
Topic 10

Decision-making

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Topic 10—Decision-making

Objectives

To describe the role and contribution of EIA in the decision-making process, particularly the final approval of the proposal.

To understand the broad trade-offs that must be made among environmental, economic and social factors in decision-making and condition setting.

Relevance

The EIA process was introduced with the express intention of incorporating environmental considerations into decision-making on major proposals. All of those involved in EIA require an understanding of how the decision-making process operates and the particular contribution made by EIA.

Timing

Two hours (not including training activity)

Important note to trainers

You should design your presentation with the needs and background of participants in mind, and concentrate on those sections most relevant to your audience. The session presentation timings are indicative only.

Time taken for the training activities can vary enormously depending on the depth of treatment, the existing skills and knowledge of participants and the size of the group.

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Information checklist

Obtain or develop the following, as appropriate:

- an outline of the steps in the local decision-making process;
- examples of decision documents, such as approvals or authorisations (permits, licenses, conditions, etc.) that are used locally;
- a statement of 'reasons for the decision' that has been issued locally;
- a list of procedural checks and balances in the EIA system that help reinforce accountability in decision-making;
- an EIA report that contains information used in decision-making;
- copies of any research focused on local decision-making;
- contact names and telephone numbers of people, agencies, organizations and environmental information/data resource centres able to provide assistance in relation to decision-making; and
- other resources that may be available such as videos, journal articles, computer programmes, lists of speakers, and case studies.

Session outline

Welcome participants to the session by introducing yourself and getting them to introduce themselves. Outline the overall coverage of the session, its objectives and why they are important.



1

This topic focuses on the relationship of EIA and decision-making. A broad view is presented of decision-making as an on ongoing process extending from project inception to implementation. In that context, particular emphasis will be given to the stage of final approval and authorisation of a proposal.



2

Introduce the concept of decision-making and its importance in the EIA process. Briefly describe the different roles and responsibilities of those who carry out EIAs and those who make decisions on the merits of a proposal.



3

Decision-making is the process of choosing between alternative courses of action. This process is essentially political in nature. It involves weighing the benefits and costs and making trade-offs among a range of considerations. Often, the views of interested parties are represented directly and decisions are made through an incremental process of negotiation, bargaining and compromise. For major proposals, a number of formal instruments can be used to develop the information necessary for sound decision-making.

In this context, EIA is an information gathering process, which is intended to facilitate environmentally sound decision-making. This process culminates in a final decision on whether or not a proposal is acceptable, and under what conditions. When the term 'decision-making' is used in EIA it is usually taken to mean the final approval of a proposal. However, a series of 'interim' decisions about the proposal are made throughout the EIA process; examples include the selection of a preferred alternative and making planning and design modifications to the initial proposal.

Depending upon the EIA arrangements that are in place, these interim decisions may be made by different parties. For example, at the screening and scoping stages, the responsible authority usually decides the disposition of the proposal. During EIA preparation, the proponent often modifies the proposal to make it more environmentally and socially acceptable. The final approval of the major proposal is normally a political decision, often taken by the national government, planning authority or other equivalent body. In some EIA systems, the approval is a pre-requisite to gaining other

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necessary authorisations, such as licenses and permits, which are issued by regulatory agencies.

Describe the responsibilities of the decision-maker in the EIA process, and consider how they might be reinforced.

Decision-makers at all levels now have well understood environmental responsibilities. At a general level, these responsibilities are outlined in the Rio Declaration on Environment and Development and Agenda 21, the principles and programme of action to which all countries that attended the Earth Summit are politically committed (see Topic 1 – *Introduction and overview of EIA*). EIA is identified as a key instrument to integrate environmental and social considerations into development decision-making. Its application is strengthened when used with the precautionary principle and other key guidelines for decision-making endorsed at Rio.

However, too many decision makers still regard EIA negatively, as an imposition or even an impediment rather than an opportunity to add value to development proposals and to safeguard critical resources and environmental functions. Meanwhile, UNEP, the World Bank and other international organisations have warned that global environmental change may be reaching critical thresholds, and report increasing pressures on land and water resources in many parts of the world. Often these issues affect the poor and impoverished most, undermining the resource base upon which they depend and reducing their prospects for secure and sustainable livelihoods.

