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Environmental Policy Integration: Towards an Analytical Framework?

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Report

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INTRODUCTION

One of the key defining features of 'sustainable development' is the emphasis on the integration of environmental objectives into non-environmental policy-sectors. This entails a fundamental recognition that the environmental sector alone will not be able to secure environmental objectives, and that each sector must therefore take on board environmental policy objectives if these are to be achieved. This is perhaps the most important general environmental policy axiom of the 1980s and 1990s, and a central element of the concept of 'sustainable development'.

In 1972 the UN Summit on the Human Environment declared that environmental factors should be taken into account in policymaking *together* with economic factors. While this emphasised the importance of environmental objectives, it nevertheless placed such objectives as essentially separate from, and in potential conflict with, other societal objectives, especially economic ones. Twenty years later at the United Nations Conference on Environment and Development (UNCED) in Rio, the rhetoric had changed. Here it was decided that "environmental protection shall constitute *an integral part* of the development process" (United Nations, 1993: Rio Declaration principle 4, emphasis added). In other words, over the 20 years between the two conferences, the goal of integrating environmental objectives into every aspect of the development process was strengthened. This is perhaps the most important policy-axiom to emerge from the UNCED-process and the discourse on sustainable development.

The integration of environmental concerns into other policy areas has been referred to as 'environmental integration', 'environmental policy integration', 'sectoral integration', or simply 'integrating the environment into…, etc.' In this paper we will, for the sake of simplicity, follow Lenschow (1997, 1999) and use the term 'environmental policy integration' – EPI . The way in which EPI differs from the other terms depends on how each is defined and understood. For purposes of the present article, we take EPI to generally encompass the other environmental integration-related concepts.

One disadvantage with EPI is that it may be taken to signify an environmental policy objective that is not clearly connected to broader sustainable development objectives. However, it is quite clear that successful EPI is an essential and indispensable part of the concept of sustainable development. Therefore, although EPI does not in itself constitute sustainable development, it is impossible to conceive of sustainable development without successful EPI.

Naturally, EPI has been the subject of much debate both in academic and policymaking circles. However, conceptual issues have by no means dominated the discourse. This is quite conspicuous given the central place of EPI in environmental policymaking (debates) in the 1990s. Further, as this paper will illustrate, the conceptual work that has been completed on EPI generally fails to place the concept in an appropriate environmental policy context. This in turn appears – perhaps inadvertently – to betray the fact that the concept implies a relatively strong revision of the traditional hierarchy of policy objectives, where environmental goals and values historically have tended to be at the lower end of the scale. One is therefore witness to an apparent failure to appreciate the extent to which the concept forms part of a broader political process; a process that provides for a revision of the traditional hierarchy of

policy objectives, with the portrayal of environmental objectives as central, if not principal. A conceptual clarification of this point emerges as a central prerequisite for further empirical work.

Finally, we will briefly discuss various strategies for the implementation of EPI as a natural extension of our treatment of the concept. The aim of the paper is therefore, firstly, to provide a more detailed, up-to-date and comprehensive discussion of the *concept* of EPI; and, secondly, to discuss some common strategies for the implementation of EPI in the current European context.

By way of introducing the discussion, we look first at the history of the idea of EPI. Already here we see that the general idea has evolved over the years, and that this can to some extent explain why different interpretations of the idea are found in the contemporary policy-discourse on EPI.

ENVIRONMENTAL POLICY INTEGRATION: A BRIEF HISTORY

In tracing the history of a concept, one must take into account the possibility that a given idea may have had many different labels, and indeed that the general substance of an idea may have been expressed without it having been assigned a single 'label' at all. This is very much the case with EPI. In looking for its conceptual origin, we will not find the term EPI (or any similar term) used before the 1980's, yet the idea as such clearly was expressed much earlier.

One of the first systematic attempts to enunciate the idea of a more comprehensive environmental policy that penetrated policy-areas not expressly connected with environmental concern can be found within the European Union.[1] The EU has, since 1973, issued Environmental Action Plans (EAPs) at regular intervals to stipulate the basic environmental objectives and environmental policy orientation of the Union. The first EAP, adopted in 1973, is quite progressive for its time, containing a number of innovative principles. For example, the 'polluter pays principle' is clearly articulated in the 1st EAP, and this is one of, if not the, earliest articulation of this central principle of environmental policy in the 1980s and 1990s.[2]

The European Community's 1st EAP does not explicitly use any phrase comparable to 'environmental policy integration'. Under the heading "Principles of a Community Environmental Policy" it is, however, stated that:

> The environment cannot be considered as external surroundings by which man is harassed and assailed; it must be considered an *essential factor* in the organisation and promotion of human progress. It is therefore necessary to evaluate the effects on the quality of life and on the natural environment of *any measure that is adopted or contemplated at national or Community level* and which is liable to affect these factors. (CEC, 1973: 6, emphasis added).

This clearly introduces a more holistic approach to environmental problems, an approach that appreciates that such problems cannot be solved through environmental policy alone, and that non-environmental policy-areas need to consider environmental effects. This holistic approach is the basis for EPI, and it is restated and developed in subsequent EAP (CEC,1977, CEC,1983). In the 5th EAP (CEC, 1993) it emerges as the principal task of the Community's environmental policy, receiving a very detailed treatment as a "Key Priority". The Maastricht Treaty of 1993 further established that environmental considerations "must" be integrated into other policies, hence providing a constitutional basis for EPI in the European Union.[3] Finally, the 6th EAP maintains a strong focus on sustainable development and EPI. Article 2 of the programme lists "the full integration of environmental protection requirements into other Community policies" as the second of 10 overall aims and objectives

[1] What we today refer to as the European Union has changed names several times through its 50-year history. This paper will employ the terms European Union (EU) and European Community (EEC) as the context dictates.
[2] The 'Polluter Pays Principle' was actually advocated by OECD as early as 1972 (MacNeill, 1991:41, and WCED, 1987: 233, note 30), while Pearce (1989: 156) refers to its origin as 1975.
[3] Specifically, Article 6 of the Consolidated Version of the Treaty Establishing the European Community states, *inter alia*, that "Environmental protection requirements must be integrated into the definition and implementation of other Community policies."

(CEC, 2002). Hence, it seems reasonable to conclude that the EU has been, and still is, a major driving force for EPI, at least with respect to political commitment.

In a historical context, the International Union for the Conservation of Nature and Natural Resources (IUCN) issued the *World Conservation Strategy* (WCS) in 1980. This is generally considered to be a precursor to, and an important influence on, the Brundtland Report that appeared seven years later. Although the WCS is much shorter and less comprehensive, it does contain many of the ideas that reappeared in the Brundtland-report, and perhaps most importantly, it apparently coined the term 'sustainable development'. The term is not defined explicitly in WCS, but it clearly implies an integration of developmental and conservational concerns.[4] Indeed, although the term 'environmental policy integration' does not appear, the idea as such is articulated quite clearly. The WCS presents a number of strategic principles under the heading "A Framework for national and subnational conservation strategies", the first of which is:

> *Integrate*: The separation of conservation from development together with narrow sectoral approaches to living resource management are at the root of current resource problems. Many of the priority requirements demand a cross-sectoral, interdisciplinary approach. (IUCN, 1980: Chapter 8.6)

This is followed up with a more detailed discussion of "cross-sectoral conservation policy" in Chapter 9, where emphasis is placed on integration across thematic sectors and across levels of governance. It would also appear that this is the first time that the concept "cross-sectoral" is employed in connection with strategies for environmental policy making (IUCN, 1980: Ch. 9).

