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SEA MUST LEARN HOW POLICY MAKING WORKS

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The concept of strategic environmental assessment (SEA) has developed rapidly in recent years and has been extensively promoted by environmental assessment (EA) practitioners. SEA has been the focus of considerable dialogue, increasing regulatory attention and emerging evidence of application. This paper seeks to advance the potential for the adoption of SEA in policy making by focusing attention on policy making processes themselves, and on the need for SEA procedures to be moulded to these existing policy making activities. We argue that widespread adoption of SEA concepts is unlikely unless EA practitioners become much more cognisant of the policy making process. Too much of the literature on SEA to date is insular — EA practitioners communicating amongst themselves. Dialogue on SEA development must be between EA proponents and policy makers/theorists if SEA of policy is to fulfil its promise. In order to make SEA of policies effective, SEA must influence the decisions that are intrinsic in policy making. We provide a simplified policy making model and demonstrate that it is necessary, and possible, for SEA to provide environmental input throughout the stages of policy formulation and decision making. The policy making context must drive the form and process of the SEA. In effect, this is an extension of Brown & Hill's (1995) notion of decision scoping, originally developed to increase the efficiency and effectiveness of project-based EIA, to the environmental assessment of policies.

Keywords: strategic environmental assessment, policy making, policy, environmental impact assessment, decision scoping, decision making, environmental assessment

SEA of Policy (Policy Environmental Assessment)

There is reasonably broad acceptance, amongst EA practitioners, of the definition of strategic environmental assessment (SEA) as the application of environmental

assessment to policies, plans and programs. While much of the early literature on SEA made little differentiation between application to each of these three strategic activities, there is growing recognition of the need to consider different approaches and techniques for SEA of policies *vis-a-vis* SEA of plans and programs (Bailey & Dixon, 1999; von Seht, 1999; Therivel, 1997; Partidario, 1996). This differentiation can be attributed (Bailey & Dixon, 1999; Therivel, 1997) to:

- the predominance of much current application to plans and programmes;
- the greater complexity and uncertainty of policy making;
- the existence of policy making processes that are less formal and/or highly variable; and
- the focus on plans and programs in some formal SEA systems — most notably the EU SEA Directive (Clark, 2000; von Seht, 1999).

This paper focuses specifically on SEA of policies. We will use the terminology *SEA of Policy* in this paper, but will regard it as synonymous with *policy environmental assessment* (*PEA*) — the latter defined by Therivel (1997: 21) as "an appraisal of the environmental impacts of a policy which is used in decision making" (Bailey & Dixon, 1999).

We recognise that the term *policy* can refer to a very complex array of activities operating within a very diverse range of contexts (for example, an examination of the range of policy types on which SEA might operate in Bailey & Dixon, 1999). For instance, policies may be, *inter alia*:

- public or private;
- explicit or implicit;
- general or specific; and
- whole-of-government or agency-specific (Boothroyd, 1995; Bridgman & Davis, 2000).

For simplicity, this paper focuses on the formulation of explicit public policies, though we believe that its conclusions have quite general application.

Policy Makers Scepticism Regarding SEA

Despite considerable proselytising on the part of EA practitioners, there is evidence of considerable disinterest in, even resistance to, SEA amongst policy makers, who argue:

- existing policy making procedures can and often do incorporate environmental considerations (Boothroyd, 1995; Bailey & Dixon, 1999; Partidario, 1999);
- potential environmental impacts of their policy making activities are minimal, therefore SEA is not necessary (Devuyst *et al.*, 2000); and

- the formality of SEA as proposed within much literature, and its sole focus on environmental issues, is unsuitable for policy making processes (Boothroyd, 1995; Bailey & Dixon, 1999; Bailey & Renton, 1997).

Perhaps even more significant, evidence from the broader policy literature suggests a basic conflict between policy makers and EA practitioners in their ideas about the role of scientific information in policy making (Healy & Ascher, 1995; Smith Korfmacher, 1998; Boothroyd, 1995). Environmental assessment approaches are seen to be dominated by notions of positivism and scientific "rationality", with an implicit assumption that improved decision making *automatically* results from input of objective scientific evidence, based on observable phenomena, and evaluated and quantified according to a systematic and structured procedure (Clark, 2000; Smith Korfmacher, 1998; Healy & Ascher, 1995). This may be explained by the early dominance of scientists within EA practice, and its origins in NEPA in 1969 when rationalist notions of decision making dominated (Weston, 2000). These notions are reflected in many, particularly early, definitions of SEA, which focus on the comprehensive assessment of issues and formal, systematic procedures (Bailey & Dixon, 1999).

