Environmental Purchasing Guide

An Australian Government Initiative

Table of Contents

About this Guide

This Guide is for Australian Government officers involved in procuring goods and services. It is also relevant for employees who are developing and implementing environmental management systems (EMS) to improve their organisation's environmental performance. The Guide introduces the general principles of environmental purchasing, links these to key Australian Government policies and provides advice on getting environmental purchasing started in an organisation. Checklists that provide assistance specific to key types of goods and services purchased by the Australian Government accompany the Guide.

The Guide will also assist suppliers, who wish to sell to the Government, to understand how environmental issues are considered in the procurement process. We also hope that this guidance will assist other organisations that are interested in making their consumption and production more sustainable.

What is Environmental Purchasing?

Environmental purchasing is the inclusion of environmental factors in decisions on the purchase of products and/or services. It is sometimes called "green", "sustainable" or "environmentally preferable" purchasing. The aim of considering environmental factors is to buy products or services that have less impact on the environment and human health than otherwise comparable products or services.

Public and private sector environmental purchasing initiatives are underway all around the world. In the USA, Federal agencies must take environmental issues into account in their purchasing decisions, and are supported in this by the US Environmental Protection Agency's (EPA) Environmentally Preferable Purchasing Program. In Canada, Federal green purchasing is well established as a key part of an overall Sustainable Development Strategy. European environmental purchasing is particularly strong at the municipal level, and the European Union and many national governments also have programmes in this area. The United Nations Environment Program also has a focus on sustainability in public procurement and provides a database of relevant purchasing criteria. The Netherlands, Norway, Japan, the UK, South Africa and many other OECD countries have commenced and are committed to work in this area.

As part of the Plan of Implementation from the 2002 World Summit on Sustainable Development, the Australian Government agreed to "promote public procurement policies that encourage development and diffusion of environmentally sound goods and services". For more details on this agreement see
www.ea.gov.au/industry/sustainable/greening-govt/policy.html#johannesburg

Other Australian governments have policies in place that support or require the consideration of energy and environment issues in purchasing. Sometimes these are explicit policies for the government agencies of that jurisdiction, such as the Victorian State Government's requirement for large agencies to develop, implement and report on their environmental purchasing policies. There are also issue-specific policies in each

jurisdiction covering matters such as waste management or discharges to water for many or all organisations operating there. As the Australian Government has sites in every Australian jurisdiction, purchasing officers should be aware of the policies and programmes relevant to their local area of operations, as well as the general policies of the Australian Government.

The focus of environmental purchasing can vary, depending on the priorities of the organisation involved. Many organisations have emphasised the purchase of products made from recycled materials. Others pay special attention to the selection of energy efficient and/or water efficient products. Still others have a particular concern about reducing chemical hazards. The Australian Government, as part of its Greening of Government Programme, is promoting environmental purchasing to address a wide range of environmental issues, including waste minimisation, energy efficiency, water conservation and reductions in greenhouse gas emissions.

Rationale and Benefits of Environmental Purchasing

The Australian Government is the largest purchaser of goods and services in Australia, spending more than $16 billion a year. It can use its purchasing power to achieve substantial environmental benefits and at the same time reduce its costs. Environmental purchasing can achieve a number of benefits:

- reduce energy and water consumption (which can reduce costs)
- improve resource use efficiency
- reduce waste (which can reduce waste disposal costs)
- reduce environmental health impacts of products and services
- reduce pollution
- provide markets for new environmentally preferable products
- "close the loop" on recycling, improving the viability of recycling
- provide leadership to the community
- encourage industry to adopt cleaner technologies and produce products with lower environmental impacts

Reducing environmental health impacts and pollution can reduce costs to the Australian community of addressing these effects. In addition, by creating markets for new products, environmental purchasing can contribute to the establishment of new local businesses and jobs.

Public procurement can improve markets and assist the diffusion of innovations. One relevant example is the role US Federal Government purchasing played in improving the energy efficiency of computers.

