

# Institutional Change and Learning for Sustainable Development

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*In summary, the aim of the project is to explore operational institutional lessons of relevance to Australia, gleaned from institutional change in other countries driven by the post-WCED (1987) and UNCED (1992) policy agenda of sustainable development. The primary output of the project is a brief (~20 page) report with a target audience of the NRM policy community, stakeholders and NGOs, supplemented by explanatory material, background papers, case studies, data bases, etc. as required. Clearly a review of institutional change around the world over the period 1987-2001 represents a mammoth task, and thus this study must scan widely and then scope more narrowly. This paper seeks to inform that process, and to do so is organised as follows:*

- In Part 1, a conceptual discussion of the nature of 'institutions', emphasising the need to understand the broader and interdependent institutional system (policy, organisations, rules, political traditions);*
  - In Part 1, a discussion of different types of policy and institutional learning, and of who learns about policies and institutions;*
  - In Part 2, thoughts on operationalising the idea of 'institutional learning' in the context of this study, Australia, and sustainable development;*
  - In Part 2, a discussion of proposed primary criteria for selecting case studies and themes for closer investigation;*
  - In Part 2, a set of proposed cases and themes for further investigation, along with a set of options that are relevant but not favoured.*
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# Part 1: Conceptions of Institutions and Policy Learning

## 1. Introduction

This project, under the LWA Social and Institutional Research Program, is tasked with drawing lessons for Australian natural resource management (NRM) from experiences of other countries in “institutional reform.” Underlying this investigation is the proposition that Australia should be making a purposeful effort to move to NRM policies and practice consistent with the notion of sustainable development and with commitments made under international agreements at, and subsequent to, the 1992 UNCED conference.

In approaching this broadly defined task, part one of this paper seeks to provide the basis for a discussion of the key concepts of “institutions” and “policy learning.” This is intended to assist the project team to build a set of criteria for the selection of case studies from which to draw lessons relevant to Australian NRM. First we explore the issue of defining the focus of our attention - institutions. It is important analytically that a shared and well-understood meaning for the term “institution” is established at the outset, and that consistent usage is maintained as much as possible throughout the project. We argue that clear and consistent terminology will promote a deeper understanding of the dynamics of institutional systems, which in turn will produce a more useful selection and analysis of case studies.

Secondly, as this project is “an exercise in policy and institutional learning,” some exploration of what might comprise learning in this context seems worthwhile. A

brief summary of ideas from the policy learning literature is given to bring focus to the search for case study material. From this framework, a focus is developed in the following sections on what it is we might attempt to learn about with respect to institutions for sustainability, and examples of potential case studies are raised to prompt discussion.

In addition to serving a systematic selection of case studies, this section stands in its own right as a contribution to the discussion and development of conceptions of institutions and policy learning for sustainability, and one that we trust will be of interest to the NRM policy community.

The institutionalisation of the sustainability idea, and its eventual integration as a fundamental and mainstream principle of governance, is a long-term project only recently begun. Arguably, sustainability has an inexorable logic, on a plane with other deep social logics such as democracy, justice, and human rights. Inevitably it seems, these central animating ideas of modern societies are all intertwined and inseparable. Sustainability has yet to attain the status of its natural partners at national or global levels. This will require both broad normative change and purposive institutional change. Now is certainly an important historical point for humanity with respect to institutional development, and one that demands that we attend closely to the task of better understanding the substance and the ways of our institutions.

## 2. Institutions: Form, Function and Relations

This section of the paper sets out a framework for the consideration of institutions in the context of the project objectives. It develops a general conception of institutional systems based on the analytical definition and explanation of institutions developed in the New Institutional literature, and particularly the ideas of Douglass North (North 1990). The account given seeks to reconcile this analytical definition of institutions with meanings underlying common usage, reducing apparent conflict

through the view that the need for analysis forces refinement and precision in defining the objects of study. This theoretical work in turn facilitates clearer understanding of the commonalities of meaning behind seemingly disparate common usages. It also allows us to develop a systems view of institutional form and function that will facilitate a deeper appreciation of how and why particular institutional arrangements may be more or less effective at addressing the problems of sustainability policy.

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### DEFINING INSTITUTIONS

The term institution has been used in many ways to refer to a range of different things. It is used in everyday language to refer to entities as seemingly disparate as banks and insurance companies, a nation's constitution, or an older member of the community reliably seated at the bar of the local pub. This broad scope in common usage of the term has been reflected in the language of institutionally related theorising dating back a century. Most definitions of institutions are descriptive and encompass a diversity of social entities. Following a period of neglect, institutional theory has recently undergone a revival throughout the social sciences (Goodin 1996; March and Olsen 1984). References to institutions and the use of institutional language often remains vague and, despite a greater emphasis on analysis, somewhat conflictual. Some of this is a deliberate attempt to accommodate a range of disciplinary theoretical perspectives with disparate traditions, or merely traditions of similar imprecision, with an associated view that a restrictive definition would not be helpful to scholarship. In recent Australian literature Henningham (1995), for example, relies on a dictionary definition originating in the sixteenth century, describing an institution as: "an established law, custom,

usage, practice, organisation, or other element in the political or social life of a people." Dovers (2001) builds on this to produce a more detailed meaning, but one that retains the ambiguity of the original, and summarises this as: "An institution is an underlying, durable pattern of rules and behaviour."

Theoretical work in other areas has led to attempts to provide a more precise definition to assist analysis. However, as foreshadowed above, such definitions have contributed to confusion over how to utilise the term in a discourse that refers to several of the differing entities that in various contexts are called institutions. A particular difficulty arises in the distinction of institutions and organisations. Where the term institution is used to refer to an organisation, those that use it so would not agree that all organisations could be described as institutions. So a key question must concern what it is that distinguishes one type of organisation from another in this way. Dovers (2001), for example, argues that persistence is a feature of institutions, and therefore an organisation that persists over time could qualify as an institution. However, here we explore a different approach.

One of the most widely used theoretical definitions of institutions is that of Douglass North (1990):-

*Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.*

“They are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behaviour, conventions, self-imposed codes of conduct), and their enforcement characteristics. Together they define the incentive structure of societies and specifically economies” (North 1994). This definition can be interpreted as referring to an institution as being a single rule (such as that proscribing the forward pass in rugby, or that prescribing which side of the road to drive on), but it is also possible and of considerable utility to allow a hierarchy of aggregation of individual rules. Thus the set of official formal rules of a sport can be considered an institution.

North also proposes the primary purpose of institutions.

*Institutions reduce uncertainty by providing structure to everyday life. They are a guide to human interaction...”*

Thus the way others will respond in a given interaction is made more predictable by institutions, whether by formal rules of the road or sport, or through informal social and cultural norms of behaviour. This allows us to move through many interactions with others every day without having to renegotiate ground rules every time.

The scope of this view of institutions is important to appreciate. It includes all socially devised rules of governance such as articles of constitutions, statute and common law, regulations and by-laws, policies, legal rulings, contracts, codes of conduct and honour, and the myriad social and cultural traditions and norms that constrain the way individuals and groups act in social contexts. This vast array of constraints and guides to appropriate

behaviour forms an institutional matrix within which all social actors interact.

North specifically enjoins us to separate institutions from organisations conceptually – warning against confusing the rules of the game with the players. “The purpose of the rules,” he explains, “is to define the way the game is played. But the objective of the team within that set of rules is to win the game – by a combination of skills, strategy, and coordination; by fair means and sometimes by foul means” (North 1990). Thus teams (the organisations) and their strategies are responses to the rule set, and are different in kind to the rules themselves (the institutions).

North’s conception and definition of institutions derives from his underlying purpose in theorising: to explain an economic history in which firms (economic organisations) are primary actors. This makes the separation of institutions from organisations crucial to his analysis, and the distinction we hold to be well made and valid. However, it does present a challenge to consistency in the institutional language of a broad and cross-disciplinary public discussion.

One approach to this problem is to view North’s definition as an analytical refinement of common usage of the term “institution,” rather than a departure. In North’s model, institutions are environmental variables set by society that condition behaviour generally, and therefore the emergence, form and actions of organisations. They do this in combination with other variables, particularly the purpose and objectives of actors and organisations, cost structures and potential benefits, risks involved in breaking rules and so on, although these other factors themselves are all conditioned by, or are direct products of the broader institutional environment. General agreement may be had on the proposition that at least a minimum set of such rules is essential for orderly and predictable social life.

Now, some organisations are also essential for orderly social life as we know it,

because they provide the essential service infrastructure required for the degree of social coordination and assurance necessary to support the level of governance and economic activity that is the norm in a particular society. These services provide the regularities upon which we build our social lives. To this extent they, and the organisations that deliver them, form part of the institutional system. If we attempt to identify such essential services and their associated organisational structures, we find that many of these tend to be referred to as institutions. Schools, universities, hospitals, banks, the key arms of government, are all referred to in this way, arguably because they serve to facilitate the fundamental workings of our society, just as the basic rules do. These are expectable regularities, or norms, in a given social context. They provide us with a “normalised” social environment and are entirely integral to our way of life.

