

# GENERIC ESD AND ENVIRONMENTAL PERFORMANCE INDICATORS FOR COMMONWEALTH ORGANISATIONS

- 1 Introduction ([link](#))**
- 2 ESD Indicators ([link](#))**
- 3 Indicators for environmental effects ([link](#))**
- 4. Indicators of measures to reduce adverse effects ([link](#))**
- 5 Mechanisms for reviewing the effectiveness of these measures ([link](#))**

## **1 INTRODUCTION**

This document provides suggested performance indicators for ESD and environmental reporting under Section 516A of the *Environment Protection and Biodiversity Conservation Act 1999*( [link](#).)

The ESD Reporting Guidelines ([link](#)) provide details of reporting requirements under Section 516A.

## **2 ESD INDICATORS**

- 2.1 What is ESD? ([link](#))**
- 2.2 Devising ESD indicators that are relevant to Commonwealth agencies ([link](#))**
- 2.3. Key indicators for whether activities accord with principles of ESD ([link](#))**
- 2.4 Indicator tables for contributors to and coordinators of Annual Reports ([link](#))**
  - **Table 1: indicators for each area responsible for a type of activity ([link](#))**
  - **Table 2: indicators for coordinating areas responsible for writing organisation's ESD report ([link](#))**
  - **Table 3: ESD indicators for smaller organisations ([link](#))**

Section 516A(6)(a) and (b) relate to your organisation's accordance with and contribution to ESD.

## 2.1 What is ESD?

The principles of ESD as identified in the EPBC Act are explained in *ESD Reporting Guidelines* ([link](#)). For convenience the five principles of ESD under the EPBC Act are referred to below as:

- the integration principle;
- the precautionary principle;
- the intergenerational principle;
- the biodiversity principle;
- the valuation principle.

ESD reporting requires these principles to be applied to an organisation's activities.

Some ideas on how to work out the relevance of ESD to your organisation's activities are provided in *Criteria for Determining ESD Relevance* ([link](#)), along with some suggestions on how these may apply to the business of different Commonwealth organisations.

## 2.2 Devising ESD indicators that are relevant to Commonwealth agencies

Ultimately good ESD performance equates to good environmental, social and economic outcomes at the national and the global level. National ESD outcomes are measured by a set of National Headline Sustainability Indicators which show, at a very broad national level, whether Australia is sustaining its well-being in relation to various environmental, social and economic aspects of our lives.

ESD performance by Commonwealth Government organisations will contribute to these national ESD outcomes. However, the contribution by any one organisation is relatively small and virtually impossible to unravel from the contribution of other organisations, other Australian governments, industry, the community at large and other countries.

While ESD must ultimately translate into a practical outcome, it can only achieve this outcome through a process of:

- (a) formally considering all social, economic and environmental consequences;
- (b) integrating values;
- (c) reconciling competing concerns; and
- (d) making decisions that minimise trade-offs.

It is therefore indicators of these processes, rather than indicators of outcomes, that we are suggesting as indicators of ESD performance by Commonwealth agencies.

### **2.3. Key indicators for whether activities accord with principles of ESD**

The key questions which provide an indication of whether activities accord with the principles of ESD are much the same as for all organisations:

- Is ESD, or its principles, mentioned in broad, high level corporate and strategic plans?
- Is ESD, or its principles, mentioned in legislation your agency administers?
- Is ESD, or its principles, mentioned in lower level activity objectives?
- Are there formal mechanisms for ensuring consideration of ESD takes place at this level – or does it occur as part of the organisational culture?
- Is there documentation to show that ESD principles have been considered in decision-making? and
- Has this consideration, in some cases, actually modified decisions?

These key indicators are examined in more detail in the following paragraphs.

#### **2.3.1 Broad high level corporate commitment**

- Do the objectives of your organisation's overarching (eg Corporate or Strategic) Plan explicitly mention ESD?
- Do the objectives of your organisation's overarching (eg Corporate or Strategic) Plan explicitly mention any of the ESD principles:
  - the integration principle;
  - the precautionary principle
  - the intergenerational principle
  - the biodiversity principle
  - the valuation principle
- Do the objectives of your organisation's overarching (Corporate or Strategic) Plan include social, economic and environmental objectives? (They would need to include all three for the answer to be yes.)
- Is there any other high level process in place for resolving, with minimal trade-offs, any conflicts between:
  - the ESD objectives; or
  - the core business of the organisation and the principles of ESD; or
  - the social, economic and environmental objectives of the organisation?