Computers are more energy efficient than ever before because government purchasers are buying *Energy-Star* compliant computers. Some computer manufacturers were reluctant initially to design energy-efficient machines because they did not believe a market existed for them. The [US] Federal Government's $5 billion in annual purchases, however, represents approximately seven percent of the world market. Once the Government expressed its preference for energy-efficient computers, manufacturers began producing them. The computers are now available to any consumer at no additional cost.[1]

Many environmental purchasing decisions can be win-win outcomes for the organisation, providing multiple environmental benefits and cost savings.

In 2002, BP Australia, as part of its Green Office Program in the Guildford Office (Sydney) replaced disposable polystyrene cups with ceramic mugs. It was a simple but very tangible example of how an environmental initiative can deliver real business value. It resulted in:
* 156,000 fewer polystyrene cups to landfill per year;
* direct financial savings of $4,680 annually (one-off purchase of ceramic mugs cost $1,580);
* approximately 10% less waste (cups plus the cardboard and plastic packaging);
* improved staff satisfaction and morale, motivation towards Program; and
* improved customer image.
"It's cheaper to buy everyone a brand new mug year-on-year than disposable cups!!" *Rosemary Warnock, Business Unit Leader, BP Lubricants, 2002*

Examples of benefits from environmental purchasing in the USA include the following.
- In 2001, King County, WA spent $3.8 million on goods and services it considered environmentally preferable and saved $580,000 in the process.
- Cape May County, NJ, switched to an integrated pest management approach which saved $45,000 over five years, while doing its part to reduce the 4.5 billion pounds of chemicals used each year in the United States to control insects, rodents and weeds.

---

[1] Scot Case, "Environmentally Preferable Purchasing – Moving Beyond "Buy Recycled". Government Procurement, October 2002: 11.

- In 2001, Massachusetts spent $86 million on recycled-content and environmentally preferable products. The State's sustainable design initiative is saving $17 million annually in operation, maintenance and utility costs.[2]

Environmental considerations can easily be integrated with other purchasing requirements, such as safety, price and performance when selecting products.

---

[2] Scot Case, "Environmentally Preferable Purchasing – Moving Beyond "Buy Recycled". Government Procurement, October 2002: 9.

The Australian Government's Environmental Purchasing Programme

The Australian Government aims to improve the implementation of Ecologically Sustainable Development (ESD) principles within Government departments and agencies. ESD is defined in Australia's National Strategy for Ecologically Sustainable Development (1992) as "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased." To ensure that agencies incorporate ESD in their programme, policy, legislative and operational activities, s516A of the *Environment Protection and Biodiversity Conservation Act 1999* requires ESD and environmental reporting in agency Annual Reports.

As part of that effort to incorporate ESD into government operations, the Australian Government has established a Greening of Government Programme. One aspect of that Programme focuses on purchasing. Australian Government procurement policy requires that agencies, within the context of obtaining "Value for Money", take account of relevant environmental policy, legislation and Government targets in purchasing activities.

The Greening of Government Programme website includes a variety of tools to help buyers implement environmental purchasing.

Policy requirements

Since the introduction of the *Financial Management and Accountability Act 1997* (FMA Act), Chief Executives have been responsible for financial matters within their agencies, including procurement decisions. Section 44 of the FMA Act requires Chief Executives to make efficient, effective and ethical use of Australian Government resources.

The Department of Finance and Administration has responsibility for providing high-level guidance for Australian Government procurement. Value for Money is the core principle governing Australian Government procurement. This is supported by the four principles of: Efficiency and Effectiveness; Accountability and Transparency; Ethics; and Industry Development. Chief Executives are responsible for ensuring that they achieve best Value for Money in their agency's procurement decisions.