From this perspective, it may also be appreciated that particular organisational entities might, for convenience, be substituted in common parlance and perception for the system of infrastructure of which they are merely a delivery point. Thus locals are shaken by the closure of a bank branch or postal agency, not only because this may require changes in the way they go about their daily business and the possible extra costs involved, but because they regard the branch, and sometimes even the building, as an institution in its own right. Whether the closure of a particular bank branch represents real erosion of essential institutional infrastructure is in part an empirical question, and is certainly a matter of social discourse. However, this is not itself relevant to the task of separating out the underlying meaning of the use of the term institution in the current context.

In the context of the advanced western economies, it is the underlying service delivered by the infrastructure of institutional systems that is critical, and we have become increasingly acculturated to changes in their organisational configura-

tion. Regulatory reform, including privatisation of government owned assets and government controlled services, has brought altered modes of delivery that continue changing with technological and economic change. These regulatory changes are the real institutional changes in the Northian sense of the rules of the game, rather than the organisational changes consequent to them.

However, we cannot so easily discard common usage for an analytical convenience. Remember that old fella at the bar? Both he and the bank building on Main Street are regularities in the socio-physical environment that are directly analogous to those produced by rules. It is this socio-physical reality that people experience most directly on a daily basis, and that represents in the sensorial world the kind of order and predictability that institutions as rules bring to behaviour.

It is now becoming clear how the seemingly conflicting notions of institutions as rules, organisations, or other longstanding socio-physical phenomena, are related as social regularities. The analytical cleavage emerges when we ask what is cause and what is effect. In complex dynamic systems like human societies, there are few truly independent variables. Each social entity, whether individual, group, organisation, process, or institution, is interlinked with many others and bound into the whole, and these linkages are not arranged in a strict linear hierarchy. Hence the relationships between a rule and the entities (e.g. organisations) acted upon by it are often two-way, with feedback from the results of the rule being applied used to modify it so as to improve future outcomes.

The New Institutional literature makes a convincing analytical case for “institutions-as-rules” providing the fundamental infrastructure of coordinated social action, and thereby setting the stage for the emergence of other regularities such as organisations. Some authors have suggested that the regularities themselves should be treated as the institutional analytical unit,



but this seems less helpful than using the cause of the regularity. However, the answer to the question of what is an institution depends to some extent on why the question is being asked. In any case it is still a work in progress, in that interest in the issue has undergone a recent resurgence and it will take time for the analytical utility of particular definitions to be demonstrated and accepted. The range of disciplinary traditions in the use of institutional language is likely to remain quite broad,<sup>1</sup> and hence analytical definitions such as North's will not be appropriate in all discussions.

However, for those engaged in discussions of public policy for sustainability, it seems that North's framework provides a significant clarification in language as a crucial building block to an improved analytic theory. Although founded on a micro-behavioural model of the boundedly-rational actor, the framework views individual action as fundamentally constrained by social choice as expressed in the institutional system. This allows more scope for addressing sustainability concerns through purposive institutional

development and reform, and for learning about how to approach this, than do other views of institutions more concerned with exploring multiple theoretical perspectives. However, the bounded rationality caveat is important in its implications for institutional change. Herbert Simon (1986) comments:

*If... we accept the proposition that the knowledge and computational power of the decisionmaker are severely limited, then we must distinguish between the real world and the actor's perception of it and reasoning about it. That is to say we must construct a theory (and test it empirically) of the process of decision. Our theory must include not only the reasoning processes but also the processes that generated the actor's subjective representation of the decision problem, his or her frame.*

The implication is that perceptions are built on cultural norms as well as experience. Because humans have limited cognitive capacity and incomplete information, our judgements of the world are based on perceptions guided by beliefs – our mental models. Cultural beliefs about resources and environment are difficult to change, and to an important extent determine both the demand for institutional change to support sustainability and the effectiveness of new rules for a given level of enforcement.

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<sup>1</sup> For an example of the diversity just within sociology see Scott 1987, and Goodin 1996 provides an accessible summary of institutional interests across a selection of social science disciplines.

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## STRUCTURAL LOGIC IN INSTITUTIONS

In the context of the current project, establishing the distinction between institutions and organisations, and the consideration of cause and effect relations between these classes of entity, promotes a systems view of institutions, and of the contribution that they make to the functioning of society. Institutions are fundamental building blocks of social systems, providing the generalised regulatory framework for socially acceptable behaviour. Without institutions-as-rules, social and economic coordination would not be possible and

social life would be reduced to face to face negotiations of terms for every interaction. Even language is an institution, or institutional system, in this view.

The complexity of the general institutional environment can be appreciated from the consideration of many everyday activities that require coordination of individuals. From the running of the formal mechanisms of governance such as parliamentary or court processes to driving a private car through the city, successful negotiation of daily tasks is mediated by a

plethora of socially defined rules, norms and expectations. The very purpose of these rules - reducing uncertainty in interaction - means that they remain unchanged for long enough to often become suppressed from conscious consideration. We do not think constantly about which side of the road we should be driving on, or whether to stop for a red light. However, should the traffic lights go out or start operating in a random fashion, chaos soon results.

In the wider institutional environment there is often a considerable degree of redundancy in the system, particularly at higher levels of group decision making where results, and therefore mistakes, have far reaching impacts. The separation of powers and the notion of checks and balances in government is an institutional expression of the principle of redundancy supporting several subsystems that must agree to, or at least agree not to veto, policy proposals for them to succeed. Having such multiple parallel institutional channels has the effect of broadening the range of views included in policy debates and tends to increase both their sophistication and acceptance. This redundancy built into governance mechanisms again emphasises the systems nature of the institutional matrix. A hierarchy is evident, but democratic government is not a rigid single-headed beast. It is, rather, a system of actors and resources whose, sometimes almost unfathomably, complex relations and interactions are defined and constrained by a large set of institutions-as-rules.

The concept of policy systems is familiar enough, and we can directly observe many of the processes and actors involved in the formation of policy. In a broader institutional system model, these can be viewed as sub-systems, often acting as feedback loops, as well as producing new or altered institutions as policy edicts or legislative change. Existing institutional settings prescribe, encourage, or allow certain organisations and processes to emerge and develop that consider issues of importance

for government policy. Through resulting interactions the facilitating framework may itself be modified and developed, changing conditions for further policy work. In addition, policy processes result in outputs that address substantive issues, setting the rules and parameters for action in the real world, thus adding new substance and often complexity to the institutional system.

Organisational form in state-run NRM has traditionally adopted standard departmental bureaucratic modes as a means of dealing with distinct and separable sectors of government responsibility. This form is based on a hierarchical model of administration and decision making, an assumption of discrete issue areas, and is reproduced by convention (another institutional form). Such models have been argued to be particularly inadequate for environmental policy problems due to important characteristics such as complexity, uncertainty, and cross-sectoral impacts (Dovers 1997; Dryzek 1997, discussed further below), and proposed alternative models embody different fundamental principles.

The notion of organisational form and culture having an embedded rationality is worth developing briefly. Popular arguments over what comprises rational action have become dominated in recent decades by a single view or form of rationality based on economic theory. Here, efficiency is the key principle upon which rationality is judged, and its purpose is the maximisation of a plurality of goals (social welfare) through the mechanism of individual utility maximisation. However, many still recognise that other rationalities exist based on different principles of order, and their own sets of values and goals. Easily distinguishable ones include legal rationality, political rationality, technical rationality and social rationalities.

Each form of rationality is supported by what has been termed a discourse: "a shared way of apprehending the world. Embedded in language, it enables those

who subscribe to it to interpret bits of information and put them together into coherent stories or accounts. Each discourse rests on assumptions, judgements, and contentions that provide the basic terms for analysis, debates, agreements, and disagreements..." (Dryzek 1997). John Dryzek (1996) sees the discourse as "institutional software," interacting with the hardware of rules, rights, operating procedures, customs and principles. The system won't work without the software, and this has arguably been demonstrated in attempts to introduce a free market economy to the former Soviet bloc countries. Formal changes were wheeled in, but the informal systems of understanding that support the kind of response expected by the reformers were not widespread and chaos has been the predominant result. The discourse concept is perhaps a more socially developed version of the Simon-North view of cultural norms and subjective mental models of reality.

Standard bureaucratic administration of environmental and NRM policy, as seen in many state agencies, has been built on a pre-existing administrative rationality that privileges scientific and managerial expertise, and is strictly hierarchical (the Weberian model). The underlying purpose is to be able to deal with large and complex problems facing society by reduction - breaking them down into sub-problems, solving each separately, with the process controlled, and the value of outputs judged, from the top. This rationality is built into the structures and processes of administration, but it is also (to some extent) built into the mindset, thought processes and language (the discourse) of the occupants of the hierarchy. Thus both structure and culture are integral to the maintenance of administrative rationality. This approach has worked to deal with many policy issues arising in complex developed economies over the past century. However, it seems particularly inappropriate to sustainability issues due to several important characterising features,

including the key issues of complexity and uncertainty (Dryzek 1997).

