
5 Case studies

The terms of reference for this inquiry require the Commission to undertake case studies in priority areas of how Commonwealth departments and agencies have incorporated environmental considerations into their decision making processes.

Five case studies of the Government's approach to selected resource management, environmental and sustainability issues have been undertaken. Four of these case studies focus on particular programs which seek to implement ESD and which incorporate Commonwealth involvement to some degree. The final case study considers the environmental program of a department that does not have a principal focus on ESD or environmental issues, but undertakes activities that could have significant implications for the environment and the achievement of ESD.

The case studies are:

- regional forest agreements (RFAs);
- fisheries management plans of the Australian Fisheries Management Authority (AFMA);
- the Natural Resource Management Strategy (NRMS) of the Murray-Darling Basin Commission (MDBC);
- the National Greenhouse Strategy (NGS); and
- environmental management by the Department of Defence.

This chapter provides details of the framework used to examine the case studies. It also presents a summary of some of the key issues the case studies highlight for implementation of ESD. The detail of the case studies themselves is presented in appendix D.

5.1 A framework for analysing the case studies

The case studies highlight processes adopted by different agencies in different contexts when dealing with ESD related issues. The purpose of examining the case studies is not to comment specifically on individual agencies' success or otherwise in implementing ESD, but rather to draw out general lessons or insights on approaches and mechanisms that appear to work well.

Three Commonwealth agencies — Department of Finance and Administration, Australian National Audit Office and Office of Regulation Review — have responsibility for (or have published guidelines on) conducting program evaluations or establishing mechanisms that encourage effective policy or program making.

In its publication, *Doing Evaluations, A Practical Guide* (1994), the Department of Finance (now Finance and Administration) provides guidance to departments and agencies conducting evaluations. It considers that analysis and understanding of program logic is a necessary first task for evaluating the appropriateness of a proposed program, or for evaluating an existing program. Analysis of program logic requires consideration of:

- the rationale and objectives of the program;
- its relationships with other programs;
- performance information or details of information collected to monitor the on going performance of the program;
- details of previous evaluations and reviews; and
- linkages between the program's major inputs, processes, outputs and outcomes (or, broadly, how the program operates).

In sections of the guide that deal with management of an evaluation (DoF 1994, pp. 30–35), the Department of Finance emphasises the need for agencies to identify and consult stakeholders in planning the evaluation; to publicly release results to improve accountability and address public interest concerns; and to use the findings of the evaluation to improve the program, thus maximising the benefits of the entire exercise.

The Australian National Audit Office (1997, p. 23) examines similar criteria when it assesses key performance elements of programs in its performance audits. These include:

- how the objectives are designed;
- respective roles and responsibilities of parties to the agreements;
- appropriateness of the performance information;
- quality of the needs assessment process;
- strategic focus on outcomes;
- program focus on the customer or client; and
- adequacy of the monitoring, review and performance reporting mechanisms.

The Office of Regulation Review's *A Guide to Regulation* outlines the requirements of regulation impact statements (a form of ex ante assessment). The regulation impact statement process (ORR 1997, pp. A1–A2) is designed to improve regulation making by formalising the steps that should be taken in policy formulation and ensuring that a systematic, objective and transparent process is applied. It requires agencies to identify:

- the problem that needs to be addressed;
- desired objectives;
- a range of alternative options that may be viable mechanisms for achieving the desired objectives;
- an assessment of the costs and benefits of the options;
- a consultation statement; and
- a strategy to implement and review the preferred option.

While these steps are described in the context of making regulations, similar requirements may be applied to the establishment or review of programs and policies to ensure best practice.

The Commission has drawn on the approaches adopted and/or promoted by these three agencies to develop a template for assessing policy formulation and program design in the case studies.

Box 5.1 outlines the aspects of policy/program design which are examined in each case study. Attention to these aspects by agencies is necessary for sound policy or program making processes. They represent 'minimum requirements', or a fundamental starting point, for 'good practice' policy or program making, although they will not necessarily guarantee good outcomes because of variability in the way they may be addressed. Sound processes underpinning policy or program formulation should maximise the likely effectiveness of the policy or program that results. If some of these elements are ignored or poorly addressed, then it is likely that the program will be less effective than it would otherwise have been.

Box 5.1

Background Template for examining the case studies

This section will provide brief introductory remarks to place the specific program in context.

Objectives

This section will outline whether, and how, the program has specified its objectives, including any specific ESD objectives.

Strategies and actions

This section will summarise key features of how the program operates and the strategies and actions employed in pursuit of the program's objectives.

