europe' programme and the 1997 review of Agenda 21 ([90]).

6.1.2 OECD checklist on policy coherence and integration for SD (2002).

The checklist contains four clusters of questions, relating to: clear commitment and leadership; institutional mechanisms to steer EPI; stakeholder involvement; and effective knowledge management. Compared to the EEA criteria, the OECD questions are focused much more on how policies are made ([91]).

Other evaluation criteria have been developed, in particular to support evaluations of national sustainable development strategies and EU integration strategies ([92]).

These existing EPI criteria sets cover many if not all the key opportunities and challenges identified in this report. They both suffer from a rather partial focus on the issues — tending towards either the evaluation of process or policies rather than a balanced combination of the two. The criteria sets are also rather large and are not supported by more detailed sub-criteria and other guidance to help potential users of the frameworks. The result is that their application is rather cumbersome and resource-intensive and may result in evaluations that are not particularly comparable between sectors or countries.

That said, the content of and the approach taken to the existing criteria (that is, using a series of categories followed by questions relating to particular criteria) provides a solid basis on which to develop a new EPI evaluation framework.

6.2 Proposed elements of an improved EPI evaluation framework

In developing an improved framework, attention needs to be given to ensuring its relevance to a wide range of sectors and countries. A framework needs to be practicable by focusing on as limited a set of parameters as possible. Any evaluation criteria or similar should also be sufficiently concrete, ideally combining both quantitative and qualitative approaches. The criteria and resulting analysis should also generate information not only on what is done but also on the effectiveness of these efforts, something that is particularly critical but at the same time challenging.

There are a number of theoretical areas that can be identified as being relevant to the process of policy-making, and where change could be made in order to secure more environmentally-integrated policies. Based on the discussion in Section 6, this includes the development of political commitment and support, adjustments to culture and practices, and assessments for decision-making. Activities in these areas can help to prepare the ground so that policies are adopted that meet the needs of environment and sustainable development. Systems can also be introduced to monitor progress in integration — both the process and the policies, and their outcomes and impacts.

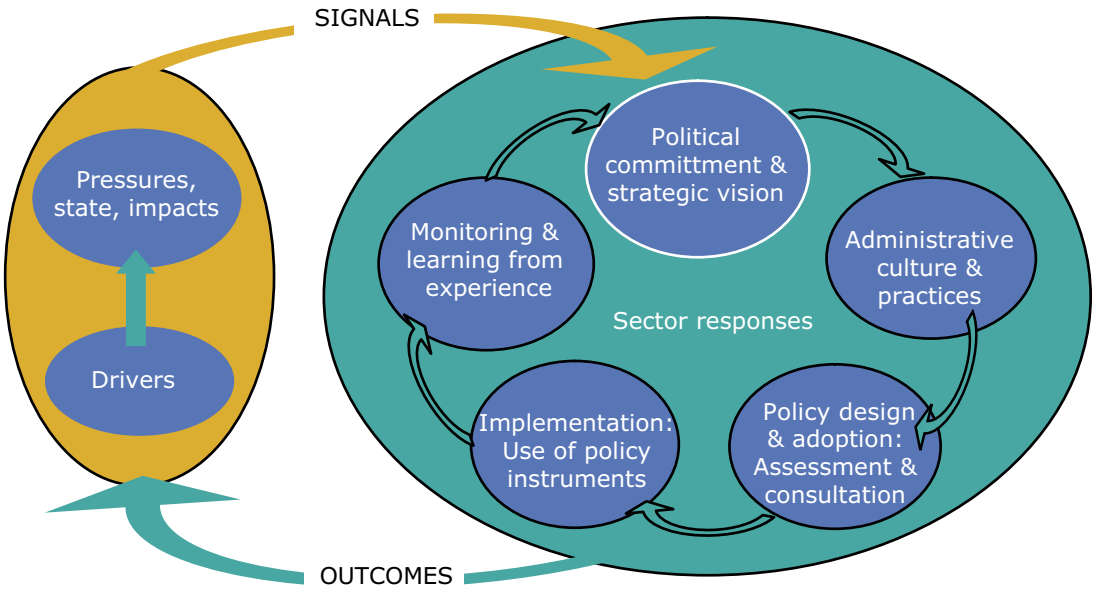
These areas are used for the purpose of this report to underpin an evaluation framework and as the basis for developing specific evaluation criteria. They are presented in Figure 5, which also puts EPI in the context of 'drivers, pressures, state of the environment, impacts and responses' (DPSIR framework).