#### **2.3.2. Reference in legislation**

- Does your organisation administer legislation which explicitly mentions ESD, or any of its principles?

#### **2.3.3. Reference in activity objectives**

- Do the formal objectives (if any) of an activity (eg administration of permits, funding, development of programs or policy etc) articulate the contribution of the activity to ESD or its principles?

#### **2.3.4. Existence of mechanisms/ culture for consideration in practice**

- For each type of activity, are there formal guidelines or requirements in place to facilitate consideration of ESD, or any of its principles, or consideration of clearly identified social, economic and environmental objectives?
- Does this guidance material inform staff on how to go about assessing the relationship between the activity and the principles?
- Does this guidance include mechanisms for reconciling and minimising trade-offs in ESD related conflicts?
- Does the activity routinely include an assessment of effects in relation to:
  - ESD; or
  - any of the principles of ESD; or
  - the activity's potential social, environmental and economic effects (eg growth in production, maintenance of viable communities and maintenance of natural resources and ecosystems)?
- Does this guidance include formal or informal mechanisms for ensuring that any ESD related conflict is addressed, for example:
  - through cross-portfolio, whole of government or stakeholder discussion fora, input and/or clearance processes? and/or
  - formal, systematic processes for evaluating environmental, social and economic impacts?
- In the absence of formal guidance referring to such mechanisms, do such mechanisms nevertheless exist?
- Are such mechanisms routinely used for resolving potential conflicts (with or without formal guidance referring to such mechanisms)?
- What level of commitment to ESD exists across the organisation? For example:
  - what proportion of staff resources is devoted to environmental and/or ESD management and/or reporting activities?
  - what proportion of staff can demonstrate an understanding of ESD and its principles?
    - You might need to undertake a survey if you wanted to report against either of the two above indicators.

### **2.3.5. Evidence of ESD consideration**

The most convincing way for an organisation to demonstrate that it is according with ESD principles is to document the occasions on which the principles have been considered.

Some questions/indicators for this are:

- In how many/what proportion of decisions during the year is there documentary evidence that ESD, or its principles, were considered?
- In how many/what proportion of decisions during the year was an assessment of the potential social, environmental and economic effects of an activity conducted?
- In how many/what proportion of decisions during the year was a consultative mechanism invoked to resolve an ESD related conflict?
- In how many/what proportion of decisions during the year was any other mechanism used to resolve such a conflict?

### **2.3.6. Indicators that processes are contributing to outcomes**

An organisation may wish to demonstrate that it is not only engaging in processes which accord with the principles of ESD but that these processes are actively contributing to ESD outcomes by modifying decisions.

Some questions/indicators for this are:

- In how many/what proportion of decisions during the year is there documentary evidence that decisions have been modified on the basis of this consideration?
- In how many/what proportion of decisions during the year is there documentary evidence that decisions have been modified on the basis of an assessment of the potential social, environmental and economic effects of an activity?
- In how many/what proportion of decisions during the year is there documentary evidence that decisions have been modified on the basis of reference to a consultative mechanism ?
- In how many/what proportion of decisions during the year is there documentary evidence that decisions have been modified on the basis of reference to some other mechanism for resolving conflicts?

#### Hypothetical Example: modifying a decision following consideration of ESD principles

An environmental impact assessment of a proposed development shows that the development may involve an impact on a threatened species. However, the species in question is not currently listed as such under the EPBC Act – although it is currently under consideration for listing. If decision-maker decides to treat a species under consideration for listing as a threatened species, pending the conclusions of the scientific committee regarding whether it should be listed, and stops or alters the development on that basis, the organisation could identify this decision as an indicator that decisions are being modified on the basis of the precautionary principle.

### Hypothetical Example: modifying a policy following integrated assessment of the social, economic and environmental dimensions

A proposed free trade agreement would allow foreign companies access to a fishery which is already under pressure. There appears to be a conflict between economic and environmental objectives – one in which the environmental outcomes are at risk of being traded off for the economic outcomes. However, the Commonwealth organisation developing the agreement undertakes a rigorous assessment of the social, economic and environmental costs and benefits of the activity. In the light of the findings of this assessment, the organisation develops legislation to limit the number of companies accessing the fishery.