Yet, despite the fact that 'sustainable development' and 'cross-sectoral' environmental policies were originally 'flagged' in the WCS, it was not until the Brundtland report in 1987 and the UNCED-process that followed that these concepts gained ground in international environmental policymaking. With the UNCED-process, EPI is, for the first time, given a substantive role in environmental policymaking, following up thereby the earlier signals from the IUCN in 1980.

'Sustainable development' is, of course, a much analysed and strongly contested term (*e.g.* Lafferty and Langhelle 1999; Lafferty and Meadowcroft 2000; Lele, 1991; Redclift 1993). What we wish to emphasize here however, is the way in which the entire UNCED-process has made EPI a central component of the development vision espoused. This is perhaps best illustrated by the different approaches to environment and development taken by the two declarations from the Stockholm Summit in 1972 and the Rio Summit in 1992. Although the need for a more integrated approach with respect to 'environment' and 'development' was recognised in the Stockholm declaration, it is nevertheless clear that the Stockholm Conference essentially reflected a pre-integration era where the two concerns essentially were treated in separation. 'Development' was seen as a question and challenge for economic growth; while 'environment' was perceived as the sphere for addressing the negative effects resulting from 'development'. The Brundtland report approached this in a new manner, suggesting that environmental and developmental concerns are essentially two sides of an interdependent process: "Environment and development are not separate challenges; they are inexorably linked" (WCED, 1987: 37), and further, 'environmental

[4] After the WCS and the WCED, the term "conservation" has become associated with 1st generation environmental policy that emphasised conservation of nature, end-of–pipe policies and abating environmental problems rather than preventing them. However, in the WCS "conservation" must clearly be understood more progressively than the actual term (with its environmental history) suggests, i.e. as the environmental protection component of "sustainable development".

protection shall constitute *an integral part* of the development process' (United Nations, 1993: Rio Declaration, Principle 4).

Yet, while OCF in principle strongly emphasises the need to integrate environmental concerns in *all* sectors of policymaking (WCED, 1987: 313), it is only the integration of environmental concerns in economic decision-making that receives a more detailed treatment in the report (WCED, 1987: 62-64, 52-54; Collier, 1997: 33). This is a slightly less ambitious stance than that of the European Community at the same time, which more explicitly and thoroughly outlines, sector by sector, how environmental concerns need to be integrated into non-environmental policy in order for the Community's overall policy to be effective.

However, the UNCED-process is completed with the much more ambitious statement on EPI contained in the Rio Declaration and in *Agenda 21*. In Chapter 8 of *Agenda 21*, the need for the integration of environmental concerns into a number of different policy-arenas is mentioned regularly. More specifically, this chapter is entitled "Integrating environment and development in Decision-making", and outlines four major integration themes: (1) the integration of environmental considerations in policy making; (2) providing an effective legal framework; (3) making effective use of economic instruments; and (4) establishing systems for integrated environmental and economic accounting. Much like the Brundtland Report, we see that the integration of environmental concerns into economics is given priority, yet the integration of environmental concerns into policymaking *in general* is also elaborated upon. An *ad hoc* approach is viewed as insufficient, and there is an expressed need to accept environmental premises as important to all policy areas (United Nations, 1993: Agenda 21, Ch. 8.3, *passim*).

The most recent development with respect to EPI in international political fora is the renewed attempts by the EU to implement EPI in its polices, through the so-called Cardiff-process. This can be characterized as one of the most ambitious projects ever launched for EPI, and is guided by the EUs almost constitutional commitment to EPI in article 6 of the consolidated treaty of the European Union. This has resulted in a substantial effort to "green" the various sectors of the EU, and while it is perhaps debatable whether or not anything substantial has come out of the process thus far, it certainly has placed EPI towards the top of the European Political agenda. In environmental terms, EU-policy for the 2000's is clearly marked by a significant push towards more and better EPI, both in the Commission's Sustainable Development Strategy document and in the 6th EAP.[5]

Hence, with the UNCED process and the relatively recent developments within the EU, we see that environmental policy integration emerges as a central principle of the environment and development discourse. A similar development and emphasis can also be seen within the OECD, where sustainable development has been given increasing importance as a policy goal.[6]

Tracing the general history of EPI as a guiding principle does not, however, provide sufficient analytical preciseness to evaluate specific efforts to achieve greater integration in practice. It can be shown, in fact, that the principle takes on different meanings in different policy-documents and academic texts, and we have already seen how the UNCED process appears to shift emphasis from the integration of environmental concerns with economics, to a more general approach were all sectors need to focus on environmental objectives.

[5] Provide supporting quotes from both documents:
[6] Add references to the recent OECD documents – look for particular references to policy integration.

Further, the OECD, in its discussions of EPI, appears to emphasise the realisation of mutual benefits (Collier, 1997: 34, OECD 1991), while the EU places less emphasis on this, stressing more the need for all sectors to comply with the principle that an environmental dimension should be integrated into other policies (*e.g.* CEC, 2002: Article 3.3). It is quite clear, therefore, that EPI remains a relatively 'fuzzy' concept with a wide variety of interpretations.

CLARIFYING THE CONCEPT OF 'ENVIRONMENTAL POLICY INTEGRATION'

Identifying the problem

When we speak of a concept we speak of the *meaning* of a particular term. A *conception* is more extensive, and involves the principles and standards required for the implementation of the concept. A concept is therefore a more abstract construction of various conceptions (Kaplan, 1964: 49). With respect to EPI we must first try to focus the nature of the concept; what features characterise policymaking that qualifies *as* EPI, as opposed to other 'non-EPI' modes of policymaking. This task must be distinguished from a discussion of implementation; that is, a focus on the various strategies that can lead to a more effective realisation of EPI. It is also important to keep in mind that EPI refers to both a *state of affairs* which is the aim of policymaking, as well as to the *process* necessary for achieving change. Though we touch on the latter at the conclusion of the paper, we are primarily interested in clarifying – and establishing benchmarks for – the former.

Three preliminary points should be stressed towards this end:

First, we want to emphasize that we are only concerned with issues that clarify EPI in an applied context. We are not engaging in an open-ended discussion of the idea, but are primarily looking at those features of EPI which give it 'value-added' potential in relation to more effective policy implementation.

Second, though EPI is very strongly associated with the concept of sustainable development, we will here treat it in relative isolation, that is as referring primarily to the 'environmental' or 'ecological' dimension of the concept. It is logically impossible to have sustainable development without pursuing EPI, but EPI may be pursued without explicit reference to the broader equity aspects (generational and global) of sustainable development. Our approach should, therefore, be understood as a 'minimalist' understanding of the EPI norm.

Third, despite the fact that EPI has gained recognition as a central principle of environmental policymaking, among both academics and policymakers themselves, there is limited literature on EPI in general, and *very* little literature on EPI as a concept. For example, Lenschcow (1999) discusses EPI briefly in an introductory section to her work on the EU's common agricultural policy (CAP) and structural funds, outlining (with reference to Hey, 1996) different strategies for EPI. Yet these strategies are linked to differing conceptions (understandings) of the principle of EPI. Some of these are linked to versions of EPI that are so weak that they hardly qualify as anything more than traditional, 'first generation', environmental policies (for example, the assessment of environmental impacts and side effects (Lenschow, 1999: 92)). Hence, a discussion of strategy masks an unresolved differentiation of concepts, leaving us with little more than a stipulation of the idea of EPI itself.