6.2.1 Trends in drivers, pressures, changes in state of the environment, impacts

The ultimate aim of EPI must be to improve the way in which policies and policy instruments are applied, in order to ensure that the sector/country progresses to meeting its environmental objectives

([90]) Persson, 2003; Dalal Clayton, 2002; and Fergusson *et al*., 2001.
([91]) EEA, 1999c.
([92]) OECD, 2002b.

Figure 5 A virtuous circle for EPI



and targets, as well as broader sustainable development objectives which need to consider, for example, distributional issues, exploitation of win–win opportunities and respect of critical thresholds. Although it is generally difficult to establish a cause–effect relationship between changes in processes, resulting policies and the extent to which these policies are contributing to overarching and sector-specific targets, this nevertheless remains a key area to examine. The state of the environment and trends will also inform further work on environmental integration, making this area both an entry and an exit point for the virtual circle.

6.2.2 *Political commitment, strategic vision and leadership*

Political commitment can be expressed in different ways, ranging from public statements to legal texts such as constitutions. Long-term vision and direction can be provided, for example, through the development and adoption of sustainable development and integration strategies. The quality of such strategies, and political commitment more generally, can be assessed on the basis of whether such commitment is sustained, and whether there is a clear definition of the environmental issue, long and medium-term policy objectives, targets and timetables, and mechanisms to monitor implementation. In some countries, the EPI processes have been anchored by objectives and targets that have been politically agreed, including international targets, and that are consequently more acceptable to sectors or actors within them. Even with political commitment and vision, however, it is important that leadership is also provided, so that the public and administrations are continually encouraged to deepen their environmental thinking.

6.2.3 *Administrative culture and practices*

A change in the culture and practice of organisations and their staff may be necessary, with roles and responsibilities for the delivery of strategic objectives clearly defined and communicated. A core executive could be involved in overseeing the delivery of strategic objectives, ensuring leadership from the highest level. New or existing committees, structures and groups can be used to support better and more effective communication and coordination across sectors, at both political and administrative levels. New ministries/departments can also be created, as well as new integration units.

Organisational changes need to be supported by budgetary, planning and auditing process, and adequate resourcing and investment in integration capacity. For example, a key challenge is to ensure that there is sufficient and sufficiently high-level staff to oversee, promote and participate in integration efforts. Resources are also needed to support training and awareness-raising across organisations. The appropriate management of departments

and agencies can be supported through the effective use of environmental management and audit systems.

6.2.4 Assessment and consultation to underpin policy-design and decisions

Various tools or systems can also be introduced to support decision-making, addressing weaknesses in terms of how and when decisions are taken, and the extent to which environmental considerations, both information and actors, are involved in such decisions. The most obvious tools include environmental accounting systems, *ex ante* environmental assessment, and public participation and consultation mechanisms. The quality and thus value of such tools will depend on factors such as the stage in the decision-making process at which they are undertaken, whether they are seen as one-off exercises or ongoing processes, and whether there are resources and quality assurance systems in place.

6.2.5 The use of policy instruments

A combination of instruments can be deployed, in addition to traditional 'command and control' instruments, to help ensure environmental integration takes place at the national and individual level. The main criteria for policy design should be the effectiveness of the proposed instrument or mix, as well as their contribution to short-term and long-term efficient solutions. Instruments can include fiscal instruments, spatial planning, information instruments, liability and government subsidies. Where sectoral instruments are seen to be effective, it may be possible to harness them in favour of EPI.

Apart from getting the type of policy instrument or instrument mix right, it is critical that the content is sufficient to address the issue, and that their application is targeted to the appropriate areas. For example, a tax or charge placed on air emissions is unlikely to have the right effect unless it is set at a sufficiently high level, and is applicable to all major emitters. Where feasible, environmental taxes should be based on the magnitude of externalities, although knowledge is still scarce. Even without proper knowledge of external costs, however, financial impulses may play a crucial role in bringing about intended behavioural change in relevant target groups.

6.2.6 Monitoring and learning from experience

Monitoring and reporting mechanisms can generate information on how integration structures and processes are performing, how resources are being allocated and how these efforts are being reflected in terms of policies and environmental impacts. Such information can be aimed at the public, as well as policy specialists. Mechanisms can also be used as a means of exchanging information on good practice and innovation. There also needs to be a flow of information between scientific and policy communities, including *ex post* analysis and forward-looking information.