However, experience with incorporating scientific information in policy making suggests that the automatic improvement in decision making often does not occur (Healy & Ascher, 1995; Smith Korfmacher, 1998). This is often the result of scientists' failure to appreciate the complexity of policy making processes, including the dynamic nature of policy making, the involvement of a wide range of actors and the influence of new information in the policy making process (Healy & Ascher, 1995; Boothroyd, 1995). We argue, therefore, that a precondition to SEA exploiting any of its potential to provide policy makers with information regarding the environmental consequences of their decisions, and consequently influencing those decisions towards more sustainable outcomes, requires SEA to learn how the policy making process works.

The Restricted Focus of Current SEA Literature

Within much of the literature on SEA, critical evaluations of SEA concepts (Thissen, 2000; Therivel *et al.*, 1992; Sadler & Verheem, 1996) and practice (Devuyst *et al.*, 2000; von Seht, 1999) have focussed largely on how to conduct the SEA, SEA content and assessment procedures, and the scientific quality of the assessment.

In our view, there appears to have been very little critical evaluation of a range of issues that we consider central to the successful implementation of SEA concepts and practice. These issues include:

- how well SEA fits policy making processes;
- acceptance of SEA as a critical tool in policy making;
- the impact of SEA on decision making within the policy making processes; and
- the effect of SEA on outcomes (of the policies being formulated).

It is probably too early to expect to have a large set of examples of effects of SEA on outcomes and decision making. But, even so, we suspect that their almost complete absence in the literature to date is symptomatic of a general problem — that of a restricted focus by SEA practitioners on the content and assessment processes of SEA, rather than on the impact of SEA on the policy outcomes.

We argue that the restricted focus, together with the scepticism of policy makers regarding the utility of SEA, suggests an urgent need to refocus debate on the nature of SEA when applied to policy making.

This paper provides a two-stage framework for such a refocus:

- As a starting point, EA practitioners need to become informed about the nature of policy making processes. Policy making is supported by a long history of analysis and theory, and it would not be unkind to suggest that many EA practitioners appear unfamiliar with this field — at least as evidenced by what they have written to date in the EA literature. By way of example of related starting points, Kornov & Thissen (2000) have identified the theories and models of decision making processes available in the behavioural science literature.
- Next, there is a need to identify where the opportunities lie for SEA to contribute to any particular policy making process, who is involved and who is making the decisions implicit in the policy making, and the type and form of environmental information that is pertinent to this decision making. The SEA content and form needs to be tailored to these realities for each specific policy making context.

Such refocusing is suggested by other current work. Sheate *et al.* (2001: 3), in reporting their findings of a European case study analysis of SEA and integration of the environment into strategic decision making, conclude:

> "… SEA can be seen to originate from two main disciplines: natural resource management and political science. The research also indicates that in terms of integration it is a hybrid of both these schools that forms the optimum SEA process."

Models of the Policy Making Process

The policy sciences contain many different model theories that explore policy making processes. These explain, or attempt to explain, the complex and dynamic nature of policy making. Complexities include the role of the state (e.g. elitist, pluralist, Marxist and corporatist theories), the distribution of power in society, the role of organisations and bureaucracies within policy making, and the role of information within the policy making process (Ham & Hill, 1984). Policy making occurs within very different contexts that include the policy making norms of the particular jurisdiction, the nature of the substantive issue under consideration, the administrative framework, and the scale of the policy making activity.

There are also models and theories on the nature of decision making:

- the rational-comprehensive model;
- incrementalism;
- mixed-scanning; and
- the "garbage-can" model (Sabatier, 1999; Weston, 2000).

These theories contain both descriptive and normative elements — observations of how decision making both does, and should, operate (deLeon, 1999). They are generally regarded as competing theories of the nature of decision making within policy making (Ham & Hill, 1984). Project-based EIA was conceived while notions of rational-comprehensive decision making were dominant and, as noted, these ideas are still central in much EA practice today. They are reflected in the focus on comprehensive assessment of potential environmental impacts, consideration of alternatives and assumptions of a single decision maker (Weston, 2000). However, many consider the rational-comprehensive model is not at all descriptive of policy making procedures, and unrealistic in its assumptions of objective rationality (Kornov & Thissen, 2000; Weston, 2000). Policy making is more complex than this.