It is important for decision-makers to be aware of their responsibility to implement the EIA process and use its results to better manage the environmental impacts and risks of a proposal. At a minimum, decision-makers need to understand:

- the basic concept and purpose of EIA (and SEA);
- EIA requirements, principles and guidelines that are applicable;
- the effectiveness of their implementation and the implications for decision-making;
- limitations that may need to be placed on information and advice contained in an EIA report;
- how EIA process and practice measure up to internationally accepted standards and to those in place in comparable countries; and
- the issues associated with public consultation in decision-making, including third party and legal challenges to the authorisation of proposals subject to EIA.



4



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The sustainability agenda places further obligations on decision-makers. In order to meet them, decision-makers need to have the requisite knowledge and tools to take fuller advantage of EIA as a sustainability instrument.

Decision-makers should be encouraged to:

- implement the sustainability commitments made at Rio;
- broaden their perspectives of the environment and its values;
- better communicate information and reasons for decisions;
- apply the precautionary principle when addressing the environmental impacts of development proposals;
- look for improved ways of making trade-offs among environmental, economic and social factors;
- adopt more open and participatory approaches to decision-making; and
- use strategic tools to aid decision-making, including SEA for proposed policies and plans and environmental accounting to gain a realistic measure of macro-economic progress.

Using a local proposal (real or simulated) as the basis for discussion, ask the participants to identify the different types of interim decisions that are made throughout the applicable EIA process and specify who might be responsible for making them.

The discussion should review the chain of decisions culminating in a final approval of the proposal, including:

- screening – to decide if and at what level EIA should be applied;
- scoping – to identify the important issues and prepare terms of reference;
- impact analysis – focusing attention on the consideration and choice of alternatives;
- mitigation – to identify measures to avoid, minimise or compensate for impacts; and
- review – to determine the quality and adequacy of the EIA report as a basis for approval of the proposal.



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At each stage, an implicit or explicit decision will be made on whether or not the proposal is acceptable and can be justified environmentally. In practice, this is invariably favourable, unless a proposal has a 'fatal flaw' or proves highly controversial and unacceptable to a large majority of people. This process of decision-making is iterative, whereby the conclusions reached at each stage narrow down the choices to be made at the next one. It raises a number of issues about the difference EIA information actually makes to interim decision-making and final approval of proposals.

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What aspects and issues apply to EIA decision-making locally? For example, consider:

- What type of precedent is set by each stage of decision-making for the next one?
- How do the range of options and considerations become narrowed?
- To what extent does momentum build up in favour of approval as the decision-making process continues?
- What are the circumstances and conditions under which a proposal might not be approved?
- Are the conditions established by the approval and authorisation of a proposal enforced during the implementation phase?

Now focus the discussion on final approval of the proposal. Outline the nature of the decision-making process and the factors that are important. Emphasise that information from an EIA is only one of the inputs taken into consideration.

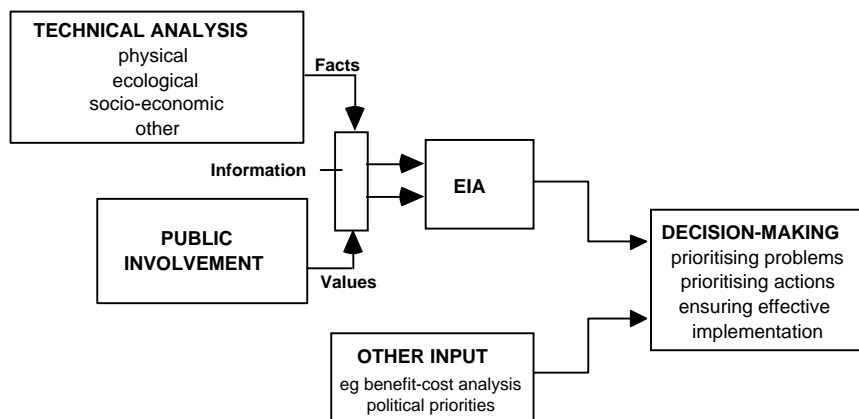


Figure 1: EIA as part of the decision-making process

EIA is part of a larger process of decision-making to approve a major proposal. This process is shown in the above figure. It results in a political decision, which is based on information from a number of different sources and involves making a large number of trade-offs. A balance must be struck between the benefits and costs; their environmental, economic and social elements must be weighed, and uncertainties and arguments over the significance of risks and impacts must be addressed.