6.3 A checklist of criteria for evaluating EPI

Having proposed the basic areas of a framework for evaluating EPI, a set of more concrete criteria has been identified as a means of underpinning the framework — see Table 6.3. The criteria build on the approaches previously taken by the EEA and OECD, as well as discussions with the project advisory group, EEA staff and independent experts.

The criteria are presented as a sort of 'checklist' rather than a comprehensive list. This is because some criteria may be more relevant to the transport sector, for example, but may have less resonance with other sectors. It is nevertheless desirable to meet all criteria, even if the importance of meeting different criteria will not necessarily be the same (e.g. green taxes are probably 'worth' more than departmental integration 'champions'). The checklist furthermore distinguishes between sectoral and cross-governmental policies, given the different issues and challenges that arise in these contexts.

Despite this in-built flexibility, the checklist serves two key purposes:

- firstly, helping to understand how to promote integration;
- secondly, providing a single framework for undertaking evaluations of EPI in a consistent manner, and thus supporting shared learning between administrations and between sectors.

The framework is intended for use by, for example, EU administrations, national ministries and other actors wishing to examine and compare progress between sectors, as well as between countries or regions. The next steps of the project will involve fine-tuning the framework further, and developing a methodology for applying the framework so that both qualitative and quantitative information can be generated and used to evaluate and compare progress on EPI.

Table 6.3 A checklist of criteria for evaluating sectoral and cross-sectoral EPI

Context for EPI	**Cross-sectoral**	**Sector-specific**
1. Trends in drivers, pressures, changes in state of the environment, impacts	1a. What are the main economic and social driving factors facing the administration?	1a. What are the trends in the sector's main economic and social driving factors?
	1b. What is the magnitude and trends of socioeconomic impacts?	1b. What is the magnitude and trend of the sector's socioeconomic impacts?
	1c. Is society becoming more eco-efficient, i.e. decoupling its economic activities and outputs from environmental pressures and impacts?	1c. Is the sector becoming more eco-efficient, i.e. decoupling its economic activities and outputs from environmental pressures and impacts?
	1d. Is progress being made towards key overarching SD/environmental targets and objectives?	1d. Is the sector contributing appropriately to key overarching SD/environmental targets and objectives?
		1e. Is the sector on track to reaching its own environmental targets and objectives?
EPI categories	**Cross-sectoral**	**Sector-specific**
2. Political commitment and strategic vision	2a. Is there a high level (i.e. constitutional/ legal) requirement for EPI in general?	2a. Is there a high level (i.e. constitutional/ legal) requirement for EPI in the sector?
	2b. Is there an overarching EPI or SD strategy, endorsed and reviewed by the prime minister or president?	2b. Is the sector included in an overarching strategy for EPI and/or for sustainable development?
		2c. Does the sector have its own EPI or sustainable development strategy?
	2c. Is there political leadership for EPI and/or sustainable development?	2d. Is there political leadership for EPI in the sector?
3. Administrative culture and practices	3a. Do the administration's regular planning, budgetary and audit exercises reflect EPI priorities?	3a. Does the sector administration's mission statement reflect environmental values?
	3b. Are environmental responsibilities reflected in the administration's internal management regime?	3b. Are environmental responsibilities reflected in the sector administration's internal management regime?
	3c. Is there a strategic department/unit/ committee in charge of coordinating and guiding EPI across sectors?	3c. Are there cooperation mechanisms between the sector and environmental authorities?
	3d. Are there mechanisms for cooperation with higher or lower levels of governance?	3d. Are there mechanisms for cooperation with higher or lower levels of governance?