At a much earlier date, Underdal (1980) discussed policy integration in general, but had relatively little to say on *environmental* policy. (As we will show below, however, his analysis is vital to the further clarification of the environmental aspect of the concept.) Collier's work on EPI is more extensive, but ultimately lacks awareness of the historical roots of the idea, and

is quite derivative of other definitions (Collier, 1997). Liberatore (1997) has provided what is probably the most frequently cited text on EPI, but in our view 'integration' is here used to cover a number of features of environmental policymaking which are less useful in delineating the type of 'value-added' definition referred to above. She discusses, for example, integration with respect to issues, sectors, organization, space and time, distributive elements and instruments. As we see it, however, it is 'issues and sectors' which is the primary focus of the concept, and it is difficult to see what is gained by viewing the other issues as issues of 'integration' per se. Integration across space and time, for example, relates to matters of intergenerational justice and international cooperation that are surely best viewed as such, and not as variations of EPI.

To illustrate how conceptual imprecision can lead analysts astray in discussions of EPI, one can point to the European Environmental Bureau's position paper on "Ten Benchmarks for Environmental Policy Integration" (EEB, 1999). In this paper, the EEB clearly sets out to establish indicators for EPI, yet this ultimately comes out as, for example, "targets for sustainable development" and "green benchmarks". The relationship between a "target", "indicator" and "benchmark" is no-where elaborated upon. Further, one reasons that these targets/benchmarks should be applied in each sector, yet it is unclear what this indicates as to an analysis of *degrees* of EPI. One opens here for a danger of confusing indicators for environmental policy with indicators for EPI. A sector may score very well with respect to the EEB's targets/benchmarks, yet this may not tell us very much about EPI. We might assume that EPI should be relatively strong in a sector that scores well with targets or benchmarks, but this would only be an assumption since the application of the targets/benchmarks only says something about the sector's environmental performance, nothing direct as to the degree of actual integration.[7] Unfortunately, the EEB paper is hardly unique in this type of conceptual 'slurring', so that there is, in our view, a clear need for greater conceptual precision and analytical rigour as a basis for more effective evaluation and implementation.

Defining EPI

We will treat the concept of environmental policy integration is a Weberian 'ideal type'. This refers to a construction of certain elements of reality into a logically precise definition of a concept. The Weberian ideal type is not necessarily 'ideal' in a normative sense (ideal types can be employed in the study of 'war criminals' as well as 'philanthropists'), but ideal in an analytical sense in that it is relatively far removed from empirical reality while being conceptually relatively precise (Gerth and Mills, 1958: 59). In this light, concepts understood as ideal types do not aim to mirror reality, but to perform a service in our analytical dealings with specific problems of action and change (Kaplan, 1964: 82-83).

For example, a term like 'democracy' may never be unambiguously reflected in a particular social organisation or practice (where does one find the perfect and complete democracy?). But retaining the concept as an ideal type provides definite analytical advantages. The fact that reality never matches the ideal type may be a reflection of how difficult it is to create the conditions necessary for its realisation; or of the fact that once you get close enough to the ideal type, the 'matching' of the type and its empirical referents becomes a very contested interpretive activity. We may, for example, be able to agree that

[7] A similar point is made by Nollkaemper (2001: 25), who argues that an understanding of EPI merely as effective environmental policy implies that the concept has no distinct meaning.

some societies are more democratic than others, but even those societies that we perceive as very democratic will have democratic deficiencies, and what these are, and their significance, will depend on the fine print in different people's interpretation of what democracy actually entails.

Similarly with EPI, we will find that, although we may be able to conceptualise it quite perfectly, we will surely have difficulties identifying the perfect case of EPI in actual policymaking. Even if we were to come across an incidence of implementation whereby environmental objectives appear to have been extensively integrated, there will still be a debate as to its strengths, weaknesses, and ultimate implications. This does not invalidate the use of ideal types, but simply makes us aware of the need for conceptual consensus if such types are to prove useful.

Ute Collier's work on EPI serves as a valuable point of departure in this regard, since she is one of the very few who have distinguished attempts to define the concept from other features of its application (such as strategies and indicators). She offers a three-point definition of the objective of EPI (Collier, 1997: 36). It should aim to:

- achieve sustainable development and prevent environmental damage
- remove contradictions between policies as well as within policies
- realise mutual benefits and the goal of making policies mutually supportive

To achieve sustainable development and prevent environmental degradation: From the first point in this definition it is immediately apparent that the objective of EPI actually is twofold. The first is the very general overarching aim of achieving the objectives of environmental policy. For Collier, this is EPI as part of a strategy of sustainable development and the prevention of environmental degradation. This serves to place EPI in an intellectual context, but it helps little in the way of a definition. The objectives of the 'polluter pays principle' or the 'precautionary principle' are, for example, both ultimately the realisation of a set of broad environmental objectives (such as sustainable development). But this does not tell us much about what these principles entail, especially in terms of policy implications. It may therefore be useful to view the *objective* of EPI in slightly more narrow terms; to provide for a *particular type of environmental policy making* which is believed to more effectively facilitate the attainment of a given environmental goal. A definition of this objective needs to say something about the specific characteristics of EPI. What features should a policy have at the point where we want to say that EPI is being applied? The first point of Collier's definition says little about this.

To remove contradictions between policies as well as internal contradictions within environmental policy: This point is effectively a question of policy co-ordination, which is valuable, but it does not indicate a unique feature of EPI. As Collier herself point out, *all* good policymaking would involve a high level of policy co-ordination. Yet, she does not elaborate on the consequences of this, namely that if we are trying to say something about the essence of the principle of EPI (i.e., what enable us to pick it out from other modes of environmental policymaking), then policy-co-ordination or the removal of contradictions between policies as such is not very helpful. Of course, EPI is about policy co-ordination in that it entails an adjustment of non-environmental policy to better achieve environmental objectives. However, this is a very specific type of policy co-ordination; a type that must be operationalised in demonstrable intra-sectoral terms.

To realise mutual benefits and make policies mutually supportive: This point is perhaps the most problematic in Collier's definition. It concerns the realisation of mutual benefits. Two points should be noted.

First, it is again quite clear that anyone seeking to pursue *any* policy objective would seek to point out benefits not only for the 'home' sector, but also for other sectors, as this would be a central element of a successful policy. In other words, what is being described is once again a feature of any good policymaking strategy. While this may be a useful aspect of EPI as well, it does not help us in defining the specific objectives of EPI.

Second, while it is clear that there are many 'win-win' cases where mutual benefits can be realised, it is equally clear that the idea that this is the dominant feature of environmental policymaking is contestable to say the least. This is something that Collier recognises explicitly, yet the implications of this recognition are nowhere to be found. The difficulties encountered with the operationalisation of sustainable development in, for example, Western Europe, *could* be the result of policymakers' inability to see and realise mutual benefits. If that were the case, a better and more enlightened view of all policy sectors would clearly be an important aspect of the solution.