#### **2.4 Indicator tables for contributors to and coordinators of Annual Reports**

Both the ESD relevance of an activity and your organisation's ESD performance in relation to that activity may vary considerably across the range of your organisation's activities. For example, you might have developed guidelines for ensuring consideration of ESD principles in your permit administration but have no such mechanism in place for ensuring similar consideration in relation to your grant administration. For most larger organisations who are engaged in more than one broad type of activity, it is probably best (at least initially) to prepare separate reports against the suggested indicators for each broad type of activity.

Table 1 suggests a number of indicators which might be distributed across all areas of a large organisation for completion and return to the area coordinating the ESD report.

Table 2 suggests a further set of indicators which summarises the data provided in Table 1 for inclusion in the organisation's Annual Report. It also poses a number of cross-organisation questions which could be used as indicators.

Table 3 combines tables 1 and 2 and is designed for smaller organisations.

While some of these indicators will be expressed as numbers or proportions, others are expressed as "yes" or "no" answers. The usefulness of these answers as indicators over time will be whether there is an overall increase in the number of "yes" answers, and whether there are any reversals to "yes" answers from one year to the next.

**TABLE 1: INDICATORS FOR EACH AREA RESPONSIBLE FOR A TYPE OF ACTIVITY**

<b>Indicator</b>	<b>Expression of indicator</b>
<b><i>Existence of ESD in activity objectives</i></b>	
Do the formal objectives of the activity (if any) articulate how the activity accords with ESD or its contribution to ESD?	Yes/No
Do the formal objectives of the activity (if any) articulate the contribution of the activity to economic, environmental and social goals (they must include all three to answer yes to this question)?	Yes/No
Do the formal objectives of the activity (if any) articulate any of the ESD principles: <ul style="list-style-type: none"> <li>• the integration principle?</li> <li>• the precautionary principle?</li> <li>• the intergenerational principle?</li> <li>• the biodiversity principle?</li> <li>• the valuation principle?</li> </ul>	Yes/No Yes/No Yes/No Yes/No Yes/No
<b><i>Existence of ESD in activity guidelines</i></b>	
Are there formal guidelines in place to facilitate staff consideration of ESD when undertaking the activity?	Yes/No
Are there formal guidelines in place to facilitate staff consideration of any of the ESD principles when undertaking the activity?	Yes/No
Are there formal guidelines in place to facilitate staff consideration of identified social, economic and environmental objectives when undertaking the activity?	Yes/No
<b><i>Existence of mechanisms for resolving conflict between objectives</i></b>	
Are there mechanisms for resolving ESD related conflicts such as: <ul style="list-style-type: none"> <li>• cross-portfolio, whole of government or stakeholder consultation, input and/or clearance?</li> <li>• research or formal systematic assessment and evaluation processes for social, economic and environmental effects?</li> </ul>	Yes/No  Yes/No

<b><i>Documented instances of ESD consideration</i></b>	
Documented instances where all or any of the ESD principles were considered	Number or percentage of instances of consideration of any of these principles for activity.
Documented instances where an ESD related conflict was referred to cross-portfolio, whole of government or stakeholder consultation, input and/or clearance processes	Number or percentage of instances of referral
Documented instances where an ESD related conflict was referred to formal processes for evaluating environmental, social and economic impacts	Number or percentage of instances of referral
Documented instances where any other mechanism has been used to minimise trade-offs in the resolution of an ESD related conflict	Number or percentage of instances of use
<b><i>Documented instances of decision modification</i></b>	
Documented instances where a decision was modified on the basis of consideration of ESD or any of its principles	Number or percentage of instances of modification on the basis of any of these principles
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to cross-portfolio, whole of government or stakeholder consultation, input and/or clearance processes	Number or percentage of instances of modification
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to formal processes for evaluating environmental, social and economic impacts	Number or percentage of instances of modification
Documented instances where a decision was modified on the basis of use of any other mechanism for minimising trad-offs in the resolution of an ESD related conflict	Number or percentage of instances of modification