The *Commonwealth Procurement Guidelines and Best Practice Guidance* (CPGs) provides the procurement policy framework for FMA Act agencies. All procurement decision-making, including environmental purchasing, needs to take place within the framework provided by the CPGs. The CPGs state that the core and supporting principles "are also complemented by other Government policies." Specifically:

"Government policies, such as foreign exchange, innovation policies, industrial relations, the IT infrastructure initiative, **environment**, construction and indigenous policies, are a part of the framework within which agencies need to achieve Value

for Money. Agencies and their officials have an obligation to conduct procurement in accordance with relevant Government policy in the way they do business." (Financial Management and Accountability Regulation 9)

Hence, energy and environmental policies are explicitly referred to in the CPGs as issues to be taken into account, where appropriate, when determining the comparative Value for Money of competing goods or services. Section Three of the CPGs provides the following guidance on environmental considerations.

Environment and Energy: Sustainable Procurement

Officers should be aware of Australian Government environmental legislation, policies, and performance targets that are relevant to the procurement of a wide range of goods and services. These considerations cover key sustainability issues such as energy, waste management, packaging, greenhouse gas emissions and environmental health. Section 516(A) of the *Environment Protection and Biodiversity Conservation Act* requires all Australian Government agencies to report on the environmental performance of their activities, including procurement.

Several other Australian Government policies place specific obligations on Government purchasers in relation to the environment. Some of these are listed below.

Document	Issue	Requirement
Measures for Improving Energy Efficiency in Commonwealth Operations	Energy and greenhouse emission reduction	Target of less than 10,000 MJ per person per year by 2002 for tenant's light and power use in Australian Government office buildings.
		All new appliances to have 2-star or better Energy Rating under the Appliance Energy Efficiency Rating Label Scheme.
		Departments and agencies to purchase only office equipment that meets the standards required to display an *Energy Star* label, where it is available and fit for purpose.
National Government Waste Reduction and Purchasing Guidelines	Waste reduction	Agreement to work towards whole-of-Government waste reduction and purchasing policies; individual agencies to adopt waste reduction and purchasing plans; effective monitoring and reporting systems to track implementation.
National Packaging Covenant	Reduce the environmental impacts of packaging	As a signatory, the Australian Government has agreed to facilitate implementation of purchasing policies for recycled goods.
Environment Protection and Biodiversity Conservation Act 1999	Environmental reporting	Australian Government agencies to include information about their performance on Ecologically Sustainable Development (ESD) principles in their Annual Reports.
Commonwealth Procurement Guidelines	Life cycle costing	Officials buying goods and services need to be satisfied that the best possible outcome has been achieved, taking into account all relevant costs and benefits over the whole of the procurement life cycle.
National Greenhouse Strategy		Encourages purchasing which takes into account operating energy costs as well as capital cost for assessment and selection of tendered goods and services.

Document	Issue	Requirement
National Occupational Health and Safety Commission	Occupational Health and Safety (including chemicals and toxics risks)	The National Occupational Health and Safety Commission (NOHSC) advise that suppliers of hazardous substances to the workplace must provide appropriate Materials Safety Data Sheets (MSDS).
Other	Environmental Management Systems (EMS)	Government has encouraged all departments and agencies to: * join the Greenhouse Challenge Programme; and * implement an Environmental Management System and accredit one large site by December 2003.

For more information about the environmental priorities and programmes of the Commonwealth, please see the Government environment portal at: www.environment.gov.au

Model Chief Executive's Instructions

Chief Executives may reinforce Australian Government policy requirements to take account of environmental issues in purchasing activities through their Chief Executive's Instructions (CEIs). Under Section 52 of the *Financial Management and Accountability Act* and the subordinate Regulation 6, Chief Executives of departments are authorised to issue CEIs to their department on a range of issues, including:

- spending public money;

- ensuring or promoting the proper use and management of public money; and

- ensuring or promoting proper accountability for the use and management of public money.

Chief Executives may issue instructions to clarify how environmental issues should be considered in purchasing and how this consideration should be reported. An environmental purchasing CEI can also assist in ensuring that purchasing off-contract and without tender follows the environmental purchasing policy of your organisation. Chief Executives are invited to contact the Department of the Environment and Heritage for assistance in formulating CEIs in relation to environmental purchasing.