4. Assessments and consultation to underpin policy design and decisions	4a. Does the sector have a process for ex ante environmental assessment of its proposed policies or programmes?	4a. Does the sector have a process for ex ante environmental assessment of its proposed policies or programmes?
	4b. Are environmental authorities and stakeholders engaged in mechanisms for consultation and participation in the sector's policy-making process?	4b. Are environmental authorities and stakeholders engaged in mechanisms for consultation and participation in the sector's policy-making process? [coordinate with sector paper]
	4c. Is environmental information available for and used to inform policy-making?	4c. Is environmental information available for and used to inform policy-making?
5. Use of policy instruments to deliver EPI	5a. Do market-based mechanisms support environmental objectives (eg by removing damaging subsidies or introducing measures to 'get the prices right')?	5a. Do the sector's financial assistance programmes support environmental objectives (eg by introducing positive incentives or removing damaging subsidies)?
	5b. Is spatial planning used to integrate sectoral and environmental issues?	5b. Are other market-based instruments (eg taxes and emissions trading) used to internalise external environmental costs?
	5c. Are environmental management instruments used for EPI, e.g. EMAS, EIA/ SEA, eco-labelling, access to information/ participation/justice?	5c. Are there technical or other standards to promote environmental objectives in the sector?
	5d. Are other instruments used to promote EPI?	5d. Are other instruments used to promote EPI?
6. Monitoring and learning from experience	6a. Is progress towards sectoral and cross-sectoral EPI objectives and targets regularly monitored?	6a. Is the sector's progress towards its EPI objectives and targets regularly monitored?
	6b. Is there a systematic evaluation of the effectiveness of the policies that have been put in place?	6b. Is there a systematic evaluation of the effectiveness of the policies that have been put in place?
	6c. Are there mechanisms for exchanging good practice?	6c. Are there mechanisms for exchanging good practice?

7 Conclusions

This review showed that important steps are being taken in terms of developing the strategic framework for environmental integration and sustainable development in Europe — both at national and EU levels. Particular efforts have followed from the 1997 Amsterdam Treaty, although some changes were introduced well before 1997, to support more coherent governance, as well as EPI and sustainable development. The result is a slow but steady evolution in the organisational structures, tools and instruments used to support more integrated policy development and implementation.

A number of key areas remain where progress is not yet sufficiently evident, or where mechanisms have not been applied fully or effectively. These include the following.

- Despite the widespread development of sustainable development strategies, there is generally scope to improve the quality of SD and integration strategies, as well as evaluating their implementation and impacts, not least to support learning between countries.

- The introduction of cross-sectoral coordination mechanisms is increasingly a feature of EU and national environment and integration work, as is departmental restructuring and the introduction of environment units in sector departments. Whether arrangements are effective or sufficient, however, is not clear.

- Although some good practice is emerging, there is much scope to use regular government planning, budgeting and auditing exercises to ensure delivery of strategic objectives, including at the EU and national levels. How to monitor progress, particularly in terms of budgeting, remains a key question however.

- Some of the bottlenecks to integration may be caused by insufficient human and financial capacity. Capacity is particularly an issue as concerns integration across different levels of government ('vertical coordination'). The importance of 'vertical coordination' between different levels of government is increasingly recognised, both in terms of integrating environmental considerations in policy development, but also at the implementation stage.

- The Commission's new extended impact assessment procedures represent an important step forward, in terms of supporting more informed decision-making, although the quality of IAs is critical, as is the willingness to respond to their results. At national level, there are few examples of environmental or integrated assessment of policies, which makes EU-level assessment rather problematic.

- EU and national environmental policy has traditionally been delivered using 'command and control'-type instruments, although there is a gradual move towards subsidy reform/ financial incentives, environmental taxes and tax reform, and other market-based approaches. Harnessing the EU's funding instruments has been particularly important, with funds increasingly diverted to environmental objectives, and subjected to environmental criteria, including cross-compliance mechanisms. The effectiveness of different instruments and instrument mixes is not clear.

- Reporting on progress on SD is usually done on the basis of indicators covering sustainable development. The annual reviews of the EU SDS and integration strategies are limited and indicators for the EU SDS are not fully developed. Sector monitoring mechanisms currently exist for transport (TERM), agriculture (IRENA) and energy. For other sectors, monitoring mechanisms need to be further developed, and efforts needed to allow comparisons between sectors and to better link monitoring into the policy and decision-making cycles.

In each of these areas, more detailed analysis is warranted, in order to strengthen our understanding of whether certain

mechanisms are effective in practice, and why. The challenge is for any further work to build on and complement the work of the European Commission, and particularly focusing on the identification of concrete examples of good practice covering both cross-sectoral and sector-specific activities.

Using the main categories of EPI and the related cross-sectoral evaluation criteria proposed in this report, Table 7.1 gives an overview of progress, barriers, information gaps in relation to EPI, and recommendations for subjects that would benefit from further analysis and research by EEA and others.