However, an equally plausible and highly relevant case can be made to the effect that there are numerous very real conflicts of interests with respect to many environmental issues.[8] Indeed, in a recent study, the Swedish Environmental Protection Agency has outlined a list of potential conflicts of objectives that may emerge as a result of attempts at increased EPI, and it seems clear that these types of conflict cannot be 'assumed away' (SEPA, 1999: 41-48). Thus, an endless search for 'mutual benefits' may draw attention away from the fact that environmental policy often affects certain interests in a negative manner, and in a way that is not all together easy to mitigate, at least not in the short run.[9] To identify mutual benefits as a key aspect of the definition of EPI serves, in our view, to underplay numerous vital challenges inherent in the integration objective.

Hence, while Colliers' definition places the principle of EPI in the right intellectual context and provides a number of possible indications as to what it might entail, the approach leaves us short of a more precise and applicable conception of EPI. We feel, therefore, that we still must pose the question: What *is* EPI? What does it entail? How will we recognise it when we see it?

In trying to answer these questions, we've found it helpful to return to the very early work of Arild Underdal (1980). Underdal's 1980-article in *Marine Policy* is generally cited as the first academic treatment of the term 'policy integration'. Even though Underdal deals with policy integration in general, and not with environmental policy integration, his approach to the problematic has the appealing (and highly necessary) feature that it concentrates on *how* the policymaking process can be characterised. In this light – and in the light of the EPI discussion above – Underdal's approach stipulates what distinguishes an integrated policy from other forms of policymaking.

[8] As the Brundtland report recognises: "The search for common interests would be less difficult if all development and environment problems had solutions that would leave everyone better off. This is seldom the case, and there are usually winners and losers" (WCED, 1987: 48)

[9] The European uproar about petrol prices in September 2000 is a good example in this respect: European consumers protested at the price of petrol, a price made up significantly of environmental taxes. European consumers here pay for environmental protection (integrating the environmental costs of emissions into the price of petrol) through higher petrol prices, and it is difficult here to see any undiscovered "mutual benefit", except in the very the long term. There is no undiscovered good, most reasonably enlightened European citizen will know that this policy has a long term benefit, yet it has a definite cost in the short term.

For a policy to be 'integrated', three criteria need to be satisfied: comprehensiveness, aggregation, and consistency (Underdal, 1980: 159). 'Comprehensiveness' refers to time, space, actors and issues; 'aggregation' to the evaluation of policy from an 'overall' perspective, (i.e. *not* merely from the perspective of a particular actor or issue area); and 'consistency' implies that the different components of an integrated (i.e. aggregated and comprehensive) policy are in accord with each other. The latter requirement applies across different departments and different levels of governance.

Underdal then defines an integrated policy as one where:

> all significant consequences of policy decisions are recognised as decision premises, where policy options are evaluated on the basis of their effects on some aggregate measure of utility, and where the different policy elements are in accord with each other (Underdal, 1980: 162).

Although this is a very well developed and precise definition of policy integration, it can in principle be used for *any* type of policy integration, and is not specifically tied to environmental policy. What we lack is a value-hierarchy to guide the actual integration in question. EPI, as understood by the UNCED-process, is meaningless without a clear emphasis on, and bias towards, environmental objectives. Using Underdal's more general definition as a 'bridge' to environmental policymaking, we arrive at the following definition of EPI. Environmental policy integration implies:

- the incorporation of environmental objectives into all stages of policymaking in non-environmental policy sectors, with a specific recognition of this goal as a guiding principle for the planning and execution of policy;

- accompanied by an attempt to aggregate presumed environmental consequences into an overall evaluation of policy, and a commitment to minimise contradictions between environmental and sectoral policies by giving principled priority to the former over the latter.

As indicated, the definition has two dimensions. The first dimension is the actual definition of the integration principle. It incorporates a combination of the general statement put forth by Collier (1997) with the more specified definition found in Underdal (1980). It refers to the general category of "environmental objectives", which could be sustainable development or any other desired environmental policy discourse (although sustainable development of course explicitly calls for EPI). Further, it specifies what the integration principle actually implies in terms of policymaking, namely that the environmental objectives need to be part of the fundamental premises for the policymaking at all stages. It specifies, thereby, initial criteria for claiming that a specific policy is environmentally integrated.

The second part of the definition may at first sight appear superfluous, since the initial integration principle should be quite clear. It is here, however, that we face the crucial issue in defining EPI: *the relative importance of sectoral and environmental objectives*. Most discussions of EPI assume either that the environmental and non-environmental objectives should be balanced, or that any conflicts between the objectives can be resolved to the satisfaction of all affected interests ("coherence"). Yet looking at the broader context and history of the integration discussion, it is quite clear that this assumption cannot be maintained. We would argue that the whole point of EPI is, at the very least, to avoid situations where environmental objectives becoming subsidiary; and, in the view of sustainable development, to ensure that they become principal or overarching societal objectives. This is arguably *the* essential difference between 'environmental policy integration' and 'policy integration' conceived more generally. Given the key importance of this point, let us look at it in more detail.

Are environmental objectives necessarily principal?

In her work on the integration of environmental concerns in energy policies in Europe, Collier (1997) sets out a framework for integration where environmental, energy-centred and economic concerns are presented as three sides of a triangle. Policy integration is placed in the middle of the triangle, where the three objectives are viewed as balanced (Collier, 1997: 254). We would question, however, the extent to which this representation describes EPI, since there is no sense in which environmental policy objectives are given priority in the policy process. Collier appropriately uses the term 'policy-integration', yet this cannot be conflated with EPI. The difference between the two is significant. Given a conflict of specific policy objectives, 'policy integration' is neutral as to which type of policy prevails in the integration process. Whereas policy integration is portrayed by Collier as the balanced pursuit of all three objectives, EPI consists in our understanding of the integration of environmental concerns *into* other sectoral policies. Whereas the former implies either a neutral balance or an ultimate priority for the given sectoral policy, the latter indicates an underlying priority for the environmental aspect. Collier does discuss an 'environment-centered' approach to policymaking, where environmental objectives are given priority, but this is only gives a qualified endorsement, leaving the vital question of ultimate priorities open.

And this would seem to be a general characteristic of the EPI-related literature. Integration is viewed as well and good in a very general sense; but not in a sense which specifically allots a *prima facie* priority to environmental values and goals. Liberatore (1997), for example, in her much cited discussion of EPI, never really discusses the value hierarchy that necessarily must lie at the heart of *environmental* political integration. She indicates, of course, that EPI is not achieved when environmental objectives are clearly subordinate to sectoral objectives. The extent to which environmental objectives need to be placed in a more commanding position in sectoral policies in general is less clear, but Liberatore indicates at least that environmental objectives should be prioritized over other sectoral objectives (1997: 119-120).

This must be seen as a crucial aspect of the integration issue. First, the entire shift in environmental policy discourse over the last couple of decades concerns the prioritisation of environmental policy vis-à-vis other policy sectors. The fundamental premise of keynote documents such as the Brundtland report, Agenda 21, the successive EAP's and strategy documents of the EU, is that environmental policy for too long has been treated as a peripheral concern for policy-makers in general, and in particular for those sectors with no obvious and explicit responsibility for environmental issues.

Second, this shift is not just a matter of bringing environmental objectives into the policymaking process in non-environmental sectors, and balancing the various objectives if and when they conflict. The increasing recognition and acceptance of the fact that we are facing potentially irreversible damage to life-support systems clearly implies that, as far as at least some environmental objectives are concerned, these cannot simply be 'balanced' with the objectives of other policy sectors. In short, an understanding of the historical discursive context of the EPI idea dictates that environmental objectives must – as a general rule – be seen as principal.