The factors that will be important in the final approval of a proposal include:

- findings of significant impact contained in the EIA report;
- inputs from economic and social appraisals; and

- other external pressures or political inputs to decision-making.

Taking account of the EIA report

The information provided by EIA is based on technical analysis and public involvement. It is a synthesis of 'facts' and 'values'. How these components are reconciled and documented in the EIA report can have an important bearing on the potential contribution it makes to decision-making. The usefulness of the EIA report for decision-making also depends upon the use of good practice at previous stages in the EIA process.

At a minimum, decision makers are expected to take account of the information from the EIA process in final approval and condition setting. With few exceptions, an EIA process does not lead to the rejection of a proposal even when there are findings of potentially significant impacts (although retaining this option is important for process credibility). However, the results of the EIA process usually have a considerable bearing on establishing terms and conditions for project implementation.

When making decisions, those responsible seldom have time to read the EIA report, other than an executive summary (see Topic 8 – *EIA Reporting*). Typically, they rely upon the advice of their officials, whose views are likely to be shaped by their policy mandates and responsibilities. The general receptivity of decision-makers to the findings of an EIA report will reflect their confidence in the EIA process and its perceived acceptance by other parties. In this regard, public trust in the EIA process, which is built up over time, may carry particular weight.

Relating EIA to other inputs

As the above figure shows, EIA is undertaken together with economic appraisal, engineering feasibility and other studies. Because of these other inputs, the decision that is made may not be the environmentally optimal choice. The environmental consequences of the proposal must be balanced against economic, social and other considerations. These trade-offs form the crux of decision-making, and, typically, environmental considerations carry less weight than economic factors in the approval of development proposals.

In this regard, an important question, on which opinion varies, is whether EIA should be a strictly neutral or an advocacy process that argues the case for the environment. The predominant view is that the role of the EIA practitioner is to:

- provide a clear, objective statement of the environmental impacts and their mitigation;
- bring the feasible alternatives and the environmentally preferred option to the attention of decision-makers; and, more arguably
- give contestable advice on the environmental acceptability of the proposal (for example, whether it can be justified in the circumstances).



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Other inputs

External inputs to the final decision on a proposal often occur through a wider representation of views and interests. These pressures vary from country to country and project to project. Many large-scale proposals are controversial and encompass a broad range of issues on which opinion can be sharply divided. They can become symbols of needed development or of environmental destruction or social injustice.

The so-called 'big dams' debate exemplifies this aspect of decision-making. The largest and most controversial schemes, represented by the Three Gorges (China) and Sardar Sarovar (India) schemes, have provoked international debate over the advisability of building them and the adequacy of the EIA process that was applied. A summary of the issues associated with the Sardar Sarovar scheme is given in Box 1 and can be reviewed to see if there are for points of comparison with projects undertaken locally. Further information can be found in the report of the World Commission on Dams (see <http://www.dams.org>).

Box 1: Sardar Sarovar scheme, India

Sardar Sarovar is an irrigation scheme located in a drought prone region. It involves the construction of a high dam on the Narmada River, a reservoir of 37,000 hectares in three states and an irrigation network 75,000 km in length and occupying a further 80,000 hectares of land. A population of one-quarter million will be relocated, many of them tribal people. Thousands more, living downstream below the dam, also will be adversely affected.

As a result of the scale of these impacts, Sardar Sarovar came to symbolise the pros and cons of large-scale development both in India and internationally. Some see it as a project that will bring major economic benefits to millions; others regard it as environmentally and socially destructive. The relocation of tribal people, who had no formal title to land, also raised broader issues of human rights. Finally, the project, now in its final stages, was heavily criticised because the EIA and SIA processes were considered deficient in taking the full range of impacts into account.

In 1992, the scheme was the subject of an independent World Bank review, which was triggered by its loan agreement with the governments involved. The review concluded the scheme was beset by profound difficulties, which included inadequate data, failure to consult with the people affected and the lack of appropriate EIA and mitigation.