Table 7.1 Overview of progress, barriers and information gaps in relation to EPI, including subjects for further research

Main aspect of EPI	Overview of progress, barriers and information gaps, at EU and national levels	Possible subjects for further analysis and research
1. Trends in drivers, pressures, changes in state of the environment, impacts	Eco-efficiency and distance to environmental targets are covered via various EEA reporting mechanisms, although limited sectors are currently covered. Some work on decoupling indicators is also being taken forward at country and OECD level.	Identification of additional criteria, relating to measurable effects of EPI — this could potentially include further examination of decoupling (e.g. emissions/resource use from GDP growth) or demand management objectives, and their suitability for individual sectors and governments as a whole.
2. Political commitment and strategic vision	There is a growing body of high level political commitment and strategic vision, in support of EPI and/or sustainable development. The quality of SD strategies and integration strategies could, in many cases, be improved. Securing evidence as to their implementation and impacts is critical, not least to support cross-country learning.	Further analysis is warranted to examine the existence and quality of sectoral strategies, with a view to identifying a sub-set of criteria to evaluate progress in relation to political commitment, strategic vision and leadership. A review and analysis of target setting in the various sectors, and an investigation of the synergies and conflicts between sectoral targets and environmental ones could help ensuring coherence of EPI objectives at a cross-sectoral level.
3. The administrative culture and practices	The use of vertically and horizontally cross-cutting structures is increasingly a feature of EU environment and integration work, as is departmental restructuring and the introduction of environment units in sector departments. Whether arrangements are effective or sufficient is not clear. Although some good practice is emerging, there is much scope to use regular government planning, budgeting and auditing exercises to ensure delivery of strategic objectives, including at the EU and national levels. How to monitor progress, particularly in terms of budgeting, remains a key question. Some of the bottlenecks to integration may be caused by insufficient staff and resources in integration units, and insufficient effort to increase awareness among staff more generally. Capacity is particularly an issue as concerns integration across different levels of government ('vertical coordination'). The importance of 'vertical coordination' between different levels of government is increasingly recognised, both in terms of integrating environmental considerations in policy development, but also at the implementation stage.	The long-term commitment to institutional changes and their actual influence in terms of policy outcomes is not clear and warrants more in-depth analysis. A review of good practice in the EU and third countries could provide insights into the effectiveness of efforts to 'green' budgetary, planning and auditing processes. Key areas of spending under the EU budget could be examined, notably the Structural Funds and other EU funding mechanisms. An information system to monitor the environmental consequences of expenditure at country and regional level would be valuable. An exploration of capacity to support EPI, as well as ways in which this could be evaluated more systematically in future, would be useful. Additional work could examine the effectiveness of EU/national and national/regional coordination mechanisms, such as those used to support the EC biodiversity strategy and the 6EAP thematic strategies.

Main aspect of EPI	Overview of progress, barriers and information gaps, at EU and national levels	Possible subjects for further analysis and research
4. Assessment and consultation to underpin design and adoption of policy	The Commission's new extended impact assessment procedures represent an important step forward. The quality of IAs is critical, as is the willingness to respond to their results. The increasingly widespread use of SEA at the national level is to be welcomed. The SEA directive's scope is, however, restricted to plans and programmes; only a few countries are also applying environmental assessment or integrated assessment to their policies. There is consequently a missing link between the ex ante assessment of policies at EU level (i.e. impact assessment) and at national policy level. Public consultation in the policy-making process should be improved in line with the Aarhus Convention and relevant EU measures.	Experience with (sustainability) impact assessments and strategic environmental assessment (SEA) could be examined, including the role of environmental information, public participation and also capacity building and resourcing issues. It could also be useful to explore whether the approach and response to IA and/or SEA might act as a broader indicator of EPI and how a link can be established between IA for EU policies and ex ante assessment of national policies.
5. The use of policy instruments	EU and national environmental policy has traditionally been delivered using 'command and control'-type measures, although there is a gradual move towards subsidy reform/ financial incentives, environmental taxes and tax reform, and other market-based approaches. It is not evident what works best for EPI. The internalisation of external costs has been variable across the EU. Harnessing the EU's funding instruments has been particularly important, with funds increasingly diverted to environmental objectives, and subjected to environmental criteria, including cross-compliance mechanisms. The effectiveness of different options, including cross-compliance, is not clear.	An examination of the different instruments currently in use at EU level would be useful, particularly focusing on the most effective or powerful, and how these instruments might best be 'harnessed' for EPI purposes. Using funding instruments to deliver EPI — under what conditions can funding be harnessed in this way? It would be beneficial to examine practice in a number of sectors, for example, agriculture and transport.
6. Monitoring and learning from experience	Reporting on progress on SD is usually done on the basis of indicators covering sustainable development, as well as individual sectors or topics. The annual reviews of the EU SDS and integration strategies are limited and indicators for the EU SDS are not fully developed. Sectoral integration indicators do not yet exist for all sectors. Arrangements for the more substantial SDS review in 2005 require clarification. Sector monitoring mechanisms currently exist for transport (TERM), agriculture (IRENA) and energy. For other sectors, monitoring mechanisms need to be further developed, and efforts need to be made to have comparable approaches and to better link monitoring into the policy and decision-making cycles.	The actual impact of monitoring and indicator systems on decision-making is not evident. Are there ways to improve their impact? Is there scope to extend sectoral monitoring systems across more sectors? What would the additional data requirements be? Information on action and inaction — a key barrier to EPI is the fear of the economic and social impacts of integration. It would be helpful to examine the role of information and research to underpin outlook and scenario work, associated with EPI. Despite the development of EPI in practice, it is not clear how much effort is given to exchanging good practice systematically. A paper could explore current practice in this area more systematically.