Given another major premise of the discourse, however – that policy priorities must be decided 'democratically' – this cannot be taken to mean that environmental objectives should, in every case, override other societal objectives. The caveat "principled" is therefore

included in the definition to open for the very real possibility that other policy objectives will, at times, be deemed more important than environmental concerns. In the words of the Brundtland Report: 'every ecosystem everywhere cannot be preserved intact' (WCED, 1987: 44). We must be careful, therefore, not to define the issue out of such quandaries. The ultimate 'trade-off' of EPI is that between existing democratic norms and procedures on the one hand, and the goals and operational necessities of sustainable development on the other. A 'strong presupposition' in favour of environmental concerns vis-à-vis other sectoral concerns, cannot be converted to an 'extra-democratic' mandate. This does not mean, however, that the 'mandate' for sustainable development cannot be considerably strengthened within the policy realm of existing sectoral interests – an issue we will return to below.

So as to illustrate the type of prioritisation in question, one can consider economic policy objectives. These objectives are perhaps the most important single policy priority of Western democracies. Every policy sector, on every level, needs to take economic factors into consideration in the planning of policy (budgeting), the execution of policy (following budgets), and internal and external evaluation (accounts and auditing). Thus, the objectives of economic policy (e.g. balance of payments, providing for growth, checking inflation, keeping down interest rates, ensuring full employment etc.) are implicitly or explicitly infused in virtually every other policy sector that does not have an explicit responsibility for the economic objectives. This clearly illustrates how the objectives of a given policy sector, in this case under the tutelage of ministries of finance, can influence – and in most cases dominate – policymaking in other sectors that have no explicit responsibility for the 'external' objectives.

However, even though economic policy has a commanding position among a variety of societal objectives, it does not mean that considerations of economic policy always prevail. Building a national opera house, for example, may be difficult to defend with reference to the objectives of economic policy, but there are other societal objectives that suggest that it may nevertheless be a good idea to build one. Many similar prioritizations take place where economic policy objectives are overridden – yet few would question the extent to which economic policy objectives *in general* remain one of the most influential factors in the development of policy. Hence, even though economic policy objectives are in general considered principal, they too may, and occasionally are, overridden by other societal objectives. One may of course quarrel with this practice and the (im)balance that it produces. But few would argue that one should (a) leave all policy decisions that have any economic implications (that is, virtually all policy decisions), up to the ministry of finance alone; or (b) ignore all economic policy objectives and pursue whatever societal objectives policies "the people" fancy (which would likely lead to economic problems). Hence, one continues to "balance" various objectives – but some objectives carry more weight than others.

Drawing a parallel to environmental policy, one can envisage an environmental objective – curbing CO2 emissions for example – whereby non-environmental sectors would be similarly monitored for compliance with the overriding norm. This would apply to both each individual sector and cumulatively across sectors. There would be a clear stipulation of CO2emission targets; a systematic monitoring of sectoral activity to ensure CO2 emissions did not exceed targets; evaluation procedures to compare actual emissions with the targets; and external auditing to make sure that no-one fiddled with the numbers. This would ensure an infusion of environmental objectives (in this case atmospheric protection) in virtually all types of policy sectors. However, as with the reference to economic objectives above, such a commanding position of a particular objective does not preclude the possibility that, in some

cases, it may be overridden. How and when this should happen would – much like the case today with economic objectives – be decided through normal democratic procedures.

Clearly, we are a long way away from a situation where environmental objectives have a position as commanding and central as that of economic policy objectives in today's Western liberal democracies. However, the basic notion of EPI is clearly formulated to bring policymaking closer to such an ideal typical situation, and it is this expectation that is given specific expression in the second part of our definition.

Having established a baseline definition of EPI – one that we feel captures the essence of the idea and discourse better than alternative approaches – we turn next to the task of moving the idea from basic concept to applicable conception.

DIMENSIONS OF ENVIRONMENTAL POLICY INTEGRATION

Horizontal and Vertical EPI

As we interpret the discussion of environmental policy integration thus far, particularly with reference to the conceptual distinctions made by Underdal and Collier, we find it useful to further develop the idea along two dimensions, one *horizontal* and one *vertical*. The implicit 'landscape' for the dimensions should primarily be understood as governmental. By this we mean that we have national 'cabinets' (governments) and their composite departments and ministries in mind, and are thinking mainly of policy integration as strategies, plans, instruments or other initiatives which are designed to promote change in the direction of ecologically sustainable development. We mention this at the outset since the term 'sectoral integration' is used in the literature to denote *both* political-administrative sectors of government, and the actual sectors of society governments are trying to affect. Our emphasis is on the integration of *policymaking* as a feature of governmental steering according to differentiated sectoral responsibility. We are, in other words, focusing primarily on *process* and *policy*; not on the actual consequences and effects of governmental initiatives (*products*).

Vertical environmental policy integration indicates the extent to which a particular governmental sector has taken on board and implemented environmental objectives as central in the portfolio of objectives that the sector continuously pursues. Vertical EPI involves the degree to which sectoral governance has been 'greened'; the extent to which it has merged environmental objectives with its characteristic sectoral objectives to form an environmentally prudent decision-making premise in its work. This 'greening' does not require an overarching primacy for environmental goals at the cabinet level. Each sector is left free to develop its own understanding of the concept and its implications. The dimension only looks at the degree of EPI within the steering domain of the individual department or ministry. This may lead to significant EPI in a given sector, dependent on the level of ministerial commitment and the ability of sectoral officials to balance internally derived environmental priorities with external demands for 'normal' sectoral policy outputs.

Indicators for vertical EPI will have to give qualitative and quantitative indications of how a given governmental sector aims to integrate environmental concerns in its activities. The following will be a starting point, but more detailed indicators could of course be developed:

- An initial mapping and specification of the major environmental challenges (issues, actors) relevant to the sector
- Formulation of a sectoral environmental action plan (SEAP)
- Consistent and regular employment of both EIA and SEA for all sectoral policy-decisions.
- Timetables and quantitative, indicator-based targets stipulated in the SEAP (or elsewhere).
- Regular reporting of the state of environmentally relevant policies within the sector.

These initiatives should be viewed as baseline measures for vertical environmental policy integration, with the expectation that each can be operationalised in terms of more detailed

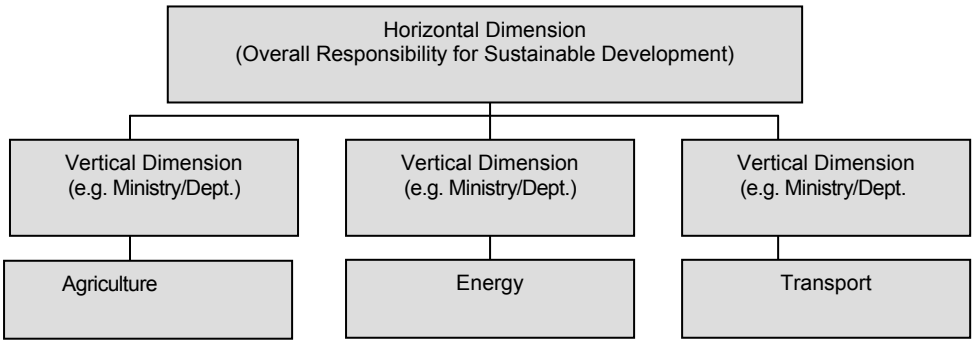
indicators. They serve to identify minimalist standards for assessing whether a given sector has taken on board the challenge of environmentalist integration. The key initiative is the existence of a strategic environmental action plan. As indicated, however, the plan itself will be of limited importance if it fails to properly assess and identify the key environmental challenges for the sector, or if it fails to stipulate realistic targets, benchmarks and measures for objective assessment of implementation results. The possibility of pursuing change without the formal structure of a strategic plan is, of course, possible, but such 'ad-hoc' approaches are notoriously 'fragile' in the daily workings of sectoral departments where they must compete on an on-going basis with the dominant interests of more traditional sectoral policymaking.