If you have a useful CEI for environmental purchasing that you would like to share with other agencies, please advise the Department of the Environment and Heritage.

Principles of the Environmental Purchasing Programme

The value of environmental performance

The CPGs state that "value for money is the core principle governing Commonwealth procurement" and they make clear that "the lowest price is not necessarily an indicator of best value for money".

Good environmental performance can be considered to add value to a product. An environmentally friendly product may, for example, reduce the risk to employees, contractors and the environment associated with product use. It may make more efficient use of energy, water and materials – and efficiency normally leads to lower costs, particularly on a whole-of-life basis. Evidence from studies in Australia and overseas indicates that a high standard of environmental performance by a service provider may be associated with a high standard of management generally, and could, therefore, represent reduced risk and better quality service for Australian Government agencies.

In many cases, an environmentally friendly option will reduce costs, either initially or over the life of the product. Even where an environmentally friendly product or service costs more than a conventional product or service, consideration of Value for Money requires purchasers to give due regard to the benefits obtained from good environmental performance. For example, although a contract to recycle paper and other wastes may cost more than a contract that sends all waste to landfill, there are clearly environmental benefits from recycling, which should be considered.

As many suppliers of environmentally preferable goods and services are small to medium enterprises (SMEs) and Australian companies, environmental purchasing can also make a positive contribution to the SME and industry development objectives of Australian Government procurement policy.

A life cycle approach

Environmental purchasing is based on reducing the environmental impacts of products and services. Such impacts may be associated with any stage in the production, use or disposal of a product. Environmental purchasing therefore needs to consider impacts throughout a product's life cycle. Issues related to different stages of the life cycle might include the following.

Life Cycle Stage	Environmental Issue
extracting resources/harvesting raw materials	pollution and ecological disturbance resulting from mining/harvesting
processing raw materials and manufacturing components	pollution and generation of hazardous wastes
manufacturing the product	choice between virgin material/recycled material/post-consumer recycled material
Using the product (including inputs such as energy, water and chemicals)	energy consumption and greenhouse gas emissions
recycling the product or its components	reduced dependence on virgin resources
disposing of the product	pollution and amenity impacts of landfilling

Environmental life cycle assessments of products have shown that the environmental impacts created when a product is used are often much greater than those resulting from manufacture of the product. This is generally the case for products that use power, water, fuel or other consumables. Similarly, the costs of such consumables over the lifetime of a product may be far greater than the initial cost of the product. It is therefore important for a purchasing evaluation to take the costs of these consumables into account when comparing products. This can help to ensure that appropriate and comprehensive Value for Money decisions are made.

It is Australian Government policy to assess Value for Money on a whole of life basis so that all costs and benefits across the procurement cycle can be adequately considered. The Department of Finance and Administration has further guidance on Whole of Life Costs in relation to Value for Money, and the Australian National Audit Office has produced a Life Cycle Costing Better Practice Guide to help Government departments.

It is important to note that these costing procedures only take account of direct costs to the Australian Government. They do not assign costs to the environmental impacts associated with the life cycle effects of the product: that is, to the environmental costs of resource extraction, manufacture, use, and disposal of products. These external costs are real and are borne by the community as a whole. They are often called "externalities".

The environmental purchasing programme described here is based on a life cycle approach and aims to provide both an understanding of whole of life environmental issues and a system for considering them in procurement. It does not, however, encompass detailed life cycle assessment (LCA) of environmental effects. Detailed LCA is very expensive, and results of assessments involving comparison of products may be highly dependent on the assumptions and the data used in the analysis.

