

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

What is Environmental Procurement?

Environmental Procurement is a process whereby organisations seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle when compared to goods, services and works with the same primary function that would otherwise be procured.

The Department of Finance and the Victorian Government Purchasing Board (VGPB) have developed an Environmental Procurement Framework covering seven principles that provide high level policy direction and guidance to Victorian government organisations to assist in embedding environmental considerations into procurement decisions for goods and services consistent with purchasing principles of the VGPB.

Information in this guide will be based on the above framework, tools and reference material.

Users of this guide should refer to the Guideline on Sustainable Procurement that is a framework guideline covering the recommended strategic approach to sustainable procurement.

Key Principles of Environmental Procurement

These guidelines endeavour to reflect seven key principles:

1. Environmental sustainability considerations
2. Assess Risk and Influence when defining priorities
3. Total Cost of Ownership
4. Environmental Specifications
5. Environmental Evaluation Criteria
6. Indicators and Reporting
7. Continuous Improvement.

Environmental sustainability considerations

Organisations should give consideration to purchasing goods and services that have reduced impacts on the environment compared with competing products and services that achieve the same function and value for money outcomes.

Considerations

Organisations should consider environmental impacts and opportunities during the procurement process with attention given to the early stages of the procurement process, for example:

- When defining a business need
- When completing a market analysis
- When developing specifications for the tender and quotation strategy
- When developing evaluating criteria leading to market engagement.

The above factors should be considered as part of a complete Value for Money approach.

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Risk and Influence in Defining Environmental Procurement priorities

Organisations should define environmental risks, environmental impacts and opportunities based on an assessment of environmental impacts and risks associated with goods and services, and their ability to influence environmental outcomes. Environmental impacts, risks and mitigation opportunities can occur within the upstream supply chain, during the use phase, and in how waste product and packaging will be managed.

The approach to assessment should be based on assessing the level of adverse environmental impact or risks and the organisation's ability to influence environmental outcomes including the capacity of suppliers to respond to the organisation's functional requirements on a value for money basis.

The initial assessment should be used to determine environmental priorities and only be considered at a high level of assessment. In some cases, it may only be possible to obtain indicative data in relation to the life cycle stages of a particular procurement. For example, the manufacturing stage may involve a network of component suppliers for which only limited data is available or of relevance to the particular procurement. However, where a high level assessment indicates the good or service as a potential high priority, then consideration should be given to the conduct of an environmental risk assessment in greater detail. The matrix below demonstrates the level of priority.

Assessing Risk and Influence when defining Environmental Procurement Protocols

Environmental Risk

Based on the outcome of a high-level risk assessment, consideration could be given to undertaking a risk assessment of a particular stage of a life cycle that has greatest relevance to the procuring entity to influence. A more detailed risk assessment will ensure that specifications and evaluation criteria are appropriately aligned to targeting the stage of life cycle impact.

Questions for consideration

- Will the good or service potentially involve the use of a significant amount of energy? Will the good or service potentially involve the use of a significant amount of water over its lifetime?
- Does the good or service potentially involve the use of toxic chemicals?
- Will the good potentially create disposal problems? Such as:
 - Impacts on air e.g. energy use, release of air pollutants
 - Impacts on water e.g. quantity of portable water used, discharge water quality
 - Impacts on land
 - Water disposal requirements (non-recycle components)
 - Raw material use

General questions of this nature should prompt consideration of the following impacts at each life cycle stage at *Figure 1* (overleaf).

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

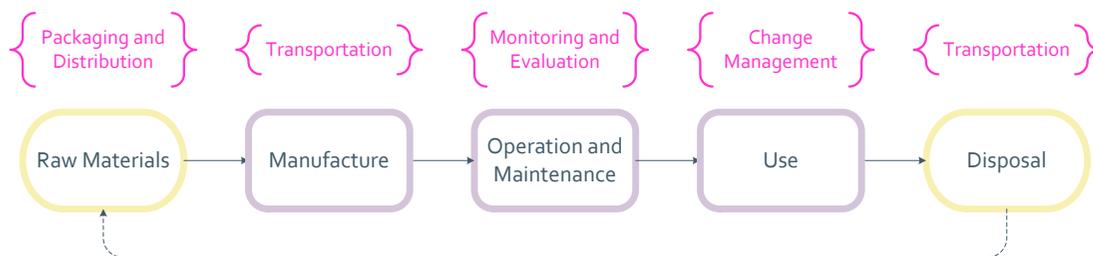


Figure 1. Life-cycle stages

Ability to Influence

The organisation may be able to influence environmental outcomes through its procurement.