Our argument is that SEA practitioners must become familiar with the nature and contexts of policy making. Procedures intended for the EA of policies will need to be appropriate to both the particular policy making context (Brown & Therivel, 2000) and the nature of the particular policy making. If not, consideration of environmental issues in policy making through SEA will be impeded, if not impotent.

A critical starting point is a model of the policy making processes, and various models representing competing theories can be found in the literature. Sabatier (1999) provides an excellent review of some of the leading models within the policy sciences, including stage models, institutional rational choice and the

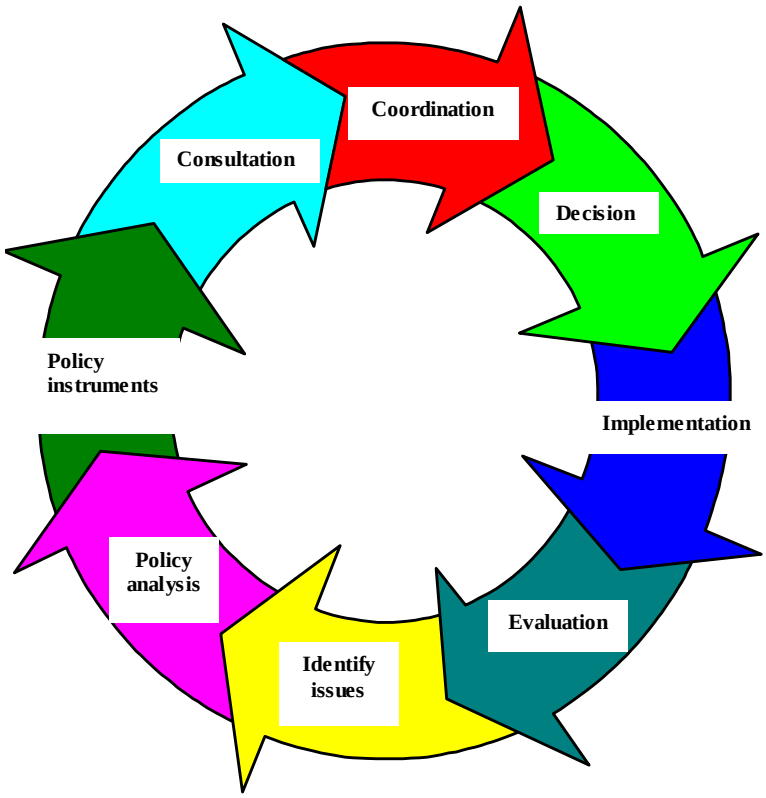

Fig. 1. A model of the policy making process.

Source: Bridgman & Davis (2000) *The Australian Policy Handbook*

advocacy coalition framework. We have selected a model of the policy making process developed by Bridgman & Davis (2000) (Fig. 1). We do not present this model prescriptively nor for any implied generality and, of course, it simplifies a complex and variable process. However, it is more than a theoretical example as it is the basis of the official policy making handbook of one of Australia's constituent states (Queensland Government, 2000). We acknowledge that this model may be underpinned by a range of cultural and political factors that determine the nature of policy making in Australia, but the choice of model is unimportant for the purpose of this paper — where that purpose is to illustrate the *use* of any appropriate model of policy making to the SEA practitioner.

The Bridgman & Davis (2000) model disaggregates the policy process into stages. Despite their connection in the figure, it is accepted that the stages are not necessarily linear, do not necessarily occur in every situation, and considerable

overlap is likely to occur between them. In any policy making activity, the stages may operate in an iterative and dynamic process where some stages may be occurring in parallel. The outcomes from one stage may, and usually do, influence the activities of others. More explanation and interpretation of these stages is shown in the second column of Table 1 below and a detailed description of them, and their actors and activities, is available in Bridgman & Davis (2000).

By way of example, policy making could be the development of a policy on coastal management. The timeframe from identification of the need for a policy through to its implementation may be a year or more. The range of issues considered for analysis would be broad, and likely be underpinned by extensive data gathering and analysis. Considerable inter-departmental coordination would probably be undertaken. A green paper for discussion and consultation in relation to alternative instruments for managing the coastline may be prepared, with the consequences of different options enumerated. Submissions from a range of government departments, and other interested parties including environmental and business groups, may be sought and reviewed by the department or even an inter-departmental committee. Refined policy options, including the implementation mechanisms (policy instruments such as legislation) would be prepared. The policy would likely then be debated and decided by Cabinet and implemented by one or more agencies funded specifically for coastal management activities. In this example, the policy making process would likely exhibit a pre-planned structure, coordination, deliberate, and perhaps even sequential, stages.