Over the last four decades, a range of modifications to the basic model have been made through the modification of organisational structure - such as the flattening of management hierarchies - and the adoption of new practices - such as stakeholder consultation. Such changes can have transformative effects on attitudes, organisational culture and policy discourse. However, they can contribute confusion and conflict, particularly where the changes are adopted as a means of neutralising political pressure, rather than in an attempt to change system dynamics. This is because institutional structure has an embedded logic, and a "mix and match" system may, unthinkingly, embody conflicting rationalities.

One example of this type of conflict has been created where an NRM agency, in responding to stakeholder demand and policy fashion, has adopted a formalised consultative structure to advise policy decision-making. The implicit structural logic in this arrangement is at least three-fold. It acknowledges that those with a stake in the outcome:

- Have a right to a voice in decision-making because they bear the consequences of decisions made under considerable uncertainty;
- Hold local environmental, social and economic knowledge not available to agency staff in other ways;
- Will be more likely to accept management decisions and comply with subsequent rules because they have been part of the process (ownership).

However in this case, in compliance with the Weberian expertise-based hierarchical model of bureaucratic problem solving, the members of the consultative groups are selected from stakeholders (by the hierarchy) on the basis of "expertise," and specifically not as representative of stakeholders. This potentially allows relevant expertise to be defined in a manner convenient to the agency in determin-

ing which stakeholders will be part of the process. Control is maintained. The systemic conflict resulting from this clash of rationalities may well not be recognised for what it is, at least until there is recognition that such a thing is possible. However, solving actual problems may be made considerably more difficult, and stakeholders may become frustrated and factionalised. This points to an important issue in policy learning that will be explored in a later section – that learning must involve improved understanding, not just mimicry.

A systems view of institutions makes it clear that the specification of new types of organisation, on its own, is an *ad hoc* approach and likely to prove inadequate to the task of institutionalising sustainability. It is the rationality, the principles and goals that organisational form must embody and implement, that is required to be elaborated within the institutional system first, along with a credible commitment from government to support it. This implies sincere and believable high-level avowals of principle, and the establishment of pragmatic policies and ongoing initiatives, with adequate resources to back them up. Of course we cannot start with a blank canvas, and changing the cultures of existing

organisations to employ a new logic is a difficult task, precisely because the formal rules are only part of the institutional system. The critical role of informal institutions such as cultural norms and social and policy discourses must not be disregarded. Normative change is required at all levels along with formal institutional change. In the case of sustainability, this suggests directed effort to re-educate policy-making and implementation agency staff and stakeholders.

It also suggests that the level at which sustainability is embedded in the general institutional system of governance needs to be raised, perhaps to constitutional level, to provide some insulation from the rapid fluctuations of partisan political economy. For many, it seems a self evident truth that governance of human societies should subscribe to the principles of sustainability at the same level as justice, human rights and democratic self-determination. Like these other foundation social values, sustainability is an ideal and not something likely to be fully achieved any time soon. It is a matter for ongoing social consideration at the most serious level, and requires mechanisms to accumulate experience and knowledge of decision-making so that learning may proceed into the far future.

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## RULES FOR INSTITUTIONAL LANGUAGE

The key question that this project seeks to answer is, in what ways and to what degree have other nations succeeded in establishing credible and working institutional instantiations for sustainable NRM, and how can we learn from them. In seeking answers, it is proposed that the arguments put here be adopted for the consistent use of institutional language. In particular, “institution” should not be used as a synonym for “organisation.”<sup>2</sup> Such

usage is of little analytical utility and can be perceived as a merely rhetorical device, aimed at imbuing the said organisation with socially critical relevance. Some organisations, as argued above, provide services that are critical to social functioning. Where these are prescribed directly through a policy or set of rules, and particularly where they are part of the machinery of government for policy development

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organisation will not be discussed here, other than to suggest that this is generally intended to convey the impression of a distinguished, not to say critical component of the intellectual establishment.

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<sup>2</sup> The use of the term “institute” in reference to or naming a research, teaching, professional or other

and delivery, they can accurately be referred to as part of the “institutional arrangements” with respect to that policy. “Institutional arrangements” encompasses the notion of a system of decisions, rules and agreements that involves structural links between existing organisations, and possibly the creation of new organisations, for the implementation of policy. The term refers to the way that the individual rules are arranged, and the opportunities and obligations created by those rules among stakeholders and their organisations in relation to the policy issue. Institutional arrangements form the infrastructure of the institutional system (or subsystem) and the venue for the systems dynamics. Similarly, “institutional setting” can be used to refer to the specific institutional environment or backdrop for an issue, policy or action. “Institution” should be reserved for rules of various types and their aggregative units.

Examples of high level formal institutions of governance include constitutions and legislation, and their provisions. Sometimes the distinction between institution and organisation can be difficult to draw. For example, Parliament may be viewed as an organisation, but is, under the view adopted here, an aggregate institution or institutional system. It comprises a set of rules about how representative government is to be carried out, organisational units and processes prescribed by these rules to enable the institution to function, and a range of actors with status and rights of participation also bestowed by the rules. The elected representatives are not thought of as belonging to, or being employed by, the organisation of parliament, but as actors in an institutional system, independent and yet bound by a vast array of formal rules, constraints imposed by party affiliation, and norms of social expectation held by the electorate. The Common Law provides a clear example of an important aggregate institution, being made up of a

great many individual institutions – principles, decision rules, protocols, precedents, and sub-aggregates such as doctrines. However, the Common Law is only one component of the broader legal system – an institutional system of institutions-as-rules, actors, organisations and processes.

Social and cultural norms and their aggregates tend to be regarded as informal institutions, whether or not direct sanctions are applied for breaches of rules. Informal institutions can play a critical role in NRM in interaction with formal rules, as in many cases the close monitoring of behaviour for breaches of formal rules is not possible. The congruence of formal and informal institutions is therefore an important issue in policy change for sustainability. Wisely handled, with judicious choice of policy instruments and well-designed processes, policies driven by urgent ecological imperatives but implying social change should be able to lead compatible normative change, albeit over time-scales that may be politically inconvenient. As North (1994) has commented:

*While the rules may be changed overnight, the informal norms usually change only gradually. Since it is the norms that provide legitimacy to a set of rules, revolutionary change is never as revolutionary as its supporters desire, and performance will be different than anticipated. And economies that adopt the formal rules of another economy will have very different performance characteristics than the first economy because of different informal norms and enforcement.*

This last statement is directly relevant to the notion of the possibility of learning from other jurisdictions and their institutional settings, and the problem of how to choose appropriate case studies of institutional innovation for sustainability. These issues are addressed in the following sections.

### 3. Policy Relevant Learning

This section of the paper briefly explores what the learning part of “an exercise in policy and institutional learning” might be about. Four categories of policy relevant learning are drawn from the literature: instrumental, government, social, and political learning. All of these are relevant areas from which to draw lessons from the experience of other jurisdictions with sustainability and NRM policies. In addition, the institutionalisation of learning – the embedding of purposive learning mechanisms in the NRM institutional system – is something that we undoubtedly need to learn more about. Hence, in its search and evaluation of case studies, the project might look to learn from:

- Examples of instruments used;
- Organisational structures and processes established;
- New or different social constructions of problem sets; and
- Strategies used for raising the agenda status of NRM issues; and, in addition,

the mechanisms built into institutional arrangements that have promoted learning and innovation in these areas.

May (1992) proposes that policy related learning must involve increased understanding, not just mimicry – the direct transfer of a policy from one situation to another. It follows that, rather than just noting that “success” has been attained by a certain policy in a given context, evaluation in case studies undertaken by this project must attempt to understand why the institutional arrangement had the observed effect in its particular social, economic, environmental and institutional context. Further, it is important for this project as intermediary in a policy learning process to identify whom the appropriate learner might be for each type of lesson. The characterisation of the four types of policy related learning described here include such linkages, and the case studies will explore this issue further in context.

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#### INSTRUMENTAL LEARNING

Within government departments and agencies charged with NRM, policy instruments are selected and programs developed to address defined problems with stated intended outcomes. Instrumental learning concerns improving the design of such institutional arrangements to achieve existing policy goals. Evaluation of the “success” of particular instruments with respect to stated goals might be relatively straightforward if results are conspicuously positive, but generating understanding about why and how particular results were attained in a given context is more difficult. May (1992) champions the view that demonstrating instrumental learning requires evidence of increased intelligence and sophistication of

thought. We must ponder how to assess in these terms whether this project results in real learning. The so called “goal trap” of policy evaluation must also be kept in mind: there may be positive (or negative) outcomes that were wholly unintended, from which we can learn as much about the nature of policies and context as from evaluation in relation to intended outcomes. Some policies may fail to achieve their primary aims, but have unintended side effects that are just as beneficial, or at least educational.