Source: Berger, 1994

Outline the types of information in an EIA report that could be required by a decision-maker in order to make a final decision. Use a local case study or EIA report to demonstrate how the types of information listed in the table could be best presented.

A summary of *Information considered important for decision-makers* is given in Box 2 and is available as a handout. It lists the key aspects of EIA reports which decision-makers need to take into account when making final approvals and setting conditions for project implementation. This listing is generic and should be reviewed to establish the aspects that are important locally.



10-1

Box 2: Information considered important for decision-makers

Background

- project background and the most important environmental issues involved

Policy context

- basic development issue or problem being addressed (e.g. flooding, water shortage, etc)
- the relationship to environmental policies and plans

Alternatives

- alternatives to the proposal (including the best practicable environmental option (BPEO) or equivalent designation)

Public involvement

- key public views
- concerns of affected communities
- areas of agreement and disagreement

Impact analysis

- costs and benefits
- distribution of gains and losses

Mitigation and monitoring

- adequacy of proposal measures

Conclusion and recommendations

- main economic benefits, significant environmental effects and proposed mitigation measures
- the extent to which the proposal conforms to the principles of sustainable development
- design and operational changes to improve the environmental acceptability of the project.

Adapted from OECD/DAC (1994)

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Discuss whether or not the decision-maker is required to consider the findings of the EIA report under local arrangements and summarize the requirements in other systems. Outline the range of possible outcomes arising from decision-making.



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The responsibility of decision-makers to consider the findings and recommendations of an EIA report varies from one jurisdiction to another. Normally, there are limited qualifications placed on the discretion of the decision-maker to approve or reject a proposal. Depending on the arrangements in place, the decision-maker may have to:

- meet no further requirements;
- take account of information in the EIA report;
- provide written reasons for the decision; or
- act in accordance with recommendations of an EIA review body, unless these are explicitly overturned.



10

There can be a number of different outcomes from decision-making:

- the proposal can be approved;
- the proposal can be approved with conditions;
- the proposal can be placed on hold pending further investigation;
- the proposal can be returned for revision and resubmission; and
- the proposal can be rejected outright.

Discuss the checks and balances that can be built into the system to ensure accountability and transparency in the process. Briefly outline some of the different ways in which the decision, and the reasons for the decision, can be made available to the public. Consider how these might work with reference to the local system of decision-making.

A number of checks and balances are built into EIA processes to help ensure accountability and transparency. The procedural controls are important for quality assurance of the information contained in an EIA report. Unless these are in place, the decision-maker may not be in a position to make an informed choice. In addition, leading EIA systems have established conventions and rules for decision-making, which provide a further check on accountability (see Box 3).

The requirement for written reasons for the decision is particularly important. For instance, the US Record of Decision must contain:

- a statement explaining the decision;
- an explanation of alternatives considered and which of these are environmentally preferable;

- the social, economic and environmental factors considered by the agency in making its decision;
- an explanation of the mitigation measures adopted and, if practicable, the mitigation methods that were not adopted, with an explanation of why not; and
- a summary of the monitoring and enforcement programme which must be adopted to ensure that any mitigation measures are implemented (*Regulations, Section 1505.2*).

Box 3: Checks and balances on decision making

Some or all of the following rules and conventions for decision-making have been adopted by leading EIA systems:

- no decision will be taken until the EIA report has been received and considered
- the findings of the EIA report and review are a major determinant of approval and condition setting
- public comment on the EIA report is taken into account in decision-making
- approvals can be refused or withheld, conditions imposed, or modifications demanded at the final decision stage
- the decision is made by a body other than the proponent
- reasons for the decision and the conditions attached to it are published, and
- there is a public right of appeal against the decision (where procedures have not been followed or they have been applied unfairly)

Adapted from Wood (1995)

Briefly discuss the importance of condition setting as part of final approval. Emphasise the means for ensuring the conditions set are implemented, and relate these to the level of confidence associated with key findings of EIA.

Normally, all proposals that are subject to EIA will have conditions attached to their implementation as part of the final approval. The conditions that are set may follow the mitigation and impact management measures proposed in the EIA report or vary them, for example by establishing more stringent requirements. In either case, condition setting is based on impact predictions, which have varying levels of reliability. As far as possible, the level of confidence or range of uncertainty that is attached to the information should be specified so decision-makers understand the limitations on condition setting.