**TABLE 2: INDICATORS FOR COORDINATING AREAS RESPONSIBLE FOR WRITING ORGANISATION'S ESD REPORT**

<b>Indicator</b>	<b>Expression of indicator</b>
<b><i>Existence of corporate commitment to ESD objectives or principles</i></b>	
Do the objectives of your organisation's overarching (eg Corporate or Strategic) Plan explicitly mention ESD?	Yes/No
Do the objectives of your organisation's overarching Plan include social, economic and environmental objectives (they must include all three to answer yes to this question)?	Yes/No

<p>Do the objectives of your organisation's overarching Plan explicitly mention any of the ESD principles:</p> <ul style="list-style-type: none"> <li>• the integration principle?</li> <li>• the precautionary principle?</li> <li>• the intergenerational principle?</li> <li>• the biodiversity principle?</li> <li>• the valuation principle?</li> </ul>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p>
<b><i>Existence of ESD principles or objectives in legislation</i></b>	
Does your organisation administer legislation which explicitly mentions ESD?	Yes/No
Does your organisation administer legislation which explicitly mentions any of the ESD principles?	Yes/No
<b><i>Existence of ESD in activity objectives across organisation</i></b>	
Activities reported as having formal objectives that articulate accordance with or contribution of the activity to ESD	Number of activities reporting these objectives
Activities reported as having formal objectives which articulate accordance with or contribution to economic, environmental and social goals (they must include all three to answer yes to this question)	Number of activities reporting these objectives
Activities that are reported as having objectives which articulate any of the ESD principles	Number of activities reporting objectives mentioning any of these principles
<b><i>Existence of ESD in activity guidelines</i></b>	
Activities which report having formal guidelines in place to facilitate consideration of ESD	Number of activities reporting guidelines for considering ESD
Activities which report having formal guidelines in place to facilitate consideration of any of the ESD principles	Number of activities reporting guidelines for considering any of these principles
Activities which report having formal guidelines in place to facilitate consideration of identified social, economic and environmental objectives	Number of activities reporting guidelines for considering social, economic and environmental objectives.

<b><i>Existence of mechanisms for resolving conflict between objectives</i></b>	
<p>Activities which report having mechanisms for ensuring that ESD related conflicts are reconciled:</p> <ul style="list-style-type: none"> <li>• cross-portfolio, whole of government or stakeholder consultation, input and/or clearance</li> <li>• research or formal assessment and evaluation processes</li> <li>• any other mechanisms for minimising trade-offs in the resolution of ESD related conflicts</li> </ul>	<p>Number of activities reporting existence of mechanism</p> <p>Number of activities reporting existence of mechanism</p> <p>Number of activities reporting existence of mechanism</p>
<b><i>Documented instances of ESD consideration</i></b>	
Documented instances reported where all or any of the ESD principles were considered	Total instances of consideration of any of these principles.
Documented instances reported where an ESD related conflict was referred to cross-portfolio, whole of government or stakeholder consultation, input and/or clearance processes	Total instances of referral.
Documented instances where an ESD related conflict was referred to formal processes for evaluating environmental, social and economic impacts	Total instances of referral.
Documented instances where any other mechanism has been used to minimise trade-offs in the resolution of an ESD related conflict	Number or percentage of instances of use
<b><i>Documented instances of decision modification</i></b>	
Documented instances where a decision was modified on the basis of consideration of ESD or any of its principles	Total instances of modification.
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to cross-portfolio, whole of government or stakeholder consultation, input and/or clearance processes	Total instances of modification
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to formal processes for evaluating environmental, social and economic impacts	Total instances of modification
Documented instances where a decision was modified through any other mechanism for minimising trade-offs in the resolution of an ESD related conflict.	Number or percentage of instances of modification

<b><i>Resources and staff awareness</i></b>	
Across the organisation, what proportion of staff resources is devoted to environmental and/or ESD management and/or reporting activities?	Estimate of proportion of ASL funding (via survey)
Across the organisation, what proportion of staff can demonstrate an understanding and awareness of ESD and its principles?	Proportion of staff demonstrating understanding and awareness (via survey)