Most NRM stakeholders can benefit through better understanding of how the use of particular instruments affects social, economic and ecological outcomes through interactions with contextual variables.

Instrument choice may be left to implementation units within government departments based on their previous experience with the issues. Alternatively, where legislation or regulations are required to authorise revenue collection, police powers or enforcement provisions, executive government and possibly cabinet level decision-making may be involved. In some cases, particular instruments have been specified in legislation as government policy (e.g. ITQs in the Commonwealth *Fisheries Management Act 1991*). It is increasingly the case that the norms of the contemporary NRM policy environment require wide consultation and some form

of consensus before new policy instruments are implemented. This process will be driven or at least mediated and strongly affected by the section of the government department responsible for policy development in the area. Therefore these policy analysts and managers must be key learners in instrumental lesson drawing from outside jurisdictions. Depending on the issue, analysts from stakeholder peak bodies may also be important, as a coalition for policy change involving the major industry representative bodies and the responsible government departments, sharing a common policy discourse, can be immensely powerful.

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## GOVERNMENT LEARNING

Government learning involves some conceptual overlap with instrumental learning. However, government learning has as its focus the organisational structure and processes of agencies and delivery systems, as distinguished from the policy instruments used. Where existing departments are restructured for greater effectiveness or efficiency, independently of policy change, and continue to utilise the same set of policy instruments, the distinction is clear. However, reorganisation can be a result of the adoption of new policy instruments that require special administrative arrangements. Bennett and Howlett (1992) use the same passage from Etheredge (1981) as a criterion for judging this type of learning - "increased intelligence and sophistication of thought" - used by May (1992) for instrumental learning. The concept of improved structural intelligence in both instrumental and organisational design may be of some utility, to the extent that it can relate organisational logic and effectiveness to the rationality and discourse supporting the policy approach being implemented. Structural intelligence

can be said to increase as congruence of organisational logic and policy rationality is improved.

It is clear that the key learners for this category must be senior departmental bureaucrats and in some cases Government Ministers. Reorganisation (like decimation in the Roman army) is used as a periodical strategic management tool within many organisations for reinvigorating functional units. This presents regular opportunities for government learning, and some organisations, no doubt, become structurally more intelligent as a result. However, such learning is attuned to particular management objectives, and these do not necessarily include the needs and principles of sustainability. Structural models that take these needs seriously could play a powerful role in policy related learning at the both the instrumental and social levels, acting as effective seeds for wider institutional change. This area may be one of the most fertile for this project if existing studies of the impacts of departmental restructuring for sustainability can be found.

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## SOCIAL LEARNING

The above two categories of learning are both about more intelligently effecting predefined policy goals. Social learning, by contrast, involves the recasting of the policy problematique – the policy problem itself, the scope of the policy, or policy goals (May 1992). Social policy learning therefore involves the wider policy network that participates in modelling and sustaining the prevailing social construction of the problem. The basic building blocks used in these constructions are (according to May):

- Beliefs about cause and effect;
- Preferences concerning desired policy outcomes;
- Perceptions of policy targets; and
- Beliefs about the policy ideas that undergird policies.

Changes resulting from a new social consensus about one or a combination of these fundamental aspects of a problem and therefore the policies in place to address it comprise social policy learning according to May. It is clear how this conception of problem framing or social construction is related to the Dryzek's notion of policy discourses. Each discourse has its own construction of the problem based on beliefs and preferences for particular outcomes. "Social consensus" in the above statement relates to "dominant discourse" in Dryzek's view – the construction of the problem that actually gets supported in policy.

Generalised normative change regarding the environment has an important part to play in social policy learning as it affects preferences for outcomes and beliefs about policy ideas in particular. Normative change involves shifts in individual beliefs and the social consensus over fundamental values. Without normative change at some level social policy learning would be rare. Normative change can occur in different ways: through diffusion of ideas and values from other cultures; conflict between

opposing groups; or persistent deviation from existing norms by sub-cultures. Certainly, with respect to environmental issues, normative change has been rapid over the past four decades. Science has played a large role in informing these changes, particularly through creation and modification of models of cause and effect relationships, and the collection of data on the state of the environment. Improved information has shifted values over preferred outcomes for the environment, but the consequent thirst for more information has exposed pervasive uncertainty with regard to many issues. Perhaps one of the most significant currently incipient normative changes involves the dethroning of science and technology as exclusive providers of solutions to environmental problems. This is bringing more attention to institutional aspects of problem solving, and hence to the institutional construction of problem definitions, with a resulting extension of peer communities and broadening of the range of inputs to policy.

As we have seen in the foregoing discussions, how, and to what extent, belief systems or worldviews are embedded in cognitive institutional systems, such as policy subsystems, and how durable or adaptable they are is a subject of contemporary theoretical and empirical study. There exists a range of conceptual approaches to the issue with a common language yet to emerge (e.g. see Apthorpe and Gasper 1996), as we have seen is also the case with the issue of the nature of institutions themselves. However, "problem framing" is commonly recognised as being of fundamental importance, along with the fact that the framing varies with the worldview of the problem framers. This in turn affects conclusions about what information is required for policy making and management, and therefore what research is undertaken or funded by agencies. Walsh (2001) provides an example of this in her



case study of the Inter-American Tropical Tuna Commission, where the dominant central policy idea (Walsh calls this the “embedded epistemology”) has been replaced successively over several decades. First came conservation (of tuna), then preservation (of dolphins), and then ecosystem management. Each successive central policy goal controlled the research agenda for the period of its dominance, and therefore what knowledge was generated by the agency. These goals were formulated by an influential “epistemic community,” in this case mainly comprising marine biological scientists. In other NRM policy subsystems the originators of new problem frames may be biological-ecological or physical scientists, economists or other social scientists, or they may originate in integrating processes drawing on a range of disciplinary and lay inputs. It is new framings of the latter type that are most likely to lead to sustainable policy pathways.

Through the current project, we might learn about different social constructions of a particular common NRM problem, or the processes through which social learning has occurred or been promoted in other jurisdictions. Instrumental and government learning are able to occur at the agency level without elected politicians becoming involved in decision-making. However, social policy learning requires political decision-makers to either lead community normative change or to respond to it. The greatest opportunity for social policy learning is probably at the point where elected governments change, as different ideological values and beliefs are brought into play, and new administrations introduce and search for policies that demonstrate leadership and differentiate

them from the prior incumbents. Circumstances where resource issues flare into overt and politicised social conflicts, or where resources and their exploitation systems are in crisis, can also promote a rethinking of attitudes, ideas, and policies that have remained stable for extended periods. Conflict can bring information and alternative logics to the attention of policy makers and the public that can result in redefined objectives, changed target groups, and redistributed rights. The deeply embedded nature of many of the values that underpin particular framings of policy problems means that there is likely to be a generational aspect to social policy learning. Early adopters of new problem constructions in the sustainability field may well be younger policy analysts with specific education and training in NRM and environmental problems. However, the key actors in policy decision-making are senior bureaucrats, politicians, and economic stakeholders, often with long-term investments in current problem definitions, and this is part of what makes for stable institutions. North (1994) states: “Political institutions will be stable only if undergirded by organisations with a stake in their perpetuation.” The same may be said for policies. Rapid change may be dependent on conflict or political opportunism or both, otherwise we may need to rely on long term social normative change.<sup>3</sup>

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<sup>3</sup> This analysis suggests that structural change in policy agencies (government learning) may promote social policy learning. For example, shallow hierarchies that support innovative policy cultures, promote policy entrepreneurs, encourage challenge of dominant policy discourses, and ongoing theoretical education of staff.

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## POLITICAL LEARNING

Political learning involves political actors constructing more effective strategies for getting their concerns onto the policy agenda, countering opposition to their

proposals, and eventually getting their preferred policies adopted by decision-makers. This type of policy oriented learning occurs within advocacy coalitions,

composed of people from various organisations who share a set of normative and causal beliefs (a discourse) and who often act in concert (Sabatier 1988). These coalitions, in turn, occur within 'policy subsystems,' i.e. the interaction of actors from different agencies and organisations, politicians, etc., interested in a policy area.

How relevant political learning is to the current project is a question that requires further consideration. This aspect of policy oriented learning is undoubtedly important to effecting policy change, even where substantial normative change has already taken place. In the area of environmental

and NRM policy for sustainability, powerful advocacy coalitions for defence of status quo policies may be well entrenched on some issues. The question arises as to whether it is appropriate for this project to research issues of political strategy and tactics that may assist policy change. Investigation of policy change that is seeking to explain causation in significant detail, arguably, must attend this issue, as differences in strategies brought about by political learning may explain why policy change occurs in one situation and not in other similar circumstances.