Design for Environment (DfE)

Many manufacturers and suppliers acknowledge that environmental issues need to be addressed from the earliest design stages of production, all the way through to end-of-life. Reducing environmental impacts through better design (such as using less toxic components, or making the product easier to disassemble and reuse) is referred to as "Design for Environment" or "DfE". Many manufacturers and suppliers (or their industry associations) may be able to provide information on their DfE activities. For an Australian example, see *Designing for the Environment* by the Australian Information Industry Association.

The Department of the Environment and Heritage has been involved in providing other guidance on DfE principles and practices. A key report is *Product Innovation: The Green Advantage, An Introduction to Design for Environment for Australian Business*, which is at www.ea.gov.au/industry/finance/publications/producer.html
Its sister publication is the consumer-oriented *Shop Smart Buy Green*, which can be found at www.ea.gov.au/industry/eecp/publications/shop.html

Supply chain management

Consumers and investors are increasingly judging organisations by the activities of their suppliers as well as the organisation's own activities (e.g. manufacturing suppliers that use child labour). As a result, environmental purchasing is a growing trend in industry as well as in government, forming part of the increasingly common practice of supply chain management.

Several companies in Australia, such as Ford, General Motors Holden, Toyota, Unilever, and Rio Tinto are imposing requirements on their suppliers to ensure environmental performance. Some are establishing codes of conduct for their suppliers' operations as well as their own.

These companies are saying to their suppliers, "If you want to do business with us, you will have to meet certain levels of environmental or social performance in your operations." Typical requirements include developing an Environmental Management System or preparing a Public Environmental Report.

Some companies are seeking to improve their performance by working with their suppliers to incorporate recycled materials into packaging, make other modifications to their products, or take back packaging after use. For example, Telstra has arranged with a mobile phone manufacturer to take back packaging after delivery to Telstra's retail operations.

At present, the Australian Government does not impose mandatory environmental requirements on its suppliers. But, while there are not whole-of-Government environmental standards for suppliers, individual agencies are able to determine their

own environmental requirements and may apply those across the range of goods and services they deem relevant.

The Australian Government does, however, have several programmes where it works in partnership with industry to improve the environmental performance of products and services. Examples include the national Water Efficiency Labelling Scheme (WELS), the Eco-Efficiency Programme of the Department of the Environment and Heritage, the Energy Efficiency Best Practice (EEBP) Programme of the Department of Industry, Tourism and Resources, and several Australian Greenhouse Office programmes.

Some states and territories will have their own partnerships with industry to improve environmental performance. Examples include the Extended Producer Responsibility work of the NSW EPA (which covers such things as computers and batteries) and the Sustainability Covenants agreed between industry and the Victorian Government. For more information, go to the website of the relevant environment or sustainability agency in the jurisdiction.

Individual corporations or their industry associations may also have supply chain initiatives in place or under development. These could include voluntary codes of conduct (such as the Product Stewardship Commitment agreed to by the Vinyls Council of Australia covering PVC), environmental reporting commitments, eco-efficiency agreements, or industry-initiated actions to offset the environmental impacts of their activities.

Environmental purchasing for industry development and small business

Industry development is a supporting principle of Australian Government procurement policy. This includes encouraging small to medium enterprises (SMEs) to enter the market and compete successfully for government business. Many Australian SMEs, across different goods and services sectors, consistently achieve high levels of environmental performance in their operations, manufacturing and supply. Because of that high standard of performance, environmental purchasing can make a significant contribution to the import competitiveness of Australian SMEs.

The Australian Chamber of Commerce and Industry, with Australian Business Limited and the Department of the Environment and Heritage (DEH), has produced a guide for SMEs on reporting their environmental performance. Called *Environmental Reporting: Handbook for Small and Medium Size Businesses*, it is available from the DEH website at www.ea.gov.au/industry/finance/publications/smehandbook.html   This handbook provides useful guidance to SMEs on how to effectively communicate their environmental initiatives and performance to stakeholders, including government purchasers.