**TABLE 3: ESD INDICATORS FOR SMALLER ORGANISATIONS**

<b>Indicator</b>	<b>Expression of indicator</b>
<b><i>Existence of corporate commitment to ESD objectives or principles</i></b>	
Do the objectives of your organisation's overarching Plan explicitly mention ESD?	Yes/No
Do the objectives of your organisation's overarching Plan include social, economic and environmental objectives (they must include all three to answer yes to this question)?	Yes/No
Do the objectives of your organisation's overarching Plan explicitly mention any of the ESD principles: <ul style="list-style-type: none"> <li>• the integration principle?</li> <li>• the precautionary principle?</li> <li>• the intergenerational principle?</li> <li>• the biodiversity principle?</li> <li>• the valuation principle?</li> </ul>	Yes/No Yes/No Yes/No Yes/No Yes/No
<b><i>Existence of ESD objectives or principles in legislation</i></b>	
Does your organisation administer legislation which explicitly mention ESD?	Yes/No
Does your organisation administer legislation which explicitly mentions any of the ESD principles	Yes/No
<b><i>Existence of ESD in activity guidelines</i></b>	
Are there formal guidelines in place to facilitate staff consideration of ESD when undertaking the activities of the organisation?	Yes/No
Are there formal guidelines in place to facilitate staff consideration of any of the ESD principles when undertaking the activities of the organisation	Yes/No
Are there formal guidelines in place to facilitate staff consideration of identified social, economic and environmental objectives when undertaking the activities of the organisation?	Yes/No

<b><i>Existence of mechanisms for resolving conflict between objectives</i></b>	
Are there mechanisms for ensuring that any ESD related conflicts are reconciled, such as: <ul style="list-style-type: none"> <li>• stakeholder consultation, input and/or clearance?</li> <li>• research or formal assessment and evaluation processes for social, economic and environmental effects?</li> </ul>	Yes/No  Yes/No
Documented instances where all or any of the ESD principles considered	Number or percentage of instances of consideration of any of these principles for each activity
Documented instances where an ESD related conflict was referred to stakeholder consultation, input and/or clearance processes	Number or percentage of instances of referral
Documented instances where an ESD related conflict was referred to formal processes for evaluating environmental, social and economic impacts	Number or percentage of instances of referral
Documented instances where any other mechanism has been used to minimise trade-offs in the resolution of an ESD related conflict	Number or percentage of instances of use
<b><i>Documented instances of decision modification</i></b>	
Documented instances where a decision was modified on the basis of consideration of ESD or any of its principles	Number or percentage of instances of modification on the basis of any of these principles
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to stakeholder consultation, input and/or clearance processes	Number or percentage of instances of modification
Documented instances where a decision was modified on the basis of referral of an ESD related conflict to formal processes for evaluating environmental, social and economic impacts	Number or percentage of instances of modification
Documented instances where a decision was modified through any other mechanism for minimising conflicts in the resolution of ESD related conflicts	Number or percentage of instances of modification
<b><i>Resources and staff awareness</i></b>	
Across the organisation, what proportion of staff resources is devoted to environmental and/or ESD management and/or reporting activities?	Proportion of ASL funding (via survey)
Across the organisation, what proportion of staff can demonstrate an understanding and awareness of ESD and its principles?	Proportion of staff demonstrating understanding and awareness (via survey)

### **3 INDICATORS FOR ENVIRONMENTAL EFFECTS**

- 3.1 What are environmental effects? ([link](#))**
- 3.2 Environmental indicators for operations ([link](#))**
  - **Table 4: suggested environmental indicators for operations ([link](#))**
- 3.3 Environmental indicators for other activities ([link](#))**
  - **Table 5: suggested environmental indicators for activities other than operations ([link](#))**
- 3.4 Reporting positive effects vis-a vis reporting actions to reduce negative effects ([link](#))**
- 3.5 Indirect effects ([link](#))**

Section 516A (6)(c) relates to the effects of your organisation's activities on the environment.

#### **3.1 What are environmental effects?**

ESD (see above) is explained in terms of principles which relate to processes, and can therefore be measured by the existence and pervasiveness of those processes.

However, environmental effects are outcomes, rather than processes. Wherever possible, you should report your organisation's environmental effects in terms of actual physical environmental outcomes.

It is important to make a clear distinction between the effects of the organisation's operational activities, and the activities which are the actual business of the organisation. It should be relatively straightforward to report the former but may be more difficult to report the latter.

Operations are the things the organisation has to do in order to carry out its business, such as the procurement and use of water, paper, electricity and petrol, and the generation of waste.

Other activities are all the work that is the actual business of the organisation, for example, policy work, program delivery and the administration of legislation.

#### **3.2 Environmental indicators for operations**

The following generic indicators are suggested.