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Annex A. EEA (1999) and OECD (2002) integration criteria

OEEA 1999 criteria for assessing environmental policy integration

A	**Institutional integration**
1	Are environmental objectives (e.g. maintenance of natural capital and ecological services) identified as key sectoral objectives, and as important as economic and social objectives) in a sector integration strategy?
2	Are synergies between economic, environmental and social objectives maximised?
3	Are trade-offs between environmental, economic and social objectives minimised, and transparent?
4	Are environmental targets (e.g. on eco-efficiency) and timetables agreed? And are there adequate resources allocated to achieve the targets within the timetables?
5	Is there effective horizontal integration between the sector; environment; and other key authorities e.g. finance and planning?
6	Is there effective vertical integration between EU, national, regional and local administrations, including adequate public and other stakeholder information and participation measures?
B	**Market integration**
7	Have environmental costs/benefits been quantified by common methodologies?
8	Have environmental costs been internalised into market prices through market-based instruments?
9	Have revenues from these market-based instruments been directly recycled to maximise behaviour change?
10	Have revenues of these market-based instruments been directly recycled to promote employment?
11	Have environmentally damaging subsidies and tax exemptions been withdrawn or refocused?
12	Have incentives been introduced which encourage environmental benefits?
C	**Management integration**
13	Have environmental management systems (EMS) been adopted?
14	Is there adequate strategic environmental assessment (SEA) of policies, plans and programmes?
15	Is there adequate environmental impact assessment (EIA) of projects before implementation?
16	Is there an effective 'green' procurement (supplies) programme in public and private institutions?
17	Is there an effective product and services programme that maximises eco-efficiency (e.g. via demand side management; eco-labelling; 'products to services', etc.)?
18	Are there effective environmental agreements that engage stakeholders in maximising eco-efficiency?
D	**Monitoring/reporting integration**
19	Is there an adequate sector/environment reporting mechanism that tracks progress with the above objectives, targets and tools?
20	Is the effectiveness of the policies and tools for achieving integration evaluated and reported, and the results applied?

Source: EEA, 1999, 'Monitoring progress towards integration, a contribution to the global assessment of the fifth environmental action programme of the EU, 1992–99', working paper.

OECD 2002 checklist for improving policy coherence and integration for sustainable development

Clear commitment and leadership

- Is there a clear commitment at the highest level for the formulation and implementation of sustainable development objectives and strategies?
- Is this commitment effectively communicated to the various sectors of the government machinery and across levels of government?
- When gaps exists between the administrative and political agendas, are specific efforts made to bridge (or fill) them?
- Is leadership expressed through a sequence of priorities over time?
- Is government maintaining a sense of urgency, despite the longer-term nature of the issues related to sustainable development?
- Are pioneer activities of selected agencies and local communities encouraged, rewarded and disseminated?