By contrast, development of a policy to manage wildlife-human interactions in nature reserves (following a fatal wild animal attack on a child) would more likely occur "on the run" and in the glare of intense community and media attention. The timeframe between identification of the issues and policy implementation may be a matter of days. Decisions on the policy would probably be made by an individual Minister — with, or perhaps without, the advice of the Minister's Department. The time and resources available for policy analysis would be limited and only a very restricted range of data and policy options may be considered. Consultation with relevant stakeholders and coordination may be minimal, possibly non-existent.

Clearly the processes by which these different policies would be developed are poles apart, but a model like Fig. 1 still provides a tool for analysing, and understanding, the processes in both cases. While the order and length of the policy making stages, the nature and quality of analyses, the level of consultation and coordination, and the makeup of stakeholders, are different, the underlying policy making cycle is still fundamentally present. We would argue that it is possible, and essential, for the EA specialist to use models of policy making

Table 1. Using the policy making model to focus the SEA.

Stages of Policy Making		Focussing the SEA	
		Identify Decisions/Actions by Policy Makers within Each Stage	Potential Contributions of the SEA
Identify Issues	New issues emerge requiring policy attention or need to reconsider existing policy issue	• Which issues will require analysis? • Decide "non-issues"	• Environmental monitoring data and analysis/ state-of environment reporting • Trends in other jurisdictions • Environmental briefing for policy advisors/ politicians for agenda-setting
Policy Analysis	Information gathered and research into nature of policy issue	• Formulate the problem • What are goals and objectives? • Which parameters to include? • Which alternatives will be investigated? • Which potential policy responses will be investigated?	• Scope problem's environmental aspects • Environmental data collection and prediction • Suggesting, and environmental analysis of, alternatives • Agency and ministerial briefs on environmental issues and possible solutions
Policy Instruments	Identify possible mechanisms (e.g. legislation, taxation or government funding) for dealing with policy issues	• Which policy instruments? • Choose instruments	• Scope and assess environmental implications of different policy instruments
Consultation	With general community and interested groups to inform policy analysis and test feasibility of proposed policy responses	• Who are relevant stakeholders? • What consultation strategy? • Assess options in light of consultation	• Identify relevant stakeholders and appropriate consultation strategies • Conduct consultation

Table 1 (*Continued*)

Stages of Policy Making		Focussing the SEA	
		Identify Decisions/Actions by Policy Makers within Each Stage	Potential Contributions of the SEA
Coordination	Coordination amongst government departments and agencies to identify conflicting objectives, interests and responsibilities	• What are budgetary implications of proposed policy response • Is this consistent with other policies?	• Assess consistency of proposals with existing environmental policies/ initiatives • Policy submission on to decision makers
Decision	Decision to adopt particular policy response	• Who are the final decision makers? • Where and when will decision be made? • Decide policy response	• Policy submission and ministerial briefs on environmental consequences
Implentatation	Implement policy response through establishing policy instruments and adjusting administrative structures	• What are resource implications of implementation • What are the legal and administrative requirements	• Assist in developing programmes to implement environmental dimensions (mitigation?) of policy • Programme development
Evaluation	Evaluation of effects of policy response, including efficiency, effectiveness and appropriateness to policy	• Is policy response effective (outcomes, effectiveness)?	• Evaluate environmental consequences of policy response and measure against sustainability criteria

The first two columns are adapted from Bridgman and Davis (2000)

to dissect and assess the likely form of the process (in all cases, not just in the somewhat extreme examples above) to which they seek to contribute through SEA.

Moulding the SEA to Fit Any Particular Policy Making Activity

If SEA were to contribute effectively to each of the two examples above, it would have very different form and content in each case. The timeframe for

data collection and analysis would be different. In one case, detailed studies and data collection could be conducted, but in the other collection of new data would not be feasible — and instead would have to rely on expert opinion. The environmental information in one may be initially compiled as voluminous reports, in the other it might exist only as a briefing paper (perhaps even a phone call) to the Minister. In one, the SEA could be the medium for public and other stakeholder consultations. In the other it may only be able to advise what consultations would be desirable. Clearly, the EA practitioner has to mould the SEA to fit each policy making activity. A policy making model, such as Fig. 1, provides an essential basis for this understanding.