**TABLE 4: SUGGESTED ENVIRONMENTAL INDICATORS FOR OPERATIONS**

(You should note employee numbers as at 30 June of the reporting year to put your usage into perspective.)

<b>INDICATOR</b>	<b>QUANTITY MEASURE</b>
<b><i>Annual energy use &amp; greenhouse gas emissions during reporting year</i></b>	
Energy consumed	Total and/or per employee
Change in energy consumption since last year/first year of reporting	Change in total and/or per employee
Greenhouse gas emissions	Total and/or per employee
Change in emissions since last year/first year of reporting	Change in total and per employee
<b><i>Procurement during reporting year</i></b>	
Dollar value of green purchases as a percent of total procurement budget during the year	Total and/or per employee
Change in dollar value since last year/first year of reporting	Change in total and/or per employee (adjusted for inflation)
<b><i>Paper use during the reporting year</i></b>	
Paper consumed	Total and/or per employee
Change in paper consumption since last year/first year of reporting	Change in total and/or per employee
Paper reused or recycled	Proportion
Change since last year/first year of reporting in the reuse or recycling of paper	Change in proportion
<b><i>Waste generated reporting year</i></b>	
Solid waste generated per employee	Total and/or per employee
Solid waste diverted from landfill	Proportion
<b><i>Vehicles use in reporting year</i></b>	
Vehicles in use (owned, leased or hired) by the organisation	Average number of vehicles used per day/average number of days of vehicle use per employee/average kilometres per day travelled (total and per employee)
Alternative fuel vehicles to the number owned or leased in the reporting year	Proportion.
<b><i>Water use in reporting year</i></b>	
Water used	Total and/or per employee
Grey water recycled	Proportion

### 3.3 Environmental indicators for other activities

Indicators for environmental effects of the organisation's other activities are likely to be organisation specific. Wherever possible, indicators should measure actual environmental effects rather than processes, for example, measures of actual or estimated physical or spatial phenomena such as area of land cleared, conserved or contaminated, volume of waste generated, or volume of greenhouse gases or other pollutants emitted as a result of the organisation's policy, program or statutory decisions.

Some examples of activities which may have environmental of effects are:

- providing advice to a Minister recommending a course of action that is expected to have an effect, either positive or negative, on the environment;
- issuing permits or licenses which authorise clients to take actions which have environmental impacts;
- administering grants or other government funding which enable clients to take actions which have environmental impacts;
- regulatory or other requirements imposed on clients which may have environmental impacts (for example, requiring a business to reduce its pollutant emissions or requiring recipients of funding to undertake travel which results in emissions of pollutants).

Where estimating actual environmental effects is difficult or impossible, rather than using indicators you might wish to just report on the number and range of activities undertaken by your organisation that you expect to have environmental effects, including a general description of the type of effect (eg greenhouse gas emissions, land clearance etc) of each type of activity.

If you have used the process suggested in *Criteria for Determining ESD Relevance* ([link](#)) to determine the ESD relevance of your activities, you could refer back to that section in reporting the environmental effects of your activities.

Table 5 suggests some indicators in very general terms. The actual indicators used by organisations would generally need to be more specific to their particular effects.

**TABLE 5: SUGGESTED ENVIRONMENTAL INDICATORS FOR ACTIVITIES OTHER THAN OPERATIONS**

<b>ACTIVITY/INDICATOR</b>	<b>EXPRESSION OF INDICATOR</b>
Matters of national environmental significance	Number/proportion of decisions/action affecting matters of national environmental significance
Land cleared, conserved, contaminated or revegetated (not necessarily by the organisation) as a result of decisions or other actions of organisation	Estimated area of land impacted by the activity, and nature and degree of impact.

Greenhouse gases or other pollutants emitted (not necessarily by the organisation) as a result of decisions or other actions of organisation	Estimated quantity of emissions
Water quality or quantity affected (not necessarily by the organisation) as a result of decisions or other actions of organisation	Could be measured as an estimation of volume of waste water released, total amount of pollutants released to waste water or the volume of water diverted from the environment and/or other uses
Species, ecological communities affected (not necessarily by the organisation) as a result of decisions or other actions of organisation	Could be expressed as a number of individuals, species or communities
Human environment affected (not necessarily by the organisation) as a result of decisions or other actions of organisation	Could be expressed as number of people or area of human settlement affected by activity by nature and degree of effect.