## 4. Concluding Comments

Both the above conceptual discussions offer some insight into the nature of the policy and institutional systems and structures that will be the focus of this study as it attempts to draw lessons from experiences around the world. There are distinctive synergies between the systems view of institutions and the policy learning framework, but there are some disjunctions as well. The learning framework, in its attempt to separate categories of learning, under-emphasises the interactions between the levels, conveying a view of a rather linear one-way cause and effect process of policy formulation and subsequent implementation. The systems model developed here, reinforced by standard approaches to policy analysis structured by models of policy cycles and subsystems (e.g. Howlett and Ramesh 1995; Bridgman and Davis 2000), reminds us that life is not that simple. For example, whether a particular policy is sold and/or perceived as a change of instrument or a reframing of the problem can depend the political tactics used in the development of the "policy event."

The introduction of market instruments is a case in point. These are billed in policy debate as more efficient, with the implication left unspoken that they are more

efficient at achieving what we are all trying to achieve anyway. This can be viewed as instrumental learning. However, in many cases the introduction of the efficiency objective actually displaces an existing policy objective of distributional equity. By replacing the instrument the policy problem has been redefined. This can pass relatively quietly, or it can blow up into a confused public debate and protest. The introduction of such "instruments" usually involve legislative change and the creation of some form of implicit or explicit legal property right - a fundamental institutional building block - and may involve the creation or reorganisation of government agencies for implementation and administration.

Thus there appears little hope of clear-cut and simple categories of policy and institutional initiatives even at the conceptual level. In the second part of this paper we add into this broth the operational ingredients of the specifics of what it is we wish to learn about. This will bring us toward a richer appreciation of the nature of the choices we need to make in selecting case studies, but it seems this issue is set to become more complex not less.

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# PART 2: Operationalising Learning

## 1. Introduction

The preceding discussion provides a workable definition of institutions and an approach to policy and institutional learning. The remainder of this paper proposes avenues for applying this understanding in

the present project, in terms of what Australia might wish to learn about, from where, and through what case studies and overseas models.

## 2. Learn About What?

There are several ways in which one could proceed to learn from other countries. One is to seek countries that are similar and assess their recent experience. Similarity might be defined socially and institutionally (western, English-speaking, liberal democracies, etc) or environmentally (dry, variable, high biodiversity, extensive primary production, etc). The problem with this approach is that a set of 'similar' countries only captures a small and perhaps inadequate sample of potentially relevant experience. Another warning against it is that it would echo Australia's unthinking history of seeking policy and political lessons only from other White, English speaking countries.<sup>4</sup> However, the institutional framework prompts us to think about this in terms of tensions and trade-offs. Innovations developed in similar institutional contexts would have greater probability of being supported appropriately, on transfer, by existing legal and organisational configurations. However, mechanisms developed under weak

institutional systems may be more innovative and resilient, particularly for issues requiring local action, precisely because there is little external support for enforcement of rules.

Another approach would be to identify the substantive issues most high on Australia's domestic agenda and then scan the world for examples of institutional responses to those (for example, water allocation, dryland salinity, off-reserve biodiversity conservation, and so on). This would run the risk of only focusing on issues of the moment, of not being open to cross-issue relevance of particular institutional strategies, and of reducing the field of study back to a collection of discrete issues rather than a (possibly) integrated suite of issues. On the other hand it may produce some immediately applicable lessons for current problems.

However, this project seeks to learn from overseas examples of institutional reform and change in the *policy field* of sustainable development (SD), not necessarily with regard to particular issues that make up that agenda. To do so, it would need to be established what sustainable development means, or at least a reasonably widely accepted Australian version of what we think it means.

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<sup>4</sup> The most recent example of this has been the applications of neo-liberal political and neo-classical economic theory most vigorously in the English-speaking world (Castles 1989; Bell 1997; Orchard 1998).

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## THE MEANING OF SUSTAINABLE DEVELOPMENT

Although a highly contestable term, sustainable development is expressed in Australia as principles of ecologically sustainable development, or ESD principles (see **Box 1**). These were developed as part of Australia's response to the emerging global policy agenda of SD in the early 1990s, reflect international discussions and instruments, are sufficiently broad to cover most aspects of SD, and have been expressed in many hundreds of Australian policies and over 120 Australian laws (Dovers 1999; Stein 2000). Thus, ESD principles should encapsulate much of what Australia might wish to learn about institutionalising SD: that is, if ESD is where we think we want to go, then ESD can logically also describe what we need to learn about to get there. Pursuing the institutionalisation of 'official' policy goals and principles in this way has the added advantage of providing additional strength to any lessons drawn, as opposed to lessons drawn from statements of the problem that do not reflect widespread consensus at government level.

As stated in policy and law, though, ESD principles are summary, vague and not particularly instructive in institutional terms (although they are more so in policy terms). This is not surprising, as they were compromise and summary statements, conveniently stated during a short-term political process. However, they do reflect much of the nature of sustainability as a suite of research and policy problems, for example in the following iteration of the attributes of sustainability problems (from Dovers 1997):

- deepened and variable temporal scales;
- broadened and variable spatial scales;
- possible ecological limits to human activities;
- often, irreversible and/or cumulative impacts;

- complexity within problems, and connectivity between problems;
- pervasive risk and uncertainty;
- poor information base for many processes;
- important assets not traded and thus not valued economically;
- new ethical dimensions (rights of other species, future generations);
- systemic problem causes, rooted in patterns of production and consumption, settlement and governance;
- insufficiently developed and/or contested theories, methods, techniques;
- poorly defined policy and property rights and responsibilities; .
- public/private costs and benefits difficult to separate;
- demands and justification for broad community participation in policy discussion and formulation;
- sheer novelty as a recently defined policy field.

These problem attributes, especially when encountered in combination, give some meaning and tractability to the widespread perception and common claim that sustainability problems are particularly difficult. They also reconfirm some of the targets of learning that flow from ESD principles (**Box 1**).

These attributes, and the discussion of learning above, can inform a restatement of ESD goals and principles into a more operational statement of 'what we want to learn about'. **Box 1** adds to the National Strategy for ESD (Australia 1992) iteration of goals and principles summary comments that define learning targets that would appear to logically flow from those principles, and from the generic attributes of ESD problems, in terms of learning as that concept is constructed earlier in his paper. Also in **Box 1** are summary descriptors of each goal and principle for efficient use elsewhere in this paper.

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**Box 1: ESD Principles as Targets for Policy and Institutional Learning**

ESD Goals, Objectives and Principles <sup>5</sup>	Summary Descriptor	Core Meaning as Target for Learning
<b>Goal:</b> Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.	Goal.	Too general – see under objectives and principles below.
<b>Objectives:</b>		
<b>1:</b> To enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations.	Sustainable economic development.	Policy processes and institutional arrangements that ensure longer considerations in economic policy and planning, and the implications of economic policy for individual and community well-being (well-being defined in broad terms, including social, cultural, environmental and economic aspects).
<b>2:</b> To provide for equity within and between generations.	Inter- and intra-generational equity.	Policy processes and institutional arrangements explicitly targeting the issue of the multiple dimensions of equity over the long term.
<b>3:</b> To protect biological diversity and maintain essential ecological processes and life support systems.	Biodiversity and ecological processes.	Policy processes and institutional arrangements that elevate the importance of biodiversity and ecological processes as matters of policy concern and as social and policy goals, across policy sectors.
<b>Principles:</b>		
<b>1:</b> Decision making processes should effectively integrate both long and short term economic, environmental, social and equity dimensions.	Integration.	Processes and arrangements that seek to integrate, encourage or demand policy integration, or research and develop methods for such integration.
<b>2:</b> Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	Precautionary Principle.	Processes and arrangements that explicitly inform decisions in the face of uncertainty, ensure consideration of risk and uncertainty, seek to enhance the information base for decision making in the long term, or research and develop approaches for so doing.
<b>3:</b> The global dimension of environmental impacts of actions and policies should be	International Commons policy.	Processes and arrangements that account for, seek to account for, or seek to establish the nature of international threats to

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<sup>5</sup> From Australia, The Commonwealth. 1992. *National strategy for ecologically sustainable development*. Canberra: Australian Government Publishing Service.

recognised and considered.		sustainability or opportunities for improving prospects for sustainability through international coordination of policy and action.
<b>4:</b> The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised. <sup>6</sup>	Sustainable economic growth.	Processes and arrangements that explicitly seek to link economic growth with environment or to establish whether such links can or do exist.
<b>5:</b> The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.	International competitiveness.	Processes and arrangements aimed at explicating, reviewing and/or ensuring the environmental (and social) benefits, or avoiding the disbenefits, of international law, trade, policy and interactions.
<b>6:</b> Cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.	Policy instrument choice.	Applications of flexible policy instruments, and/or processes and arrangements to research, monitor, select and test new approaches to policy instrument choice and application (including but not only market mechanisms as implied in the principle).
<b>7:</b> Decisions and actions should provide for broad community involvement on issues which affect them.	Community involvement.	Processes and arrangements that allow or encourage community participation in policy debate, policy formulation and management.