Within each of the policy making stages identified in Fig. 1, the decisions to be made, and the type of environmental information required, and the time and resources available, can be identified ahead of time by the SEA practitioner. We illustrate this, in part, in the right hand side of Table 1. The third column identifies the decisions and actions that will be made by the policy makers within each stage. A decision-orientated approach is appropriate because it ensures that the SEA will be directed at providing timely and apposite environmental information to the decisions at each stage (effectively an adaptation of the Brown & Hill (1996) concept of "decision scoping" recommended for project-based EIA). This column shows, notionally, what the output from this scoping of decisions and actions likely to undertaken by the policy makers might look like. This focus on *decisions* as the starting point for SEA is supported by observations in the ANSEA project that "placing the decision making process as the departure point is suggested to be the appropriate way to define a consistent object of study for SEA" (ANSEA, 2000: 5).

The fourth column of Table 1 provides a list of contributions that collectively, could constitute the SEA of the particular policy making activity. These SEA contributions can be assembled effectively as the response to the matters identified through the "decision scoping" contained in the third column. SEA, designed in this way, has the potential to influence the policy making agenda through highlighting environmental issues requiring attention, flagging alternative approaches that might achieve the required policy outcome but with fewer adverse environmental costs, and ensuring that decision makers and those who advise them, make their decisions fully aware of environmental consequences and opportunities. Just as policy making itself is highly contextual, SEA too has to be highly contextual. In some contexts, SEA may be able to contribute to all of the stages, in others it may have to be content with contributing more to some than to others.

The model provides the environmental assessment practitioner with a road map to the design of effective SEA. Its emphasis on appropriate input to all

stages of decision making conforms, and in fact extends, the Kornov & Thissen (2000) argument that consideration of the SEA design must occur at the beginning of the process in order for it to be effective. It also provides a methodology for Boothroyd's (1995) proposal for a merging of the formality and openness of the (project-based) EIA driven approach to PEA with the heuristic quality of policy vetting — what he suggested should be called policy assessment (Bailey & Dixon, 1999).

The policy making model also highlights the need for SEA to be seen as a learning process for all involved in the policy making. The contribution of EA practitioners, and their environmental information, within policy making processes has the potential to influence not only policy outcomes but also the policy making process itself. The inclusion of new information will alter the power of different actors in the policy making process and may lead to changes in perceptions, attitudes and behaviour of actors involved (Healy & Ascher, 1995; Therivel, 1997). SEA practitioners can learn to recognise policy making as an iterative, cyclical process where policies are constantly re-evaluated in light of new information, and adapt SEA procedures accordingly (Kornov & Thissen, 2000). This is similar to the "adaptive management" concept that appears in some of the project-based EIA literature (Smith Korfmacher, 1998).

It is also important to acknowledge that the reaction of policy makers to new information and actors changes with increasing experience. Thus, initial resistance to the SEA of policies is to be expected, but as experience accumulates, progressive policy makers are likely to appreciate the involvement of EA practitioners and information and, eventually, seek SEA input in future policy making processes (Boothroyd, 1995). The task for SEA practitioners is to tailor their procedures and concepts to facilitate and encourage this transformation. Their task of convincing policy makers of the value of their contribution will be much easier if they "dance to the same drum beat" (work to the same policy making model) as do the policy makers.

Conclusions

Environmental Assessment practitioners have the potential to contribute significantly to ensuring that environmental dimensions are considered in policy making and that policy making outcomes shift us in more sustainable directions. We consider their potential to do this is based on:

- some thirty years of collective experience of analysing and predicting potential environmental impacts;
- a well-honed and holistic systems view of the environment;

- a multi-disciplinary focus; and
- a strong tradition of public participation and consultation.

However, we are not confident, based on what we have been able to garner from published concepts and application of SEA to policy making, that current SEA of policy approaches will realise this potential unless there is a significant change in approach. We have illustrated the need for SEA to focus on policy outcomes rather than solely on the scientific rigour of the environmental assessment (or on applying project-based EIA steps to the policy making context).

We have shown that it is essential, and possible, to refocus SEA on the way that policy making processes work, and to mould SEA to fit these processes. To achieve this, EA practitioners need to become familiar with the policy process, and there is a body of literature and practice within the policy sciences to assist with this. Environmental assessment practitioners must:

— understand the stages of policy making and identify the activities and issues that will be addressed within each stage;
— identify when, and by which actors, decisions are made within different stages of the policy making process (decision scoping), and the appropriate form and content of environmental information that should be available at these decision points; and
— mould the content and form of SEA to contribute to these decisions. This moulding will have to be specific to each particular policy making context.

SEA will have to fit policy making, not the other way around.

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