### 3.4 Reporting positive effects vis-a vis reporting actions to reduce negative effects

Both positive and negative environmental effects should be reported under environmental effects (Section 516A(6)(c)). However, it is important to distinguish between the positive environmental effects of activities and the measures taken to minimise the adverse environmental effects of activities which are reported under Section 516A(6)(d).

An example of an activity which may be reported as having a positive environmental effect would be an activity to facilitate re-vegetation of cleared land. If, however, the land had been cleared as a result of the organisation's own actions, you would not report this re-vegetation as a positive environmental effect under s516A(6)(c) but rather as a measure to minimise adverse effects under s516A(6)(d).

Another example of a measure to reduce adverse environmental effects, might be putting in place processes to reduce the need for clients to travel in order to meet their statutory obligations, or to reduce distances to be travelled, or to ensure that public transport is available to clients. Indicators for this measure might be:

- just that the process has been put in place; or
- an estimation of the reduction in vehicle kilometres travelled; or
- an estimation of the reduced greenhouse gas emissions as a result of the measure.

Where, for instance, an organisation authorises the clearance of a specific area of land or an activity that is expected to impact on a particular species of animal or plant, or an ecological or human community, it may be possible to report this in terms of actual area or number of individuals or species known to be affected. However, generally speaking, a Commonwealth organisation's activities will be more likely to affect the environment via its impacts on the behaviour of other organisations. Since these effects may be quite hard to measure in exact terms, indicators for these sorts of effects are most often likely to be estimates.

### **3.5 Indirect effects**

In some cases, an organisation's activities may have no direct environmental impacts but may be expected to contribute to broader positive environmental outcomes, for example, through a general increase in a body of knowledge (such as funding for environmental research). In such cases, using environmental indicators may not be practical as it would be very difficult to estimate an actual environmental effect. Your report would simply note that the activity is expected to contribute to improved environmental outcomes in relation to a particular environmental issue.

## **4. INDICATORS OF MEASURES TO REDUCE ADVERSE EFFECTS**

Section 516A (6)(d) relates to the measures you are taking to minimise the adverse effects of your organisation's activities on the environment.

As mentioned above (*Reporting on positive effects vis-a-vis reporting actions to reduce negative effects - link*) two examples of measures to reduce the adverse effect of an action on the environment are:

- action to revegetate land cleared as a result of some other action by your organisation; and
- putting in place a process to reduce the need for clients to travel in order to meet their statutory obligations, or to reduce distances to be travelled, or to ensure that public transport is available to clients.

Table 6 identifies some measures for minimising the adverse environmental effects of your organisation's activities. The existence or otherwise of these measures could serve as indicators of your organisation's performance in relation to Section 516A (6)(d). This list contains examples only and should not be seen as comprehensive – you should add any others that are relevant to your organisation. “*ESD Indicators*” (*link*) above provides some further suggestions on process indicators of environmental consideration that could be used as indicative of measures being taken to minimise adverse environmental effects.

**TABLE 6: SUGGESTED INDICATORS FOR ADOPTION OF MEASURES TO MINIMISE ADVERSE ENVIRONMENTAL EFFECTS**

<b>INDICATOR</b>	<b>EXPRESSION OF INDICATOR</b>
Established procedures for environmental impact assessment of proposed activities (beyond compliance with relevant legislation)	Yes/No
Documents indicating that environmental effects were formally considered (beyond compliance with relevant legislation)	Number/proportion
Documents indicating that decisions were altered in the light of consideration of environmental effects	Number/proportion
The adoption and/or continued certification of environment management systems in the organisation, for example ISO 14001 or the Greenhouse Challenge program.	Yes/No

**5 MECHANISMS FOR REVIEWING THE EFFECTIVENESS OF THESE MEASURES**

Section 516A (6)(e) relates to the mechanisms for monitoring the effectiveness of your measures to reduce the adverse effects of your organisation’s activities on the environment.

Environmental management systems provide a mechanism for the ongoing review of the effectiveness of any measures taken to minimise adverse environmental effects. However, the focus of such systems has traditionally been on the operations, rather than on the core business, of organisations. Reporting over time against the indicators suggested in Table 5, or similar indicators more relevant to your own organisation’s activities, will provide you with the most meaningful review of the effectiveness of your measures for minimising adverse environmental effects.