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Other topics in the manual consider the means for implementation of the approved conditions (see Topic 7 – *Mitigation and impact assessment* and Topic 11 – *Implementation and follow up*). These include:

- establishing performance standards for meeting the conditions, preferably as part of a legally binding contract with the proponent;
- requiring the proponent to prepare (or revise) an environmental management plan (EMP) to incorporate these standards and translate the approved conditions into a schedule of actions;
- incorporating environmental management systems (EMS) to ISO 14000 standards into the EMP; and
- enforcing compliance with the conditions of approval and performance standards, with penalties for unwarranted breaches.

Finally, emphasise that to achieve good environmental outcomes the conditions that are set as part of approvals must be implemented and, if necessary, altered to take account of unanticipated impacts or ineffective mitigation. These aspects are discussed in the next Topic – *Implementation and follow up*.

Include a training activity to reinforce the topic (if desired). Conclude by summarizing the presentation, emphasising the key aspects of the topic that apply locally.

Reference list

The following references have been quoted directly, adapted or used as a primary source for major parts of this topic.

Glasson J (1999) Environmental Impact Assessment – Impact on Decisions in Petts J (ed) *Handbook of Environmental Impact Assessment*. Volume 1 (pp121-144). Blackwell Science Ltd, Oxford, UK.

OECD/DAC (1994) *Towards Coherence in Environmental Assessment: Results of the Project on Coherence of Environmental Assessment for International Bilateral Aid*. 3 Volumes. Canadian International Development Agency, Ottawa.

Sadler B (1997) EIA Process Strengthening – perspectives and priorities. In *Report of the EIA Process Strengthening Workshop* (pp. 1-29). Environment Protection Agency, Canberra.

Wood C M (1995) *Environmental Impact Assessment: A Comparative Review*, Longman Higher Education, Harlow, UK.

Further reading

Sadler B (1996) *Environmental Assessment in a Changing World*. Final Report of the International Study of the Effectiveness of Environmental Assessment. Canadian Environmental Assessment Agency and International Association for Impact Assessment, Ottawa.

Scott Wilson Ltd (1996) *EIA: Issues, Trends and Practice*. The Environment and Economics Unit UNEP, Nairobi.

Training activities

Training activities may be more instructive if they are framed around a local proposal. Consider inviting prospective course participants to make a presentation if they have expertise in this area of EIA.

Discussion themes

- 10-1 Should the final approval of a proposal be a political decision? Discuss the arguments for and against this position, and relate them to the EIA system that is applicable locally.
- 10-2 How can interim decisions facilitate informed approval and condition setting?
- 10-3 What importance should be attached to the findings of an EIA report compared to other inputs, in general, and economic considerations, in particular? How could the process of making trade-offs be improved?
- 10-4 What types of information are necessary for decision-makers to understand the environmental consequences of a proposal? How should EIA practitioners best present this information?
- 10-5 What means will be appropriate to ensure the conditions attached to approval are implemented? How should the overseeing agency address a serious breach of conditions?

Speaker themes

- 10-1 Invite a decision-maker who has experience in approving proposals that have been subject to EIA to discuss the decision-making process. How have decisions been made? What types of information have proven useful/not useful? What problems have been encountered in making trade-offs and how were these resolved?
-

Group Activity 10–1: Decision-making

Title: Making decisions

Aim: To develop an understanding of how the decision-making process operates and the issues that are important.

Group size: Pairs for the first part, then whole group.

Duration: Half-day

Resources required:

- An EIA report, with an executive summary.
- A review of the EIA report and recommendations to the decision-maker.
- Supporting materials including a summary of public comments on the EIA report, identifying areas of agreement and disagreement.
- Case notes on the background to the proposal, other types of studies undertaken, controversial issues and external pressures, etc.

Description of activity:

Taking the resource materials:

- Each pair is to review the information and develop a systematic approach to make a decision on the proposal; and on this basis, approve or reject the proposal, set any necessary conditions and provide a one-page written reasons for the decision.
- Ask the whole group to represent a party (or parties) dissatisfied with the decision that has been made. Each pair is to justify their reasons for the decision under questioning from this audience (allow approximately ten minutes per pair).