Specific institutional mechanisms to steer integration

- Is there an institutional 'catalyst' (ministry, select committee, etc.) in charge of enforcing sustainable development strategies?
- Is this 'catalyst' located strategically within the government machinery (e.g. at the level of the Prime Minister's office)?
- Are there specific reviews of laws and regulations to check whether they conflict with sustainable development, and are sustainable development objectives embedded in new legislation and regulations?
- Are there mechanisms to ensure effective feedback between different levels of government?
- Are organisations moving from narrow sectoral perspectives (e.g. agriculture, industry, transport, etc.) to a more 'issues-oriented' agenda (e.g. air quality, mobility, poverty reduction, etc.)?
- Is sustainable development integrated into regular government exercises (e.g. the budget process)?
- Is there a clear framework for assessing the performance of public organisations with regard to sustainable development?
- Are there evaluation and reporting mechanisms to support sustainability appraisal within the public sector (i.e. indicators of progress, cost/benefit analysis, environmental and social impact assessment)? Does government make effective use of these evaluation and reporting mechanisms?
- Have specific external and independent auditing and reporting mechanisms been established?
- Has a body been put in charge of providing guidance to organisations upon request?

Effective stakeholder involvement

- Do effective mechanisms exist within government or independent organisations for informing consumers about the consequences of their consumption decisions?
- Has the legal framework been reviewed and adapted in order to provide clear legal provisions for consultation and participation?
- Are there clear guidelines on when, with whom, and how consultations should be carried out?
- Is a case-by-case approach to policy development being developed at all levels and on the various dimensions of the issues, and is the public involved in this?
- Are mechanisms in place for the evaluation of and feedback on consultation, and for monitoring the influence of participation on decision-making?
- Is transparency ensured? For example, has restricted information been made the exception, not the rule, both in principle and in practice?
- Are transparency mechanisms being reinforced at different levels of government about key decisions?

Effective knowledge management

- Are the mechanisms transparent, supported by arbitration processes (e.g. a 'sustainable development ombudsman'), for managing conflictual knowledge?
- Does government ensure that a framework is in place to allow discussions to focus constructively on areas of disagreement, by developing scenarios and options?
- Given that scientific and technological innovation is critical for sustainable development, is sufficient attention devoted to ensuring that the flows of information between the scientific community and decision-makers are efficient and effective?
- Do research policies encourage and facilitate networks of scientists and do they support the development of 'joined-up' research between disciplines?
- Are specific efforts made to support forward-looking and policy relevant knowledge, in particular through assuring the 'right mix' between public and privately funded investment in research?

Source: OECD, 2002b.

Annex B. Review requirements of the Cardiff strategies

Agriculture
The strategy states that evaluation should take place regularly. A first overall review of the strategy was foreseen for 2002–03. Subsequently, a coordinated set of monitoring indicators as well as common evaluation questions, with associated criteria and indicators, was agreed between the Commission services and Member States. These are for the evaluation of rural development programmes, 2000–06. The need for regular monitoring and evaluation on integration and sustainable development was reiterated by the Council in April 2001. A report on environmental Integration and the CAP was produced for the Agriculture DG in 2002 (Baldock *et al.*).
Energy
The energy integration strategy was adopted in November 1999 and the Commission was asked to review the strategy for actions beyond 2002. A Commission staff working document was produced by June 2001. The second review of the strategy was due in 2002. The Energy Council did not review progress, but instead adopted conclusions (November 2002) on sustainable development as follow up to WSSD.
Transport
A 'First review report of the integration of environmental aspects and sustainable development into energy and transport policy' was produced in March 2001. An April 2001 Council resolution invites the Commission to propose a regulation to safeguard the continuation of the transport and environment reporting mechanism. TERM reports annually. The second review was due in December 2002. The preparations for this review led the Transport Council to conclude, in December 2002, that 'although progress has been made to reduce the environmental impact of transport in Member States and at Community level, significant progress still has to be made to reach the objectives set out in the 1999 Council strategy.' The Council confirmed its decision to regularly review the strategy on the basis of Commission reports.
Development
A review of the Development Council's May 2001 strategy was to be undertaken on a regular basis, starting in 2004. A review of the EU SDS is also planned for 2004. According to the Commission's Environment Policy Review, the SDS review is to further integrate the internal and international dimensions.
Industry
The industry integration strategy, adopted in May 2001, invites the Commission to develop indicators and a study was published in 2001. The Council agreed to review progress regularly, as a basis for policy recommendations and further development of the strategy. The June 2002 Council conclusions on 'Enterprise policy and sustainable development' committed to finalising work on indicators to monitor the integration of sustainable development and enterprise policy. The Commission was invited to report every second year on progress made on the contribution of enterprise policy to sustainable development, with a first report foreseen before the end of 2002. In November 2002, the new Competitiveness Council adopted conclusions committing to regularly evaluating 'whether the balance of the three pillars of sustainable development is maintained, in particular in terms of ensuring the competitiveness of European enterprises'.
Internal market
The Internal market, Consumer Affairs and Tourism Council adopted its integration strategy in May 2001. The Competitiveness Council adopted a review of the strategy in November 2002. The review is an update of actions and indicators, the objective being to undertake a fuller exercise in 2003 taking into account the new political context (adoption of the 6EAP and the outcome of Johannesburg) and the decision to the set up of the Competitiveness Council, effectively merging the industry and internal market Councils.
Economic and Financial Affairs (ECOFIN)
Ecofin produced a report on an integration strategy in March 2002, with the cornerstone of the strategy being the need to integrate the promotion of sustainable development in the broad economic policy guidelines (BEPGs). The strategy does not set any specific targets or monitoring or review mechanisms beyond the BEPGs. The implementation of the BEPGs is reported on annually.