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<sup>6</sup> This is a central and contested proposal in the sustainability literature; ie. that environmental protection depends on economic growth (for a review, see van den Bergh and de Mooij 1999). Here, the object of learning that arises is defined not around belief or disbelief in this proposal, but rather in terms of policy and institutional settings aimed at either establishing such a link in practice, or further testing the proposition.

In **Box 1**, all targets for learning are stated in term of policy processes and institutional arrangements, and framed in a broad manner including policy and institutional responses that fulfil, aim to fulfil, or research and develop approaches for fulfilling that objective or principle or part thereof. Such responses may include sustained (as opposed to superficial) policy programs, organisational restructuring such as portfolio re-arrangements, creation of new agencies, information-based initiatives, or deeper institutional change such as statutory or constitutional reform. An integrated and concerted institutional and policy response to all ESD objectives and principles is arguably not evident in any country, but would equal a rather fulsome

and impressive response to the intellectual and policy agenda constructed between 1987 and 1992. In these terms, this translation of ESD principles into (albeit broadly framed) targets for policy and institutional learning constructs what may be regarded as an already sufficiently large canvas for this study. With respect to kinds of learning discussed earlier, most possibilities are embedded in the targets in **Box 1**, although perhaps with a less explicit emphasis on political learning.

The principles of ESD adopted by Australia (**Box 1**) strongly reflect the economic growth element of the Bruntland construction of sustainable development. One critical reading of Bruntland is that the

WCED emphasis on growth as the answer to global maldistribution was the only approach that could succeed in gaining broad consideration of and consensus on the other central issues of sustainability. Australia's ESD principles enthusiastically restate this approach, emphasising strong growth and international competitiveness as sustainability goals, and incentive and signalling (economic) instruments as means. With time this may come to be seen more widely as an overemphasis produced by transient political conditions and policy fashion - given that three of the seven principles are given over to economics.

However, there are things missing from the NSESD version of sustainability that emerge when actual policy and institutional responses in Australia and elsewhere are considered. The following section reviews such directions of reform. Further,

consideration of the most complete and consensus-derived global statement of intent regarding sustainability, the 1992 *Rio Declaration*, adds other, significant agendas for policy and institutional reform. For example, principles 5-6 of the *Declaration* emphasise poverty reduction and prioritise the needs of least developed countries, while principle 11 states the need for effective national legislation and standards. Principles 20-22 elevate the views and involvement in sustainability of women, youth and indigenous and local people. Consideration of such principles in a study like this is important given their status as internationally agreed goals, and given that they have been expressed explicitly and thus may have informed the policy and institutional reform agendas of other nations.

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## THUS FAR IN AUSTRALIA ...

If ESD principles represent the policy challenge agreed to by Australian governments and major interest groups, it is relevant here to consider the style of response to that challenge thus far. This section characterises the style of policy response, not in terms of the efficacy or adequacy of the response but rather the policy and institutional directions that the country has chosen.<sup>7</sup> The following attempts to roughly categorise the policy and institutional baskets into which Australia has placed the bulk of its ESD eggs:<sup>8</sup>

- Community-based programs such as landcare, waterwatch, etc, with an emphasis on on-ground coordination and works

and to a lesser extent monitoring, relying to varying degrees on a mixture of volunteerism and government financial and other support;

- Integrated catchment management, through informal cooperative initiatives and more formally structured creation of new administrative and statutory arrangements;
- Often less formally structured or supported regional planning initiatives, often explicitly seeking to integrate economic, social and environmental concerns through long term planning involving community participation or leadership;<sup>9</sup>

(The last three above are often the delivery mechanisms for government-financed policy programs, such as the National Heritage Trust and the National Salinity and Water Quality Action Plan.)

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<sup>7</sup> Reviews of the both the kinds of reforms and their adequacy can be found in Productivity Commission 1999; Yencken and Wilkinson 2000; Dovers 1999, 2001b; and in the forthcoming 2001 Commonwealth state of environment report.

<sup>8</sup> Overviews and assessments of most of these categories are available in specific studies contained in Dovers and Wild River 2001.

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<sup>9</sup> For examples see Dore and Woodhill 1999.

- Information-based processes (for example state of environment reporting, natural resource accounting, land and water audits, etc.);<sup>10</sup>
- The application of economic instruments and market mechanisms of various kinds (incentive and signalling approaches), including tradable emission permits, salinity credits, rights markets in fish and water, levies, and so on (noting that the advocacy of such instruments has exceeded their practical application thus far);
- Self-regulatory approaches (codes of practice, corporate reporting, etc) in various industry sectors, usually developed cooperatively between government and the private sector;
- Development or maintenance of inter-governmental arrangements of various kinds, such as the MDB Initiative, management of the Great Barrier Reef, cooperative arrangements for management of the Australian Alps, ministerial councils, etc;
- (Limited) moves toward co-management arrangements with indigenous people, including major conservation reserves and the more recent Indigenous Protected Areas program;
- (Variable) domestic engagement in the formulation and implementation of international instruments dealing with major resource and environmental issues;
- Sectoral and issue-based policy development, with associated programs (oceans, forestry, biodiversity, greenhouse, land-care, coasts, etc). Of all sectoral policy initiatives, the RFA process has been by far the largest and most comprehensive. Most major sectoral<sup>11</sup> policies have been devel-

oped cooperatively by the Commonwealth and the states/territories (and less often with local government);

- Some significant specific institutional reforms, such as the creation of the (now defunct) Resource Assessment Commission and the proposed Victorian Commissioner for ESD;
- Experiments in the arrangement of resource and environment portfolio at state and Commonwealth level, where various constellations of resources, lands, agriculture, environment and conservation have been constructed (and often deconstructed). While not an apparent or explicit ESD-related policy, this is of interest given the question of where in the public policy landscape environment and resource issues should be located. At state/territory level, some of the experiments seem purposeful in ESD policy terms, whereas at the Commonwealth level the portfolio changes appear to have been driven by other imperatives;
- Research and development programs (and sometimes actual agencies) in the resource and environmental fields.

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A feature of the early ESD era in Australia, consensus policy development organised along so-called corporatist lines (using major representative groups to formulate policy), has been less evident in the second half of the 1990s. Also less prominent has been the Council of Australian Governments, which was key to major policy developments such as ESD.

These Australian responses cannot be located entirely in the post-Brundtland or post-Rio era, as they build upon and reflect previous responses constructed before “sustainable development” was adopted as an overarching agenda, or fully articulated as such (for a potted history, see Frawley 1994). For example, much of what Land-care “does” draws heavily on the accumulated knowledge and practice of many decades of the agronomic tradition of soil conservation. Integrated catchment management and regional resource manage-

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<sup>10</sup> See Venning and Higgins 2001.

<sup>11</sup> Note that some of these policy initiatives, and Oceans Policy in particular, cut across traditional sectors (fishing, coastal management, shipping, marine conservation) and are attempts at integration over the broader sustainability policy concerns, using ecological rather than economic parameters as primary criteria for defining the policy sector.



ment have similarly deep histories. The Murray-Darling Basin Initiative in its modern form was a product of the 1980s, and dates to the formation of the River Murray Commission eight decades ago. The importance of historical context of institutional and policy change is revisited below.

Each country develops and favours a particular mix of policy and institutional responses, and Australia is no exception. Some of the response categories above are common to many countries, whereas others are particularly Australian. Likewise, other countries may have embarked on quite different pathways than Australia. For example, strategic, statutory planning has not been a feature of the Australian experience recently; nor have the sort of detailed,

intergovernmental regulatory approaches of the past decade in Europe. This raises the question, in a study such as this, whether the focus should be on institutional reform in countries that have done similar things, or on countries that have headed in policy and institutional directions unlike Australia's. There are obvious benefits either way – to learn how to do what we are doing better, or about things we have not thought of doing – but to choose one or other would perhaps be efficient in terms of scoping this study. Alternatively, this demarcation allows explicit recognition of the quite different basis for learning (accepting that the familiar/unfamiliar demarcation is likely in most cases to be a continuum).

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## DEFINING THE OBJECTS OF LEARNING

Given the large number of factors and their combinations that could characterise policy and institutional responses to sustainability, some categorisation is required to simplify the task of choosing case studies. Here we use the typology of policy learning outlined earlier to group potential objects of learning. As might be expected, the least general examples are the more numerous – individual instrument types. The more generally applicable lessons are fewer in type and likely to be scarce as documented examples – e.g. the explicit reframing of policy problems through normative acceptance of sustainability principles. However, we must also remain cognisant of the systems view of institutions presented above, which emphasises the embedded and interdependent nature of different elements of the policy and institutional landscape. This means individual case studies may yield lessons on several levels of the typology.