It is important to stress here that the term 'vertical' is used in a *functional* sense, and not in the sense of a vertical *constitutional* division of powers. The vertical axis of VEPI signifies administrative responsibility 'up and down' with the arena of ministerial sectoral responsibility. The imagery is one of pubic authorities influencing and interacting with sector-specific actors, both individual citizens and collective/'corporate' actors of differing intent and purpose (see Figure 1). We stress this because, as previously mentioned, there exist other perspectives on environmental policy integration where EPI refers to the integration of environmental concerns into the work of local and regional authorities (e.g. OECD, 2002: 19-21). We prefer to treat the latter problematic within the discourse on 'subsidiarity', rather than to confuse *policy integration* with different levels of *policy responsibility*.

The advantage of this differentiation becomes clearer when we consider the second dimension of EPI: *horizontal environmental policy integration* (HEPI). This is the extent to which a central authority has developed a comprehensive cross-sectoral strategy for EPI. This 'central authority' can be the government (cabinet) itself; or it could be a particular body or commission which has been entrusted with an overarching responsibility for sustainable development; or an inter-ministerial body assigned to handle what is considered important overarching issues (such as the EU Commission's 'Prodi-Group' for sustainable development strategy). In its most essentialist form, horizontal EPI involves the question of the *relative authority* to be associated with environmental concerns in determining the overall policymaking goals and procedures of the responsible political-administrative unit. If 'Who gets what, where, when and how?' is the essence of a political system, the relevant understanding for HEPI is to substitute 'environmental interests' for 'who', and to insist on at least equal treatment for the environment as for other competing interests. This entails, of course, the negotiation of conflicts between environmental objectives and other societal objectives; between different sectors pursuing alternative environmental objectives; as well as between the alternative possible consequences of specific environmental initiatives (that is, environmental 'dilemmas', where the consequences of one 'solution' create new and different environmental problems in another direction).

Also forming part of the horizontal dimension is the central authority's communication to the sectors of a more detailed understanding of what the central authority aims to achieve by EPI, and the implications this should have for sectoral policy. Assigning the environment either a privileged place or a place among equals at the sectoral policy table can be communicated through a wide diversity of legal-administrative instruments, and the effects on the actual degree of HEPI, both within and across sectors, will vary considerably according to the measures chosen. The 'medium' will, in many cases, be the 'message' – even though the message (on face value) indicates environmental privilege. Assessing the degree of HEPI is thus a question of assessing both the basic mandate for environmental privilege, as well as

the detailed specifics for realising the mandate in and through the workings of public administration.



Environmental Policy Integration: Horisontal and Vertical Dimensions

An initial list of appropriate indicators for the horizontal dimension of EPI would include:

- The existence of a long-term sustainable development strategy (SDS)
- The existence of a central authority specifically entrusted with the supervision, coordination and implementation of the integration process
- Relatively clear designations as to sectoral responsibility for overarching goals
- Timetables and targets for environmental policy (included in the SDS or elsewhere)
- Periodical reporting of progress with respect to targets at both the central and sectoral levels
- An active and monitored usage of EIA and SEA for all governmental policies.

As with the vertical indicators, these are, again, 'baseline' requirements for a HEPI assessment. The national sustainable development strategy is extremely important as its existence indicates a political commitment to the crucial role that the UNCED process has assigned EPI in the national policymaking context. Thus the existence of an SDS gives a strong indication of how a government relates to EPI in the overall decision-making context. Further, an SDS is bound to discuss matters related to economic and social development, as these are integral aspects of sustainable development. While this is not, in and of itself, crucial for EPI, it does increase the likelihood that a deliberate and purposive process of weighing various societal objectives up against each other will be carried out. A judicial balancing of environmental objectives against other societal *and* environmental objectives is a crucial aspect of the horizontal dimension of environmental policy integration. It entails an open acknowledgement of the strong potential for conflicts of interest if the demanding goals of sustainable development are to be taken seriously; at the same time that it provides a central platform and arena for attempts to transcend such conflicts. As the Swedish experience with integration efforts has shown (SEPA, 1999), there is no lack of examples of conflicting environmental objectives. The vital question for EPI, however, is whether or not such conflicts have a political forum and policymaking process where conflicting interests and demands can be weighed against democratically derived guidelines and principles.

Equally important is the existence of a specific central authority, an identifiable and responsible institution, to oversee and administer the process of strategic integration. This is a basic *realpolitik* aspect of the horizontal dimension, in that a separate sectoral environmental authority will rarely, if ever, have the authority necessary to intrude environmental objectives into the decision-making premises of other sectoral authorities. The 'ranking' of ministries and departments is a notoriously imprecise exercise. Experience thus far (Lafferty and Meadowcroft, 2000) indicates, however, that it is extremely unlikely that a ministry of environment will, with any degree of consistency, win through when faced with opposition from, for example, ministries of finance, industry, transport, energy or agriculture – all crucial sectors for overall environmental performance. This is why, we would argue, the logic of decision-making in a sustainable development value frame requires that the responsibility for promoting and overseeing environmental objectives be anchored in an overarching authority structure. This could be directly integrated into or placed under the responsibility of the chief executive (as was originally intended in Norway after the Brundtland Report); or placed in an appropriately authorised planning agency (as in Holland during the heydays of NEPP); or located within the domain of the legislature (as with the Commissioner for Sustainable Development in Canada); or placed outside of the political process in the form of a last-resort judicial organ.

The two-dimensional model of EPI described here is broadly in line with what Lafferty and Meadowcroft (2000: 433-434) briefly referred to as 'intra-ministerial integration' and 'sectoral integration'. Whereas the latter entails that each ministry is separately responsible for relating sector interests to environmental objectives, the former involves a lateral extension of responsibility to cover 'the interdependency between sector specific dispositions and the norms of sustainable development' (2000: 434), thereby ensuring a horizontal application of sustainable development principles.

Peter Knoepfel is one of the very few analysts who has addressed this issue directly. His work on institutional arrangements for environmental protection alludes to the same dimensions presented here (Kneopfel, 1994). Some of the institutional scenarios that he discusses – e.g. the "satellite model" – imply an increase in the application of cross-sectoral environmental authority, while others – such as that termed "ecological self-determination" – rely on the sectors themselves to develop and strengthen their environmental performance. This latter example would broadly correspond to VEPI, and his cross-sectoral approach to HEPI. However, Knoepfel's work is not meant as an analytical framework for EPI, but is rather a more general discussion of various strategies for institutional change for the strengthening of environmental protection.