Ex ante assessment

This section will describe whether, and how, the agency assessed the environmental and other impacts of the program prior to implementing it. Examples of ex ante assessment processes include environmental impact assessments, social impact assessments, regulation impact statements and cost benefit analyses.

Coordination with other government agencies and programs

This section will discuss how the agency coordinates the development, operation and monitoring of this program with related programs administered by other Commonwealth departments and agencies or by State/Territory or Local Governments.

Involvement of other interested parties

This section will discuss the mechanisms in place to provide for the involvement of non-government stakeholders and other interested parties in the development, operation and monitoring of the program.

Monitoring, evaluating and reporting procedures

This section will discuss the arrangements established by the agency to monitor and evaluate the program's progress against its key objectives. It will consider issues such as whether performance indicators have been identified and are used to assess the program.

It will also consider how findings arising from monitoring or evaluation processes are used to improve the program over time.

Other supporting activities

This section will refer to supporting activities which are directly relevant for the effective operation of the program but which are not discussed in the other sections, for example, activities associated with research and development or structural adjustment.

5.2 Key issues in implementing ESD

The case studies highlight that implementation of ESD is very challenging and can take many forms. A considerable amount of time is also required to make significant progress. Having said that however, it would be disappointing if poorly designed institutional arrangements or policy making processes delay progress further. In the examples of the Commonwealth's implementation of ESD reflected in the case studies, agencies have, in general, considered and incorporated most of the elements of the template of good policy making outlined in box 5.1 to varying degrees.

The following key observations arise from examination of the case studies (box 5.2) and represent some of the issues that could be carefully considered and examined by agencies seeking to establish institutional arrangements that will support the implementation of ESD. While there is no 'one size fits all' method for implementing ESD, and the most appropriate institutional arrangements will vary depending on the context, the issues outlined below should offer some guidance to other agencies seeking to implement ESD consistent policies and programs.

Multidisciplinary approach

Four of the five case studies examined attempt to explicitly acknowledge and account for the three elements of ESD within the one framework. Each also attempts to incorporate principles of ESD such as the precautionary principle and inter-generational equity.

This is a significant step forward in program making which has traditionally tended to focus on one aspect — economic, environmental or social — as the dominant objective or concern. While the arrangements described in the case studies will not eliminate debate about the appropriate tradeoffs made between the various elements of ESD, which reflect different participants' preferences and views, this approach is nonetheless ambitious. As Said (1998, p. 349) notes in the RFA context:

... it is the first time that such a comprehensive assessment and planning process has been undertaken in Australia (and it appears there are few analogues elsewhere in the world) for forests or any other resource sector.

Programs developed under these multidisciplinary frameworks that explicitly seek to acknowledge and account for economic, environmental and social concerns and objectives are more likely to recognise and attempt to balance all values. Hence they should result in management that is more sustainable than would have otherwise been the case.

Box 5.2 **Key observations arising from the case studies**

Some key issues highlighted by the case studies are:

- significant attempts to move across disciplinary (economic, environmental and social) boundaries to accommodate various needs and objectives within the one planning and management framework;
- reflecting the multidisciplinary nature of ESD, a combination of instruments (for example, market based actions, information and education campaigns and forms of regulation) are likely to be required to achieve objectives;
- decisions and arrangements are made in the context of a long term planning and management framework with an expectation that arrangements will continue into the longer term;
- programs are underpinned by a statutory basis or other form of binding agreement or arrangement, which provides a greater likelihood of longevity and commitment;
- in most cases, action or implementation has been preceded by tighter specification or 'narrowing down' of broad ranging national policy statements or environmental problems by, for example, applying a program on a regional scale or by focusing on a sub part of a wider problem;
- informational demands must remain a priority area for further action despite varying attempts which have been made to provide sufficient resources in terms of funding, particularly for supporting research;
- to varying degrees, programs have been developed in an inclusive manner that involves consultation and cooperation with key stakeholders and the community at various stages;
- significant levels of consultation and cooperation between Commonwealth departments and between Commonwealth and State/Territory agencies is a key requirement; and
- monitoring and evaluation procedures have been established with varying degrees of commitment to updating and improvement of programs.

Choice of tools and strategies

The need to recognise the interrelationships between economic, environmental and social impacts in ESD policy making highlights that, in many cases, programs may need to employ more than one type of instrument or strategy to pursue ESD. This is because, for example, some instruments which may be preferable from the point of view of economic efficiency alone may not produce socially desirable outcomes overall. The fisheries and greenhouse case studies both note that market based instruments used or proposed in these policy areas may have social implications which should be examined in order for the overall policy response to be ESD

consistent. Other instruments, for example, prohibitions and prescriptive regulation, may be effective for achieving environmental outcomes for instance, but may do so at a high economic cost.