Considerations

The following factors should be considered:

- Ability to influence the market (market share or through establishing a market benchmark)
- Resource availability/number of suppliers in the market
- Supply chain/support services to suppliers in the market
- The quantity or total cost of products or services procured
- Presence of mandatory environmental labelling schemes
- Available scientific/technical knowledge of product or service impact.

A weighting or scoring system could be developed based on the environmental risk and ability to influence.

What approaches should we use in defining environmental priorities?

The following table could assist in developing actions for different levels of priority.

High priority	Medium priority	Low priority
<ul style="list-style-type: none"> • Complete high level environmental risk assessment • Develop evaluation criteria and specifications • Consider inclusion of whole-of-life costing requirements 	<ul style="list-style-type: none"> • Complete medium level environmental risk assessment • Develop evaluation criteria and specifications 	<ul style="list-style-type: none"> • No requirements to include environmental specifications or evaluation criteria • Include standard organisation statement on environmental commitment

Table 1. Environmental priorities

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Total Cost of Ownership

As indicated earlier in the Whole of Life Costing stages, value for money considers whole of life costs and suppliers can be requested to provide data for all or some of the engagement stages to support a value for money analysis, such as:

- Acquisition
- Operation
- Maintenance
- Use
- Disposal.

Environmental considerations are only one of a number of components to consider in arriving at a value for money outcome.

One way to determine the environmental value for money is the cost effectiveness expressed as cumulative savings over time to compensate for any increase in initial purchasing costs. Note the example next column from the Maribyrnong City Council at *Table 2*.

Paper towel	Hand dryer	Savings
Consumable \$9,391 /year	Purchase price (one off) \$6,075	4.9 tonnes CO ₂
Labour (refilling, cleaning, disposal, \$17,550/year	Electricity \$234/year	40,000 L water
Cost \$26,914/year	Cost \$234/year	\$25,960/year

Table 2. Paper towel versus hand dryers

The outcome of this calculation will determine a payback period. If that payback period is within the expectant life cycle period of the good, the criterion for achieving value for money can be satisfied.

In undertaking a whole-of-life analysis, it is important to consider the different variables associated with different products, for example:

- The present value of future costs (operating costs, maintenance costs, parts costs, etc.)
- Changes in usage that extend or shorten cyclic costs
- Rate of change and innovation in competing and replacement products
- Regulatory changes.

Organisations can purchase environmentally preferable goods or services that do not have a payback period within the life cycle period of the product, especially when these goods have a definable occupational health and safety benefit. For example, low off-gassing materials used in the manufacture of many furnishings and fittings have indoor environmental quality and OHS benefits that could justify additional expenditure. The value for money criterion is satisfied in this example as a qualitative value and is placed on the environmental quality and OHS benefits list.

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Environmental Specifications

Minimum environmental requirements in Specifications

It is important to appreciate that environmental impacts occur throughout the life cycle of goods and services. The following section provides guidance on the development of specifications and evaluation criteria.

The key life cycle stages are shown in *Figure 1* (p.3).

The alignment of procurement approaches to the stage of greatest impact on the environment is a key consideration in determining environmental specifications and evaluation criteria. In most instances, government procurement for goods and services will be able to exert greatest influence on the operation, maintenance, use and consumption levels and disposal life-cycle stages. *Table 3* provides further detail on how this could be considered.