General Affairs Council (GAC)
In April 2001, the Council requested a proposal for an elaborated integration strategy including indicators. The Council also agreed to regularly review its work with the integration strategy on the basis of reports from the Commission. The first review was scheduled for 2003, at the latest. The General Affairs Council integration strategy was adopted in 2002. (The strategy suggests that the Commission should make provision for two-yearly reviews of progress. For the General Affairs Council, a wider exercise of reporting by Member States and the Commission on respective progress could be envisaged. It is however questioned in the document whether the GAC itself has the capacity to formalise such reporting.)
Fisheries
An action plan to integrate environmental protection requirements into the CFP was forwarded by the Commission in May 2002 (COM(2002) 186). This foresees the development of relevant indicators to monitor the implementation of the strategy. A Commission report on the environmental performance of the CFP is promised for 2005. (The Council adopted conclusions on the action plan in January 2003, welcoming the action plan as an important step towards implementing the integration strategy and inviting the Commission to present appropriate proposals to implement the action plan.)

Source: Adapted from Environment DG (undated).

Annex C. Glossary

BEPG	broad economic policy guidelines
CAP	common agricultural policy
CEC	Commission of the European Communities
CFP	common fisheries policy
DG	Directorate-General
DPSIR	drivers, pressures, state of the environment, impacts and responses
EAP	environmental action programme
EEA	European Environment Agency
EC	European Community
ECCP	European climate change programme
EIA	Environmental impact assessment
EMAS	eco-management and audit scheme
EMS	environmental management systems
EP	European Parliament
EPI	environmental policy integration
EPR	environmental performance reviews
ETAP	environmental technologies action plan
ETR	environmental tax reform
EU	European Union
EU-15	the EU Member States pre-enlargement in 2004
EU-25	the enlarged Community, as of 1 May 2004
EU SDS	EU sustainable development strategy
GAC	General Affairs Council
GDP	gross domestic product
GNI	gross national income
IA	impact assessment
IEEP	Institute for European Environmental Policy
IRENA	indicator reporting on the integration of environmental concerns into agricultural policy
MEP	Member of the European Parliament
NEAPs	national environmental action plans
NEHAPs	national environmental and health action plans
NGO	non-governmental organisation
NSDS	national sustainable development strategy
OECD	Organisation for Economic Cooperation and Development
RASES	Czech Council on Social and Economic Strategy
RDPs	rural development programmes
RDR	rural development regulation
REACH	common name used for the Commission proposal on the registration, evaluation, authorisation and restriction of chemicals.
RIA	regulatory impact assessment
SCP	sustainable consumption and production
SD	sustainable development
SDS	sustainable development strategy
SEA	strategic environmental assessment
SIA	sustainability impact assessment
Sixth EAP / 6EAP	sixth environment action programme (Decision 1600/2002)
SME	small and medium-sized enterprises
SoER	State of Environment Report
TERM	transport and environment reporting mechanism
THE-PEP	transport, health and environment pan-European project
UNECE	United Nations Economic Commission for Europe
VAT	value added tax
WFD	water framework directive
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation

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