### 1. Implementation Instruments

*Policy instruments* are the policy tools applied to deliver defined policy goals. Bearing in mind the previous discussion of potential multiple impacts of certain types

of instruments, including on policy goals, instruments may be classified as:

- **Coercive:** such as statutory and regulatory proscription, prescription, standards setting etc;
- **Organisational:** such as community coordination and participatory approaches;
- **Informational:** including research, education, SOE reporting, environmental monitoring etc;
- **Signalling and incentive:** market and pricing based approaches, taxes, levies, user charges, subsidies etc;

Primary learners here would be government agencies implementing policy to which the case is relevant, and their stakeholders;

*Policy programs* utilise more than one instrument toward a more comprehensive set of goals, in some coordinated fashion, usually targeted at a substantive issue (eg. salinity) or a resource sector (eg. fisheries). The design of programs allows for greater opportunity for building in the flexibility required for most sustainability problems,

given their complex nature and the uncertainty of the effects of change. Primary learners would be strategic policy analysts in relevant agencies, although specialists in sustainability problems in this class are somewhat thin on the ground. The sophistication of such design tasks begs a real question here with regard to the sufficiency of human capital and organisational configuration in government to address sustainability problems;

*Policy processes* involve mechanisms and structures dedicated to policy formulation, implementation design, and policy evaluation and maintenance. Processes may be ongoing, lengthy or of short duration. In areas where policy goals are evolving, and uncertainty prevails with respect to the current or future state of a resource and impacts of its use – as is often the case with sustainability issues – complex ongoing process “rounds” are required to assess new information and update policy settings.

## 2. Organising Government

*Organising and restructuring within government*, where the structures and processes within a tier of government are re-arranged in some way to better meet a policy challenge, including such things as management restructuring within agencies, inter-departmental committees and portfolio redesign, or involving the creation of new or substantially altered organisations/agencies within the public sector, to undertake new or revised administrative, policy or information-related functions;

*Intergovernmental structures and processes*, where sustainability problems are addressed through coordination between different levels of government within a country (eg. in a federal system), through coordinated policy development, joint standards, joint agencies, ministerial councils, etc.;

*Participatory processes*, whether aimed at on-ground management, monitoring, policy formulation or policy monitoring and evaluation.

## 3. Problem Reframing

*Through normative change*, where public opinion, possibly assisted by government sponsored processes, has demonstrably shifted to redefine an existing sectoral issue as a sustainability problem and has flowed on into government policy;

*Through legal change*, mostly statutory but possibly also involving the common law. The law in this sense is viewed broadly, including both regulatory policy in the traditional sense, but more so the crucial and often overlooked roles of statute law in expressing social goals (eg. ESD principles), creating process, creating organisational structures, defining public access to decision making processes, etc.;

*Through Parliamentary or executive government processes* (e.g. like Senate Committees) that allow sustainability issues to be treated in accordance with their attributes and sustainability principles (eg. temporal scale, integration, etc).

## 4. Political Advocacy

While relevant and important to the raising of the sustainability policy agenda in political fora, in the context of this project we think such advocacy a difficult target on its own. It is likely that examples will be picked up incidentally to studies in the other target categories. For example, under organising government, the creation of commissioners for the environment or ESD, or the specification of advocacy roles for agencies may prove worthwhile subjects.

Clearly, these categories are not entirely separate, and in any actual case of policy or institutional reform of any significance, more than one would be evident. Note that, across all these types, an important variable is the demonstrable or likely longevity of the institutional or policy change. This applies both in terms of longevity and persistence as positive attributes in sustainability policy, but also the issue of irreversibility and therefore possible inflexibility of deeper policy and institutional change. Another important variable is where a particular reform sits on the

continuum between application or use of existing policy or institutional settings or capacities, and creation of substantially new settings.

### 3. Filtering Cases and Lessons

Given that the potential pool of case studies for a study such as this is immense, the cases for more detailed (but still summary) analysis will need to be selected carefully. Among the factors that can inform selection of cases in terms of their relevance to Australia are:

- Ecological/biophysical similarities and differences;
- Substantive issues that are relevant to Australia, or are likely to be so;
- Socio-economic conditions in the case location, compared to those in Australia;
- Formal and informal institutional context;
- Political imperatives and policy styles (see further below); and
- Resourcing requirements and availability (human, financial, informational).

All such factors need to be assessed and interpreted with cognisance of particular historical contexts of institutional evolution. A general principle linked closely to the concept of an institutional 'system' is path dependence. Institutional possibilities are historically defined – sudden creation is possible but rare, and even sudden change will be dependent on precedent conditions (information, cultural context, legal precedent, political norms built up over time). Transfer of institutional models or ideas therefore should be informed by the immediately apparent suitability of the recipient setting, but also by appreciation of how that setting has evolved over time.

Further to these considerations, there is the matter of deciding whether or not to have a 'sample' of case studies or thematic areas that cover all of, most of or a selected small number of the variables discussed in this paper. These include: familiar or unfamiliar (from an Australian perspective) policy and institutional responses to sus-

tainable development, judged according to what Australia has done so far or a more extended typology of responses; similar/dissimilar countries; ESD principles; and types of learning. Clearly, not all can be covered, so the basis of selection needs careful thought.

Recognising the interdependent and nested nature of the institutional system, there may be cases of institutional reform that are both apparently successful and novel to Australia, but which on any balanced analysis may be judged very unlikely to be adopted in this country. Institutional (and simpler organisational) lessons, and the reforms they might lead to, need to be analysed in the context of the political and institutional setting into which they are to be transplanted. In the list of prospective cases provided below, there are some which may be, for this reason, judged unlikely to inform actual change in Australia. For example, sustainable development has been given constitutional recognition in some countries, which would generally be regarded as a significant institutional change and in keeping with consistent but unsuccessful calls for an environmental head of power in the Australian constitution. Leaving aside the eventual impact of such a reform (flowing from the form of expression and the existence of implementation mechanisms for constitutional law), the history of constitutional reform in Australia would indicate that such constitutional expression would be most unlikely here. Should we seek lessons from such perhaps unlikely cases, or would closing such options off be unwise?

The brief for this study stressed the need to look at cases of "successful" institutional reform. Presumably this is intended to, firstly, maximise positive and operational lessons and, second, avoid the tendencies in

the environmental and sustainability literature to either be entirely critical and negative, or to champion and advocate single examples of institutional (or more usually organisational) change. While this is a useful general tone to adopt, defining “successful” raises some problems that can be briefly noted here.

The success, effectiveness or worth of an institutional or policy reform will be judged differently by different groups and individuals. For example, major components of NRM policy in Australia in the past decade – such as Landcare or the Regional Forest Agreements process – have been judged very positively and very negatively by different observers and analysts. One criterion might be that widespread (but rarely universal) acceptance or support amongst the broader policy community would indicate successful institutional reform, at least in early years. That highlights another problem: in many cases the impact of policy and/or institutional change in terms of positive improvement in the state of the environment, human interactions with it, or in the human condition may take some time to become apparent. Many possible cases of institutional reform this study might focus on are only a few years old, and thus “success” has yet to

become assessable. In other cases this will be less of a problem, such as where the policy or institutional reform has as an aim something that may emerge quickly, such as creating an information stream by including stakeholders in a process. Such strategies can be assessed with respect to their procedural rationality and effectiveness in achieving these short-term goals, independently of the long-term substantive outcomes. Perhaps a useful distinction in judging success is to separate process from outcome. Finally, a case of institutional reform is likely to have sub-components that are more or less successful than others. Indeed, because a multi-faceted institutional reform may be brought undone by one poor component, an institutional experiment generally regarded as a failure may provide valuable lessons in process or structure. These considerations are best worked through at a case by case scale, but this does raise the issue of how strictly (and indeed just how) to interpret this part of the brief.

Note that none of these factors rule out particular kinds of cases or countries, but rather may inform or qualify choice, and will be important in both informing analysis of selected cases and in qualifying and contextualising any conclusions drawn.

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## SYNTHESISING: SCOPING CRITERIA

As forewarned, this discussion of operationalising learning in the Australian context has revealed the complexity that underlies the attractive notion of ‘institutional learning’. To reduce the large range of possible avenues of investigation to a manageable level consistent with the tone of the explanation of institutions and policy learning given earlier, the following proposes primary criteria for selecting case studies and thematic areas for further exploration in this study. These are ordered according to the various implicit and explicit criteria in the sequence they are dealt with in this paper:

### *1. What ‘parts’ of the institutional system?*

It is proposed that, in terms of a hierarchical understanding of institutional systems, focus would best be placed on cases involving higher-order institutional change, where there is evidence of credible commitment by governments to sustainable development principles. This would involve change at statutory level and/or in structures and processes that have transformative impacts on the way policy and management is carried out. This emphasis is chosen in preference to seeking out examples of change happening primarily at the program implementation level. Having said that, the most fundamental and radical

forms of institutional change (revolutionary refashioning) would not be a sensible focus given the practical intent of the study.