Life-cycle stage	Procurement action
Raw Materials	<ul style="list-style-type: none">• Include specifications on amount, type, sourcing of raw materials• Consider suppliers management of supply chain issues
Manufacture	<ul style="list-style-type: none">• Consider supplier management practices• Consider level of environmental preferred component
Operation and Maintenance	<ul style="list-style-type: none">• Include specifications on operational performance• Consider contract monitoring and compliance• Implement continuous improvement initiatives and relationship development with suppliers to achieve specified environmental objectives
Use	<ul style="list-style-type: none">• Consider demand management initiatives to reduce consumption and/or demand shift to more environmental sustainable goods and services
Disposal	<ul style="list-style-type: none">• Include specifications on disposal/recycle requirements• Consider supplier management

Table 3. Environmental impacts life-cycle stages

It should be recognised that consideration of life cycle impacts is complex, for example, the positive environment values in some stages may be offset by negative consequences of another stage. A balanced analysis of all relevant life cycle stages is therefore necessary.

Developing performance based specifications

An important consideration in developing specifications is not to limit innovation and the potential market of suppliers. This is often the difference between setting *performance based specifications* that outline the functions to be performed, or the service level required, as opposed to *technical specifications* that dictate how this must be achieved.

For example, if purchasing a good or service that is a significant user of energy, the specifications may require certain energy efficiency levels (for example, X star rating or better), as opposed to specifying the way in which energy efficiency is achieved.

The second approach is to specify as part of the tender documents that potential suppliers provide details of:

- Environmental policies and plans with evidence of their application; and/or
- Examples of practices and products that demonstrate a commitment and capacity to deliver positive environmental outcomes.

The second approach may be useful where suppliers are a small business or in a regional area that may have a demonstrable commitment to environmental sustainability but may not use systems, such as ISO 14000, because of full compliance costs.

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Eco-labelling

Eco-labels are awarded to products or services that meet a set of pre-determined criteria or specifications defined by the accrediting organisation. Eco-labels can support the credibility of the manufacturer's claims. There are a number of eco-labels commonly used in Australia. Some are a result of government initiatives and are mandatory labelling schemes (for example, energy rating of specific electrical appliances), while others are independent schemes, often run by not-for-profit organisations, whereby manufacturers can pay to have their good or service accredited.

Eco-labels can be used in specifications for goods or services. However, eco-labels should be used with a degree of caution as they do impose an element of cost for certification, which needs to be justified by the value obtained. It is recommended that when specifying eco-labels, that the term 'or equivalent' be used and request suppliers to provide information to support the 'or equivalent' claim, with reference to the eco-label specifications. Including the term 'or equivalent' ensures that the potential market is not limited unnecessarily and ensures that small business and regional suppliers that cannot afford to pay costs associated with eco-labelling schemes are not excluded from government business.

Only eco-labels whose management systems are independently audited to conform to the ISO 14024 standard should be relied on uncritically. Similarly, self-declared environmental claims should be assessed against the criteria in ISO 14021 in regard to accuracy, verifiability, and that they are not misleading.

Evaluation criteria

Where appropriate, the selection process should include consideration of environmental impact as defined by the risk assessment process. This consideration could be undertaken at a high level in the shortlisting of suppliers and at a more detailed level for final selection.

The weighting given to the environmental selection criteria is at the discretion of the purchasing area having regard to the risk assessment process. The request for quotation or tender is to clearly state the environmental factors that will be considered in the evaluation.

Where possible, these should be quantifiable, allowing suppliers to be ranked in order of preference. However, non-quantifiable factors should be used where quantifiable data would place unnecessary burden on suppliers, especially small business and regional suppliers. Professional judgement is to be applied where non-quantifiable criteria are used in the selection process.

Evaluation supplier environmental management practice

Including evaluation criteria designed to assess supplier environmental management approaches, can be a major driver in encouraging environmental change in business practices. Requiring a supplier to provide such information sends a clear message to the market that departments wish to work with 'good environmental' citizens.

Suppliers can be requested to identify their current environmental management approaches with appropriate questions (for example, do you have an environmental management policy or action plan etc.?). In addition, suppliers can be asked to identify any breaches of environmental laws or regulations over a certain time period. If a breach (s) has occurred, the supplier should be asked to state the remedial action taken to prevent re-occurrence of the factors that lead to the breach. Supplier evaluation should focus on the remedial action taken.

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Continuous improvement practices

Continuous improvement involves robust contract management and developing relationships with suppliers to drive continuous improvement across all components of the contract. The principle of continuous improvement is an important factor in improving the environmental outcomes of procurement.