SMEs can find practical guidance about opportunities to improve their environmental performance in the *Good Practice for Cleaner Production* SME guides produced by the

Victorian EPA, as well as from other environment, industry or sustainability agencies. See www.epa.vic.gov.au/Business_Sustainability/SME/default.asp

Many industry associations have environmental initiatives underway that extend to their small business membership. These can cover such issues as energy efficiency, reducing greenhouse gas emissions, water conservation, pollution prevention, cleaner production and public reporting.

Australian Government procurement officers should also be aware that many suppliers of environmentally preferable goods and services will be SMEs. Some of these may not be able to access the government marketplace because their purchasing officers do not recognise environment as part of Value for Money. For example, the Environment Industry Action Agenda refers to a report that estimates that over 80% of the environment industry is classified as small to medium enterprises.[3] Excluding government agencies, the waste management industry has 71% of trading businesses employing fewer than five persons.[4]

> By choosing to recycle organic waste through a local worm farming business, the Department of the Environment and Heritage diverts waste from landfill, avoids associated greenhouse emissions and helps support a local small business. The Checklist for office equipment consumables recommends that purchasers consider remanufactured toner cartridges, sourced from an industry sector that is predominantly SME.

With clear communication about environmental tender criteria, many SMEs are well placed and flexible enough to come up with the performance information your agency requests. Indeed, Telstra's experience with their environmental purchasing policy suggests that SMEs are more responsive to these questions than some larger organisations.

Environmental Management Systems

The Australian Government has recognised that there are benefits in improving the environmental performance of government operations. In May 2001, it decided that all Australian Government departments and agencies should be encouraged to:

- join the Greenhouse Challenge Programme; and

- develop an Environment Management System (EMS) by December 2002 and accredit at least one major site by December 2003.

---

[3] Environment Industry Action Agenda, Discussion Paper, 19. www.industry.gov.au/eiaa
[4] Environment Industry Action Agenda, Discussion Paper, 24. www.industry.gov.au/eiaa

An EMS is a structured tool for measuring and continually improving the performance of an organisation in maintaining its regulatory compliance and managing its environmental risks. Agencies can include their purchasing activities as a significant aspect of their EMS, and then set appropriate objectives and targets for performance. As purchasing makes a major contribution to the waste an agency must dispose of, the energy and water it consumes, and the greenhouse gas emissions it generates, it often makes sense to consider environmental purchasing under the umbrella of an EMS and as part of a Greenhouse Challenge Agreement.

Any environmental purchasing programme your organisation undertakes will need to be compatible with other energy and environmental management initiatives that you have underway. Do the purchasing officers in your organisation know about your EMS, and the relevant goals and objectives your organisation has on energy and environmental management? Having your EMS and purchasing teams working together can make a real difference.

For further information on EMSs for Agencies, see the EMS pages of the Greening of Government website at: www.ea.gov.au/industry/sustainable/greening-govt/ems.html

Implementing Environmental Purchasing

Taking the first steps

Environmental purchasing may seem somewhat daunting to purchasers who are not familiar with it, but it is actually no different from any other form of evaluation done as part of purchasing. Every purchasing officer has taken account of issues such as safety, appropriateness of use, ease of operation or other factors in evaluating products. Environmental purchasing simply adds a new set of criteria for consideration. In all other respects, environmental purchasing should be no different from any other government purchasing.

Departments may begin an environmental purchasing programme by focusing initially on certain types of products or services and expanding to others as they gain experience. Specific Australian Government policy requirements cover the purchase of energy-using office equipment and appliances, so these may be an appropriate place to start. Alternatively, a department may want to start with products purchased in large quantities or products or services with significant environmental impacts.

Many environmental purchasing initiatives begin with paper, often on account of its ubiquity and immediate significance to staff as an obvious environmental issue. Another way to get started is to conduct a risk assessment of the goods and services you purchase, asking which pose greater risks of environmental harm, require energy consumption, demand high levels of resource input, generate difficult or high volume wastes, or could adversely impact human health. You can then target those goods and services before moving on to others with a lower risk profile. This may be accompanied by considerations of cost savings to be made from these purchases. If your agency has an EMS in place or under development, you should be able to borrow and adapt for purchasing the risk assessment method used to determine which environmental aspects of your operations are significant.