## **2. What type of learning?**

It is proposed that the focus be on more significant forms of government learning and on social learning, in keeping with (1) above. Instrumental and political learning may become an incidental topic in some cases through this focus, but would not be sought as a primary target for analysis.

## **3. What ESD principles to explore? And, what attributes of sustainability problems?**

The five ESD principles (from **Box 1**) with the greatest generic and institutional relevance in terms of (1) and (2) above are: sustainable economic development; integration; the precautionary principle; policy instrument choice; and community involvement.<sup>12</sup> These can be reshaped to capture deeper properties of sustainability issues and ESD principles, and the spirit of the institutional approach so as to provide a set of targets that may connect with non-Australian responses to the SD agenda:

- Integration of social, environmental and economic policy and goals;
- Handling of pervasive uncertainty;
- The deep embedding of SD principles in the institutional system, evidencing credible commitment to the long term;
- The links between credible commitment to SD, property rights instruments, and problem reframing;

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<sup>12</sup> While important, it is proposed that the ESD principles of international policy and competitiveness not be a focus, as this would require a massive and impossible widening of the project to consider issues of development aid, trade policy, and treaty negotiation and implementation.

- Community participation in the above (as opposed to program delivery through community based groups not involving deeper or more lasting institutional change).

## **4. What objects of learning?**

It is proposed that the study focuses on the following parts of the typology presented earlier:

- Substantial policy processes targeting elements of (2) and (3) above;
- Organising government (restructuring, intergovernmental, participatory), where the reorganisation involves significant and ongoing refocusing of policy activity, information flows, participation, etc; and
- Problem reframing (normative and legal change, parliamentary or executive government processes).

Thus, implementation instruments and policy programs would not be a focus, with the exception of instrument classes with the intent or potential to affect (2) and (3) above; that is, significant legislative change, transformative rights instruments, and some educational instruments (dealing with reframing the problem rather than specific issues).

This narrows the criteria set to a manageable level, but certainly still allows more than ample scope. An additional and important criterion in selecting particular case studies of institutional change, is the availability of sufficient existing data and analysis, given the impossibility of this study to engage in substantial primary data gathering. The 'filters' for considering cases from other countries, discussed above, would be applied at a finer level to case study selection, and utilised to qualify institutional lessons that might emerge from analysis.

## 4. Possible Cases for Exploration

Utilising the above criteria, this section proposes a range of potential case studies and thematic areas that could be examined in this study. The options in the selection below are all viable as targets for investigation and analysis, and it is noted how they address the criteria – in most cases more than one criterion. The following options are considered viable and relevant, but other options are not ruled out. The following options are divided into two groupings, firstly those most favoured, and secondly those that would be appropriate but at present not highly favoured. The basis for this division, referring to the scoping criteria above, are provided for each.

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### The currently favoured options for further analysis are:

- *New Zealand's Resource Management Act*, as a major statutory reform in response to sustainability, organised in part on a regional basis, with significant participation by varied policy and epistemic communities and well-described in the literature. As a focus for case study this legislation and its implementation could provide lessons at various levels from devolution of environmental management through nested policy hierarchies, catchment based regionalisation of NRM responsibility (structural logic), to consultative development of policy and legislation. The RMA presents the most well-documented attempt to move from traditional planning schemes toward planning for sustainability. Existing literature containing comparative analysis may allow some extension of this case study toward recognition of similar or contrasting reforms in other countries.
- The institutional context and social, environmental and economic implications of creating and maintaining *rights markets in natural resources*. This would be done via an examination of Individual Transfer-

able Quota in fisheries in different countries. Water rights may be a more obvious choice for Australian relevance, but ITQ have been in place longer and have been subject to recent and wide-ranging reviews. Water markets will thus be treated as an adjunct topic to the more tractable fisheries domain. This option addresses a transformative instrument, property rights issues, integration of social, economic and environmental dimensions, and the stated Australian preference for market-based mechanisms;

- Actual and proposed *strategic environmental assessment (SEA)* processes and proposals for integrated assessment (IA) in different jurisdictions as responses aimed at extending the tradition of environmental impact assessment beyond discrete projects and onto non-environmental policies, plans and programs (including consideration of related approaches such as integrated assessment or technology assessment). Depending on particulars and implementation, etc., this addresses integration, whole-of-government mechanisms, and policy rights and responsibilities.
- *National councils for sustainable development* and equivalent bodies, now established in dozens of countries, as national level, inclusive policy advisory and educational responses addressing (potentially) integration, long term policy making, reorganising government and participation. In particular, this theme allows investigation into possible models for whole-of-government/cross-sectoral mechanisms for furthering ESD.
- Institutional and especially regulatory and policy *integration in the European community* in environmental policy and standards across national boundaries, as the most significant example of trans-boundary, detailed mixed regulatory-self regulatory approaches in the world at present.

- *Statutory expression of sustainable development principles* in different jurisdictions (largely those comparable in political and legal traditions to Australia), in terms of the extent to which expression can or has influenced the institutional and policy system and decisions made within it. This would of necessity include consideration of implementation of treaties and agreements, specifically the Rio-related set of instruments. This addresses problem reframing, integration, whole-of-government impact, and legal change.

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**Cases and themes at present less favoured are** (noting that some observations on such options may be possible if material is considered while investigating the options above):

- *Constitutional expression of sustainability principles.* As discussed earlier, this appears an unlikely prospect in Australia, and it is noted that recent major constitutional reform for other reasons appears to be the key reason for such expressions in those few countries that have given sustainability such status.
- *Implementation of national sustainable development strategies* in other countries, where comparable with Australia's NESD and where, at least in intent, the strategies are whole-of-government. While attractive, this would demand detailed and repeated analysis of specific national policy making contexts, beyond the scope of this project.
- *Parliamentary or executive government processes* whereby bi- or multi-partisan agreements on policy directions are developed, removing some aspects of sustainability problems from rapid and perhaps unthinking change following elections or changes in political fashion (nevertheless accepting the rights of governments to make and change policy and priorities). Again, while attractive this would demand detailed understanding of the political context in a range of countries.
- *Implementation of international instruments,* focusing on inclusiveness of processes (community, and within federal

systems), translation of principles to domestic law and policy, and monitoring of implementation. While the impact of especially the Rio set of instruments is a significant issue, this would require considerable effort, and the lessons generated may be of limited transferability across legal systems. The favoured option of examining statutory expression of sustainability principles would offer some insight into this.

- *Participatory policy and management processes* (not specific programs) that enable lasting and/or significant transfer of power to stakeholder groups, to provide a contrast to Australia's investment in this response type (including indigenous land management and co-management of areas or resources). This addresses participation and reorganising government. This would require substantial research and scoping to select particular cases, given the great number and fine scale of most cases. Also, it is probably the case that participatory arrangements, both in Australia and elsewhere, have received more attention than other options, given their prominence in practice and in research in recent years, and efforts would best be directed elsewhere.

- *State of environment reporting* in a sample of jurisdictions, emphasising the institutional setting for SoE and the institutionalisation of linkages between the reporting process, long term environmental and policy monitoring, and policy formulation. SoE is but one science-policy-communication mechanism in the ESD field, and examined alone may be of little interest in the absence of consideration of other mechanisms (resource accounting, corporate reporting, etc). However, a fuller, comparative examination of science-policy-community information transfers would be a large task. To be effective, it would also require assessment of the impact of SoE systems, as opposed to the production of reports, and while an issue deserving of close attention this would be beyond the scope of this project.

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Despite its prominence in Australia, river basin governance and integrated catchment management are not proposed as cases, given the mass of previous work that has been undertaken and that currently being undertaken through the Murray-Darling Basin Commission.

The favoured six options are considered to offer a balance between sufficiently well-defined avenues of inquiry, and the need to consider a range of kinds and degrees of

institutional change, and in particular the constraints and opportunities to be found within the institutional systems in which these reforms have taken place. In this way, it is the intention of this project to not simply or even primarily document these cases, but to utilise them as vehicles for increasing the sophistication and operational usefulness of Australian discussions of institutional change for ESD.

## 5. Conclusion

This working paper has benefited from input from the project steering committee,<sup>13</sup> and sets the direction for the second phase of the project. As well as being an outcome of the project – especially the conceptual background in Part 1 – the paper will be used to communicate the nature and scope of the project to potential collaborating researchers and groups. The next phase of research from 12/2001 to 8/2002 will involve more detailed investigation into the cases and themes of institutional change proposed above and the institutional systems within which they are embedded, and analysis and lesson-drawing for the Australian context.

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