These examples illustrate that the various instruments or policy responses available to decision makers each have advantages and disadvantages. One instrument or action alone may be best suited to promoting one particular aspect of ESD rather than promoting the trio of elements that make up ESD. Hence, a combination of instruments or strategies is likely to allow agencies to take advantage of the positive features of each. This approach appears to have been followed in a number of the case studies. For instance, fisheries management plans combine a market based instrument (individual transferable quotas) with prohibitions and regulation (such as closed seasons). Similarly, the National Greenhouse Strategy combines voluntary measures such as the Greenhouse Challenge program with education strategies and a proposed market based system — emissions trading.

Long term horizon

Promotion of ESD outcomes requires a long term focus, hence planning and management arrangements must also adopt a long term view, certainly beyond the time frame imposed by the political cycle.

A number of the case studies illustrate that it is possible for agencies to incorporate a longer time frame in devising responses to ESD issues. These include Commonwealth and State Government commitments to 20 year terms in regional forest agreements and the very long history of the Murray-Darling Basin management arrangements (about 80 years) where numerous governments, representing diverse interests, have been able to maintain a long term relationship in recognition of the need to work together to deal with the problems of the basin.

A long term approach is also critical from the point of view of establishing research arrangements that support ESD programs and for developing monitoring and program evaluation arrangements. A long term approach or commitment should also incorporate mechanisms that ensure a degree of flexibility for program improvement over time (see ‘Continuous improvement’ section below for a discussion of these issues).

Commitment to ESD

Most case studies incorporate some mechanism to ensure that the commitment to ESD is maintained over the long term. In some cases, ESD is a binding requirement

imposed through legislation (for example, requirements contained in the *Fisheries Management Act 1991*) while in others (for example, Defence) a commitment to ESD issues is made at the most senior levels of the organisation and its importance is communicated throughout the department. In other cases involving joint implementation by a number of governments or departments, the parties involved have established mechanisms to help them maintain their commitment to implementation of ESD over time.

For example, decisions made by the Murray-Darling Basin Ministerial Council must be unanimous for progress to be made. This encourages all parties to focus on developing solutions and to negotiate on their respective positions so that some action will occur. While an independent arbitration mechanism exists, it has never had to be used in the council's long history.

While in the RFA context, the key Commonwealth departments — Environment Australia, and Agriculture, Fisheries and Forestry work together to promote ESD outcomes with the assistance of the Department of Prime Minister and Cabinet — which is independent and can assist the departments to arrive at a consensus position and ensure more balanced outcomes are achieved. Both Environment Australia and the Department of Agriculture, Fisheries and Forestry consider that this independent mechanism is critical for assisting progress in implementing the RFAs (AFFA, sub. 38, part B1, p. 5 and EA, sub. 21, p. 23).

Clearer specification of the problem and/or the objectives

While implementation of ESD requires a national or broad vision (which can be reflected in an overriding and coordinating framework, such as the National Forest Policy Statement or the Murray-Darling Basin Initiative), implementation of ESD 'on the ground' requires specific goals and a clearly defined task for meaningful action to occur.

A number of the case studies reflect attempts to more clearly specify the objectives of ESD within a narrower or more targeted area. For instance, RFAs apply the objectives and principles of the National Forest Policy Statement on a regional basis. Similarly, fisheries management plans translate broad objectives contained in legislation to specific fisheries.

Given the all-encompassing nature of ESD, clear and narrow specification of objectives at the individual program level is critical for making the ESD task more manageable. Clear and specific objectives also assist in the task of developing performance indicators or other methods to link outcomes to objectives. These indicators or other methods are necessary for assessing the program's effectiveness.

Distinguishing between objectives and strategies (that is, means to achieve objectives) is one element of clarifying a program's objectives. For instance, the Department of Defence has a list of fourteen goals for its environmental policy, some of which may be better described as strategies to meet an objective. An example is 'conduct environmental impact assessments' which may more usefully be considered one of a number of possible strategies for meeting an objective such as 'ensure that likely environmental impacts of a Defence exercise are identified and minimised'.

Often a large number of strategies or objectives can be distilled to a few key objectives. A narrower set of objectives can be more easily communicated to staff involved in the program and to external interested parties. Similarly, it can be easier to communicate priorities and to focus efforts for a narrower set of specified objectives.