1

Flowchart



2

EIA is a process to:

- gather information necessary for decision-making
 - inform approval and condition setting
 - help determine if a proposal is acceptable
-



3

Decision-making is a process of:

- political choice between alternative directions
 - weighing the benefits and costs
 - negotiation, bargaining and trade-offs
 - balancing economic, social and environmental factors
-



4

Decision-makers need to understand:

- EIA aims and concepts
 - EIA legislation, procedure and guidelines
 - the effectiveness of EIA practice
 - the limitations on EIA information
 - how EIA process and practice measure up internationally
 - issues of public consultation and third party challenges
-



5

Decision-makers should be encouraged to:

- implement sustainability mandates and commitments
 - broaden their perspectives on the environment
 - critically review information and advice
 - better communicate information and decisions
 - apply the precautionary principle
 - improve the process of making trade-offs
 - adopt more open and participatory approaches
 - use strategic tools including SEA and environmental accounting
-



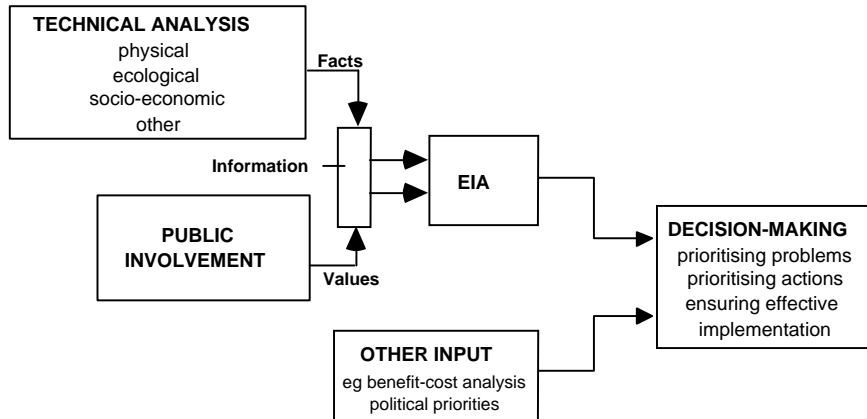
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Decision-making is a continuing process, comprising:

- interim decisions made at each stage of EIA
- final approval of a proposal
- enforcement of conditions attached to approvals



7



8

Information for decision-makers should include:

- background of the proposal
- policy context
- alternatives considered
- public inputs and balance of opinion
- significant impacts
- proposed mitigation and monitoring
- extent that the proposal conforms to sustainability principles



9

EIA responsibilities imposed on decision makers:

- meet no further requirements
- take account of information in the EIA report
- provide reasons for the decision
- act in accordance with recommendations of a review body





10

Outcomes from EIA decision-making:

- proposal approved
- proposal approved with conditions
- proposal on hold pending further study
- proposal returned for revision and resubmission
- proposal rejected



11

Checks and balances on decision-making:

- no decision taken until EIA report considered
 - findings help determine approval and condition setting
 - public comment taken into account
 - approvals can be refused or withheld
 - conditions can be imposed/ modifications demanded
 - written reasons for the decision
 - right of appeal against the decision
-



12

Means of implementing the decision include:

- establishing performance conditions
 - incorporating them into legal contracts
 - requiring preparation of environmental management plans
 - incorporating ISO 14001 standards
 - overseeing and monitoring compliance with conditions
-

Information for decision-makers

Information considered important for decision-makers

Background

- background to the project and the most important environmental issues involved

Policy context

- the basic development issue or problem being addressed (eg pollution, flooding, drought, erosion, energy shortage, poor health, depressed economy etc)
- the relationship to environmental protection goals, policies and plans

Alternatives

- alternatives to the proposal (including the best practicable environmental option [BPEO] or equivalent designation)

Public involvement

- key public views
- concerns of affected communities
- areas of agreement and disagreement

Impact analysis

- costs and benefits
- distribution of gains and losses

Mitigation and monitoring

- adequacy of proposed measures

Conclusion and recommendations

- key findings, including the main economic benefits, significant environmental effects and proposed mitigation measures (use non-technical terms)
- the extent to which the proposal conforms to the principles of sustainable development
- the design and operational changes that are considered critical in improving the environmental acceptability of the project

Adapted from OECD/DAC (1994)