Lenschow's recent book (Lenschow 2001) on EPI does implicitly acknowledge the importance of the relationship between the horizontal and vertical dimensions of EPI. She points out in no uncertain terms that while EPI depends on the 'political commitments of the sectoral policy makers', it is nevertheless crucial that the process is complimented by horizontal coordination at the highest level, – something which we chose to refer to as horizontal EPI as in entails much more than policy-coordination. The analytical implications of this, however, do not appear to have been developed further in the Lenschow volume.

Lafferty and Meadowcroft point out that it is extremely rare to see both dimensions of EPI operationalised at the same time within the OECD countries studied that have all endorsed sustainable development through the Rio accords. Broadly speaking, vertical integration (VEPI) is clearly the dimension that is most actively pursued and, in selected instances, achieved. Consequential examples of horizontal integration (HEPI) are much more difficult to

document. This is hardly surprising given the fact that VEPI clearly involves less inter-departmental conflict, and decidedly less change in the overall allocation of sectoral winners and losers. The issue raised by the two-dimensional approach, however, is whether vertical integration is sufficient in itself to achieve the general ambitions of policy integration within the sustainable development discourse. We obviously think not. The added benefit of studying EPI using the two dimensions is that as the two dimensions are pursued by different sectors of the structures of government, it is quite possible (and, we believe, common) that one dimension (the vertical) is pursued without the appropriate and corresponding developments in the horizontal dimension. This is, of course, because two different levels of government are involved: the sectoral ministries pursuing VEPI, and the central government (e.g. cabinet) pursuing HEPI. Unless the central government provides an appropriate national framework for EPI, the efforts for VEPI will be effective only to a limited extent. We will try to further illustrate the crucial difference in question by briefly looking at attempts at policy integration in two countries, Germany and Canda. We hasten to stress that our use of these cases is only meant to demonstrate the general relevance of the approach and how the different dimensions can be identified in the policy-making process, and not to carry out a systematic EPI analysis.

Dimensions of EPI: two illustrative examples

In order to illustrate how the HEPI-VEPI dimensions could be employed, this article will be rounded off with two examples of how policy initiatives could be subject to an analysis using the analytical framework suggested in this paper. The following is based on the recent OECD case studies on Governance for Sustainable Development (OECD, 2002).

Germany provides evidence of strong procedures primarily for VEPI. There are strong pieces of legislation which combine benchmark indicators, target groups, specific policy instruments and monitoring procedures for key sectoral challenges (such as the innovative "Renewable Energy Act"); the use of "Green Books" outlining all of the relevant international obligations for each sector of ministerial responsibility; and the development of a "German Environmental Index" (the DUX),[10] which is based on a relative scoring system that constantly indicates how far (or "short") sectors have come in contributing to overall goal achievement (OECD, 2002: 141). Perhaps most importantly for VEPI, each of the environmentally crucial sectors of transport, energy and agriculture have developed sectoral strategies for sustainable development (*ibid*: 126). There is also in place a Conference of Environment Ministers (UMK), which is designed to coordinate strategy and policy within the environmental "sector" across the different levels of federal governance, and which clearly contributes to heightened VEPI awareness at the federal level.

With respect to HEPI, it is worth noting that Germany already in the 1970s completed a number of measures that clearly strengthened the horizontal dimension of EPI. This must be seen in conjunction with the EEC's strong rhetorical commitment to the idea of EPI in the early 1970s, as pointed out above. In particular, the 1971 German Environment Programme can be seen as a forerunner for a National Strategy for Sustainable Development (NSSD), but perhaps more notably, the 1972 establishment of the Cabinet Committee for Environment

[10] The DUX is described as a mechanism for horizontal integration by the OECD. However, it is better described as a vertical integration mechanism as it provides a common method by which environmental performance can be measured, a method which is used by individual sectors in their work. It does not have the integrative and cross-sectorial function that we assign to a horizontal measure.

and Health and the 1976 formal definition of environmental policy as "cross sectoral" underscore the importance of cross sectoral coordination and how environmental policy is prioritised and given political legitimacy (OECD, 2002: 116-121). However, these initiatives appeared to loose momentum in the late 1970s and 1980s, and the UNCED-process received less attention in Germany than one perhaps would have expected (*ibid*.) The work on a national strategy has been slow, and it is only now that substantial potential for HEPI is being uncovered. This German potential would seem to be just that: a potential that is only now coming into effect. There is a "Green Minister" initiative evolving, consisting of 10 Secretaries of State and chaired by the Head of the Chancellor's Office, which is to work in close conjunction with a new Council for Sustainable Development (*ibid*). Though as yet unrealized, the potential for strong and substantive HEPI is thus in place, and with the strong VEPI dimension to the work on EPI this could soon put Germany among the international frontrunners in the field.

In *Canada* there is an impressive record of developing institutions and procedures which point towards a strong combination of both VEPI and HEPI. As far as VEPI goes, the most notable feature of the Canadian case is that 28 governmental units (ministries, agencies and other bodies), have already prepared second-generational sectoral plans for sustainable development. The interesting aspect of these plans is not their quality – like most other strategies and action plans they appear quite general and contain few concrete targets – but rather the institutional follow-up and review process to which they are subjected. Canada is still the only country in the world that has a Commissioner for the Environment and Sustainable Development (CESD), who's mandate it is, among other tings, to monitor and review the sectoral strategies. This ensures that each strategy is given a full evaluation by an independent body (the CESD is part of Auditor Generals operations) which the sector is then required to take into account when the strategy is revised at regular intervals (OECD, 2002: 49-50). As a VEPI measure, the strategies appear more potent than in other countries that lack such an evaluation procedure.

This illustrates the interplay between VEPI and HEPI: the potential for the sectorial strategies - a VEPI measure – is greatly enhanced by the operations of the CESD – a horizontal measure. In addition to the CESD, a number of other institutions that have evolved in recent years contribute to a strong HEPI dimension in Canada (OECD, 2002: 46-58). The most important of these are: the long-standing National Round Table on the Environment and the Economy (NRTEE); the Treasury Board Secretariat (with key functions in regard to sectoral strategies for SD); and the Canadian Environmental Assessment Agency (CEAA). In addition a new "Leaders' Forum on Sustainable Development" has been introduced to improve the overall coordination of the sectoral strategies and action plans.

These institutions interact through a system of coordinated functional diversity, in which the CESD plays an increasingly crucial role. Their operations rest on several specific legislative acts, and are thus, for the most part, statutory based. This has crucial importance for both their legitimacy and functionality. The CESD has, for the past six years, handled a large number of "petitions" on sustainable development problems from private citizens and groups, all covered by legal prescription and subject to judiciary process (*ibid*: 68-69). In addition – and parallel to these processes – the NRTEE has mobilized key economic and environmental actors to provide continuous input to governance in the form of specific projects and tasks, and these have been increasingly taken into consideration in planning and budgetary procedures.

Most of this indicates that a strong HEPI is being developed which will complement the strong VEPI provided through the framework of the sectoral strategies. The iterative effects of the highly publicized CESD auditing procedures, and of the more managerial CEAA assessment procedures, point towards clear learning effects and measurable achievements. While the actual achievement of strong horizontal steering is not yet documented, the signs are very promising; with the government itself recognizing that horizontal steering is necessary for an effective EPI.