Demanding research needs and informational requirements

Dovers (1995, p. 156) summarises the critical need for sound information in ESD policy making:

Sustainability is an accepted and supremely important goal, but the information systems to support its achievement are in general myopic, under-resourced, unco-ordinated, and constantly buffeted by the winds of political fashion and expediency. If basic environmental information is not accorded the status and guarantees we give to basic social, demographic and economic information, the achievement of sustainability through well designed, implemented and monitored policies is unlikely.

At its most obvious level, data and information are required for sensible programs to be established. However, lack of reliable information can also exacerbate conflicts between stakeholders and other interested parties on the appropriate tradeoffs between economic, environmental and social needs and goals.

Examination of the case studies highlights a number of issues associated with the research or information aspect of ESD implementation:

- In some cases, there is a need to identify and better utilise existing information before embarking on the costly search for additional information.
- Prior to commissioning new research, the additional information required should be carefully identified and defined, bearing in mind program needs and priorities such as monitoring requirements.
- Coordination and cooperation in the collection and sharing of information between agencies is critical to avoid duplication, to lower costs and to coordinate research efforts with programs being implemented. Consistency in reporting

requirements can aid in this task. For example, the RFA process is developing sustainability indicators that will be consistent with international indicators.

- Data and information collected for one program or process should be made widely available and accessible to other agencies and key stakeholders to improve the foundations for decision making. Arrangements for the funding of research, ownership and maintenance, and access to data and information should not be overlooked in arrangements to implement ESD.
- Wherever possible, linkages and consistency between environmental data and social or economic data should be encouraged so that data can be more meaningfully compared within the multidisciplinary context of ESD decision making.
- From a monitoring or evaluation point of view, a commitment to continued collection of the same set of data over time to monitor changes, is required to derive the most benefit from an investment in the collection of this type of information.

A number of these aspects of information and research are being addressed by the programs described in the case studies. For instance, the RFA process commits significant funding to data and information collection through ‘comprehensive regional assessments’, although this process is not without criticism. The regional forest agreements themselves also detail research priorities. Similarly, the National Greenhouse Strategy specifies the development of a national or common set of models to promote research and assessment of climate change and its impacts.

Despite actions taken to improve the information base on which ESD programs rest, a commitment to continually improving the information base is so critical to successful implementation of ESD that its need cannot be over-emphasised.

Partnerships with stakeholders

The case studies demonstrate an array of approaches for incorporating stakeholder input in government decision making and program development. Not only do they demonstrate the scope to encourage involvement in various aspects of the program (for example, during ex ante assessment, on ground action or implementation, or in monitoring and review) but that involvement can take various forms.

These forms can range from making publications readily available to the public with the primary intention of informing stakeholders, to arrangements where stakeholders form part of an advisory group but decisions largely rest with the relevant agency, to cases where stakeholders are directly involved and responsible for identifying management options and strategies and implementing them. For instance, of the

case studies examined, it appears that grass root level involvement is most developed in the Natural Resource Management Strategy of the MDBC.

Various approaches, and combinations of them, are likely to be valuable in different circumstances. In summary, the case studies highlight five key elements which should be addressed to derive the most benefit from stakeholder input.

Firstly, representativeness of stakeholders — both across and within representative groups — is important. Consultation and negotiation processes should attempt to ensure that all interested and relevant groups are identified and involved in the process. This might require special cultural needs to be recognised and addressed to ensure that certain stakeholder groups are reached through the process. This can also be an issue within a representative group such as industry where both small and large firms' interests should be included. For instance, in fisheries management, the interests of trawler fishers in the industry may not coincide with those of dropline fishers.

Secondly, once stakeholders have been identified, an equal opportunity for them to access consultation processes and to influence outcomes is also important. This might require measures such as the use of culturally sensitive and appropriate consultation processes or providing funding assistance to certain groups to enable them to be effectively involved in the process. This point was supported by the Australian Conservation Foundation (sub. DR64, p. 14):

Most community representatives are simply not capable of being represented in the same way as an industry representative in resourcing terms, and therefore if all 'stakeholders' are to make meaningful and worthwhile contributions resources must be provided for community involvement.

Thirdly, to promote consensus, stakeholder mechanisms should encourage negotiation and trade off of positions directly between stakeholders. This is in contrast to using stakeholder consultation mechanisms merely as a means for information exchange either from government to stakeholders or vice versa. While this latter type of consultation mechanism has value, direct interaction between stakeholders when negotiating solutions to common problems is likely to promote better identification with the complexities of balancing competing needs and greater commitment to finding an integrated outcome or solution.