Organisations should consider ways of monitoring environmental improvements throughout the life of contracts. This will require that organisations consult with suppliers on a regular basis, monitor environmental performance, analyse demand characteristics and assist in keeping abreast of relevant environmental developments.

Where to start?

Think of sustainable procurement as incremental and start by choosing a small selection of products you regularly purchase that have clear environmental impacts that are readily known and understood e.g. items with packaging that is not biodegradable or that cannot be reused or recycled leading to waste being sent to landfill, wasting natural resources and increasing greenhouse gas emissions.

Criteria

First consider what the main environmental issues are and what criteria could be used to start differentiating between products. It might be easier to assess products on one impact initially and gradually work towards incorporating more environmental aspects.

Table 3 provides some examples of criteria for different stages of the product life cycle to assist with differentiating between products.

Impact of	Examples of criteria to start differentiating between products
Resource extraction	<ul style="list-style-type: none"> Is the product made from renewable, sustainable and natural resources? What is its recycled content? Is resource extraction having an unsustainable impact on communities
Production	<ul style="list-style-type: none"> What is the product's level of energy, water, waste and greenhouse gas emissions? How much packaging is used? Are there any toxic chemicals or ozone depleting substances being emitted?
Transport	<ul style="list-style-type: none"> Where is the product manufactured? Are equivalent products available locally? How far does the product have to be transported? What mode of transport is used?
Use	<ul style="list-style-type: none"> Are there any health and safety concerns for staff, guests and communities (i.e. toxicity and sanitation)? Is the quality and durability of the product appropriate?
Disposal	<ul style="list-style-type: none"> Is the product biodegradable? Are there any environmental toxicity concerns for disposal? Can the product be recycled or reused?

Table 4. Criteria for different stages of the product life-cycle

GUIDE TO ENVIRONMENTAL PROCUREMENT

Providing general advice and guidance on how to embed environmental considerations into procurement decisions for goods and services

Differences in costs

Next assess the functionality, availability and differences in costs to determine whether capital cost of purchasing the environmentally or socially preferred product. When making purchasing the environmentally or socially preferred product. When making purchasing decisions, it is very important to take a holistic view and not just focus on the initial capital cost but also consider the many hidden costs such as:

- Operational costs including water, energy, waste and ongoing cleaning and maintenance
- Repair, replacement, disposal or resale costs
- Administration and regulation costs
- Staff training and health and safety considerations.

Lifecycle costing comparisons clearly show that green products do not necessarily cost more when operational costs are considered. The higher initial investment can be offset by lower ongoing savings in resources such as water, energy and waste.

Transparency and credibility of available data

To find out the main environmental and social issues which are relevant to your products and services and the credibility of information about your product, you may need to:

Research the company and its products

- To get an insight into what important aspects need to be considered and how well the company is addressing these issues
- Does the company's web site or promotional material mention codes of practice, standards, charters or guidelines by which they abide?
- Does the company have an environmental or social responsibility policy, relevant certifications and or Environmental Management Systems?

Look for products with information available on their environmental impacts across their life-cycles

- Lifecycle assessments provide important and useful information, however they are quite sophisticated and detailed so they will not always be available.

Consider rating labels

- Rating labels such as water ratings or 'stars'. They can provide useful information to procurers when comparing products, but are generally single issue focussed.

Environmental and eco-labels

- Environmental and eco-labels can make purchasing decisions easier; however, they need to be critically assessed based on the operation of the business. What to look for in an eco-label:
 - Independent third party certification
 - Comprehensive and based on lifecycle considerations
 - Standards developed with participation from a range of stakeholders, based on sound scientific evidence and available for review
 - Transparency of information provided
 - Ongoing auditing and recertification requirements
 - Compare products of similar function.

References

1. Department of Treasury and Finance, Good Practice Guidelines on Environment Procurement
2. EarthCheck, Queensland: Green Procurement
3. Green Purchasing Guide, University of Queensland

More information

Related documents and templates are available on the HPV website.

For access contact the HPV Process Improvement team at processimprovement@hpv.org.au.