The German and Canadian examples illustrate how the two dimensions of EPI can be identified in a particular policy context. More detailed studies employing indicators as suggested here should reveal the extent to which each of the dimensions has been manifested in each case. At present it appears that the generally less developed horizontal dimension acts as a "limiting condition" on the vertical dimension. That is, while several initiatives for VEPI have been implemented, the lack of a strong horizontal dimension prevents the vertical measures from becoming effective, since it is the horizontal dimension which ultimately provides the political, legal and budgetary framework for an effective VEPI. This situation is clearly documented in Norway, where a recent study of the transport and energy sectors indicates that a lack of horizontal steering clearly limits the potential of sectoral action plans (Torjussen 2001). The horizontal dimension in question involves an overall strategy that sets out the main priorities and provides effective coordination of the different sectoral strategies (including cross-sectoral studies of cost effectiveness), but it may also involve a broader legitimization of sustainable development by elevating the issue to a central national political challenge.

CONCLUSION

Environmental policy integration is perhaps the most important feature of the political and institutional aspects of the UNCED process. However, EPI suffers from conceptual diffuseness in the policy-integration literature. This applies to its general definition, as well as the political context within which the concept must be understood. The present article has mapped the development of the concept and sought to provide it with much needed clarification. Further, we have made an initial attempt at an analytic framework which we feel can provide a better operational point of departure for a more effective understanding of the concept and its empirical manifestations. We have identified two dimensions of EPI through which the concept may be understood and studied more effectively. The vertical dimension (VEPI) concerns the extent to which a particular governmental sector has taken on board and implemented environmental objectives as central in the portfolio of objectives that the sector continuously pursues. The horizontal dimension (HEPI) lies "above" this, and concerns the extent to which a central authority has developed a comprehensive cross-sectoral strategy for integration which entails substantive coordination and a willingness to prioritize among sectors. These two dimensions are strongly affected by the existing governance structures of modern states, with proclivities often pointing in the one or the other direction – but very seldom along both dimensions simultaneously. As a general conclusion, however, it is clear that efforts at vertical integration are more common, and more influential, than efforts at horizontal integration.

Further research along the lines here suggested should be able to cast significant light on both the normative and empirical aspects of the concept and its realization. This would involve not only the environmental aspect of sustainable development (as focused here), but also the total integrative challenge attaching to both the economic and social aspects. This could help to identify crucial variables and decision points in governance for sustainable development, a challenge being taken more and more seriously within both the European Union and the OECD. As we interpret the case studies of even the most advanced nations in this respect, no OECD country appears yet to have found the institutional and procedural "key" to effecting a significant break with "business as usual". A key premise of the present study is that, if such a break *is* to be achieved – in line with the aims and aspirations of the UNCED process – it will have to involve a much more consequential integration of environmental concerns in all sectoral activities.

REFERENCES

Collier, Ute (1997): *Energy and Environment in the European Union*, (Ashgate, Aldershot)

Commission of the European Communities (1973): *Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States meeting in the Council of 22 November 1973 on the programme for action of the European Communities on the environment* (First EAP) (SEC (74) 70014).

Commission of the European Communities (1977): 'Resolution of the Council of the European Communities and of the representatives of the Governments of the Member States meeting within the Council of 17 May 1977 on the continuation and implementation of a European Community policy and action programme on the environment' (Second EAP), *Official Journal of the European Communities* (Vol. 20, No. C139)

Commission of the European Communities (1983): 'Resolution of the Council of the European Communities and of the representatives of the Governments of the Member States, meeting within the Council of 7 February 1983 on the continuation and implementation of a European Community policy and action programme on the environment' (Third EAP), *Official Journal of the European Communities* (No. C46/1, 7.2.83)

Commission of the European Communities (1993): *Towards sustainability: A European Community programme of policy and action in relation to the environment and sustainable development* (Luxembourg, Office for Official Publications of the European Communities)

Commission of the European Communities (2002): 'Decision of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme', *Official Journal of the European Communities* (L242/1, 10.9.2002)

European Environmental Bureau (EEB) (1999): *Ten Benchmarks for Environmental Policy Integration*, Brussels, EEA.

Gerth, H.H., and Mills, C. Wright (1958): *From Max Weber: Essays in Translation* (Oxford, Oxford University Press)

Kaplan, Abraham (1964): *The Conduct of Inquiry* (Chandler, San Francisco, CA)

Knoepfel, Peter (1995): 'New Institutional Arrangements for the Next Generation of Environmental Policy Instruments: Intra- and Interpolicy-Cooperation', in Dente, Bruno: *Environmental Policy in Search of New Instruments,* Dordrecht: Kluwer

Lafferty, W. M. and O. Langhelle (1999) (eds.): *Towards Sustainable Development: On the Goals of Development and the Conditions of Sustainability*, London: Macmillan.

Lafferty, W. M. and J. M. Meadowcroft (2000) (eds.): *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*, Oxford: Oxford University Press.

MacNeill, Jim, Winsemius, Peter, and Yakoshiji, Taizo (1991), *Beyond Interdependence: The Meshing of the World's Economy with the Earth's Ecology*, Oxford: Oxford University Press.

Lele, Sharachchandra M (1991): 'Sustainable Development: A Critical review', *World Development* (Vol. 19, No. 2)

Lenschow, Andrea (1997): 'Variation in EC environmental policy integration: agency push within complex institutional structures', *Journal of European Public Policy* (Vol. 4, No. 1).

Lenschow, Andrea (1999): The Greening of the EU: the Common Agricultural Policy and the Structural Funds, *Environment and Planning C: Government and Policy* (Vol. 17, pp. 91-108)

Lenschow, Andrea (2001): 'Greening The European Union: An Introduction' , in Lenschow, Andrea (ed.), *Environmental Policy Integration: Greening Sectoral Policies in Europe*, London, Earthscan

Liberatore, Angela (1997): 'The integration of sustainable development objectives into EU policymaking: barriers and prospects', in Baker, *et al. The Politics of Sustainable Development*

Nollkaemper, Andre (2001): 'Three Conceptions of the Integration Principe in International Environmental Law', in Lenschow, Andrea (ed.), *Environmental Policy Integration: Greening Sectoral Policies in Europe*, London, Earthscan

OECD (2002): *Governance for Sustainable Developmen: Five Case Studies*, Paris, OECD.

Pearce, David (1989): *Blueprint for a Green Economy* (London, Earthscan).

Redclift, Michael (1993): 'Sustainable Development: Needs, Values, Rights', *Environmental Values* (Vol. 2, No. 1)

SEPA: Swedish Environmental Protection Agency (1999): *Samordning och målkonflikter: Sektorintegreringens möjligheter och problem*, Stockholm: Naturvårdsverket Forlag.

Torjussen, Solveig (2001): *Styring for en Bærekraftig Utvikling: En Evaluering av Offentlige Tiltak for Sektorintegrasjon i Norge fra 1987 til 2001*, Graduate thesis in Political Science, Department of Political Science, University of Oslo.
Underdal, Arild (1980): 'Integrated Marine Policy: What? Why? How?', *Marine Policy* (July, 1980)
United Nations (1993): *Agenda 21: The United Nations Programme of Action from Rio* (United Nations Department of Public Information, Geneva)
Wilkinson, David (1997): 'Toward Sustainability in the European Union? Steps within the European Commission Towards Integrating the Environment into Other European Union Policy Sectors, *Environmental Politics* (Vol. 6, no. 1)
World Commission on Environment and Development (1987): *Our Common Future* (Oxford, Oxford University Press)