In this context, the role of government may be that of facilitator to assist stakeholders in identifying issues and recognising areas of common ground while allowing stakeholders to negotiate on remaining outstanding issues to reduce the level of disagreement. The arrangements represented by the NRMS demonstrate one means through which a government agency may act as a facilitator, or in an integrating, coordinating or strategy setting role. The bulk of on ground work, from

identifying projects to implementing them, is done by local groups. The Australian Greenhouse Office is adopting a similar role in its involvement in programs such as Greenhouse Challenge which involves cooperative arrangements with industry to reduce greenhouse gas emissions, and Cities for Climate Protection where the office assists local governments identify strategies to reduce greenhouse gas emissions in their local area.

Fourthly, to ensure that stakeholders can participate as effectively as possible, participants must be provided ready access to key information and the best data available. This is particularly important where information about the state of the resource may be lacking or where it may be held by only one or two parties.

Lastly, consultation mechanisms need to be institutionalised in order for them to last into the longer term and be improved upon (Dovers 1998).

Coordination between government agencies

The multidisciplinary nature of ESD implementation emphasises and heightens the need for coordination between government agencies at both the Commonwealth level and between governments. All of the case studies demonstrate various means for coordinating activities with other agencies in implementing an ESD policy.

Government coordination is important for a number of reasons. These include incorporating the expertise and interests of the various portfolios that have a direct stake in ESD outcomes in a particular context and ensuring consistency or avoiding duplication between arrangements made. Similarly, coordination amongst research agencies and with agencies implementing programs is essential to ensure that research projects reflect and support developments in key policy areas.

Coordination arrangements must ensure that all relevant agencies are included. For instance, the Australian Greenhouse Office, established to coordinate Australia's greenhouse response (discussed in the case study dealing with the National Greenhouse Strategy), is a tripartite organisation formed through contributions from Commonwealth departments dealing with environment, industry and primary industries. The Department of Transport and Regional Services seems to be a significant omission from this arrangement given the contribution of the transport sector to greenhouse gas emissions.

Continuous improvement

Ecologically sustainable management of a natural resource (or ESD in another context) is a complex issue.

In light of this, it is appropriate for agencies to incorporate a process of continuous improvement in programs designed to implement ESD. This requires agencies to accept, and indeed expect, that programs will not necessarily operate as well as anticipated and that regular monitoring and adjustment or refinement is an inherent part of the program.

Dovers and Mobbs (1997, p. 40) describe this use of regular review for improving and refining programs as ‘policy as [an] informing system’ and as a practical means for dealing with the uncertainty that pervades ESD decision making. It requires agencies to establish institutional structures and feedback mechanisms that will inform policy making over the long term.

Continuous improvement of programs requires regular, ongoing monitoring to assist day-to-day management of a program, coupled with less frequent (say five yearly) more comprehensive evaluations or reviews of the program’s overall appropriateness and effectiveness. A number of the case studies (for example, the NGS and RFAs) incorporate both of these aspects of monitoring.

The monitoring and evaluation aspect of good practice policy making appears to have received less attention than other elements in some of the case studies. This, in part, may be explained by the fact that some of the programs examined are relatively new and are at the initial stages of developing performance indicators or other performance measures. While some delay in this aspect of program making might be expected given its difficulty, it is important that some progress in monitoring should be made as soon as possible even if indicators and systems are still imperfect. It also suggests that attention should be given to assessment methods, such as performance measures, early in the process of developing the program. In fact, these elements should be considered and developed in tandem with setting the program’s objectives as they represent the arrangements through which the program’s success or otherwise will be determined.

Monitoring and assessment arrangements should be as transparent and public as possible. Some of the case studies intend to seek and incorporate public views (for example, the NGS and RFAs) in their comprehensive assessments of the program. Other measures to improve transparency and accountability should also be employed such as engaging independent parties to conduct assessment reviews.

Monitoring activities and regular assessments of the program's overall effectiveness are of little value if the results are not used in a feedback mechanism that ensures the results are used to improve the program over time. In some case studies, results of monitoring are being used in this way. For example, the Department of Defence is applying environmental lessons learnt from its review of a major defence exercise in 1997 to the planning of its subsequent exercise.

This frequent revision and refinement of programs is necessary to incorporate new information that has come to light and to adjust programs, if necessary, in light of their impacts. It is a key and necessary mechanism for incorporating flexibility in ESD policies that are set in place for the long term.

Another aspect of 'policy as learning' is the opportunity for agencies to learn from the experiences of other agencies grappling with similar issues and concerns. This form of review of other programs can also provide valuable insights into the implementation of ESD.