As many agencies enter into contracts of several (or more) years duration for major purchasing exercises, it is possible to achieve considerable environmental performance improvements through contract variations, possibly with little or no cost. Telstra has adopted this approach to ensure consistent implementation across the variety of goods and services that they procure.

Environmental checklists prepared as part of the Environmental Purchasing Programme also indicate useful starting places for a departmental programme. (Environmental checklists are discussed in detail later in this Guide.)

If there is no environmental checklist available for the product or service types that you want to buy, you may find useful information elsewhere. Internet searches using key words of the product type, "environment" and "purchasing" can be fruitful. Useful Australian resources include the RMIT "ecospecifier" site (http://ecospecifier.rmit.edu.au/about_fm.htm), which provides guidance on

environmental purchasing of building materials, and *Choice* magazine (www.choice.com.au), which includes environmental issues in some of its product assessments. Useful overseas sites include: www.epa.gov/opptintr/epp/ and www.pprc.org/pprc/pubs/topics/envpurch.html The Greening of Government website includes a list of further resources and is updated on an ongoing basis: www.ea.gov.au/industry/sustainable/greening-govt/index.html
Departments should ensure that existing purchasing policies do not inadvertently hinder environmental purchasing. For example, unnecessary specifications for high whiteness paper might rule out the purchase of recycled stock.

Sometimes the most environmental solution might involve changing a process or system so that the need for products can be reduced or eliminated. Moving to electronic phone directories or manuals can eliminate the need for many paper copies and frequent supplements. In other cases, system changes may allow use of a different type of product that has less environmental impact.

Environmental purchasing trials

You may wish to conduct trials of environmentally preferable goods or services to satisfy yourself as to their fitness for purpose and overall Value for Money. Many organisations have taken this approach and often their experiences (and data) can be useful aids to your own environmental purchasing initiatives. For example, your cleaners could trial less hazardous cleaning products for a preliminary assessment of their suitability and value. Many suppliers are more than happy to provide trial samples of their goods or services if this may lead to subsequent business. For more information see: www.ea.gov.au/industry/sustainable/greening-govt/purchasingtrials.html

Obtaining environmental information about products and services

The Environmental Purchasing Toolkit identifies the types of information that could be requested from suppliers to enable evaluation of the environmental aspects of products obtained through tenders. The size of the order and the nature of potential suppliers should be taken into account when drafting the specification. As an example, on a small printing job, packaging might be a minor issue and it may not make sense to ask printers to supply extensive information on the packaging they use. On the other hand, when developing a specification for large print orders, it is reasonable to ask the printers to provide information on how the printed material will be packaged, and whether, for example, they will take back pallets after delivery.

Even where a purchase is a one-off bought directly without a tender, some environmental aspects of the product may be readily identifiable. Many appliances have energy efficiency rating labels, which indicate how much energy they use in a year. It is an easy matter to compare products with these labels. Similarly, some water-using appliances are labelled with water efficiency ratings. Office equipment qualifies to display *Energy Star* labels if it incorporates provision for a reduced energy or "sleep" mode that uses no more than a specified level of energy.

Product labels may identify use of recycled materials and other environmental aspects of a product. These should be viewed with some caution to ensure that the claims are actually meaningful to the conditions under which the product will be used and that the labels do not ignore significant issues. You may also wish to ask for quantitative evidence of superior environmental performance from the labelled product. There is an international standard for eco-labels: ISO 14024 – Environmental Labelling.

Eco-labels can provide useful information regarding the environmental attributes of a product or service. There are several key types of eco-label:

- Specific labelling schemes: These often focus on a particular issue (such as energy efficiency, water consumption or greenhouse emissions) or impact (such as *Dolphin Friendly*). They usually take part of the life cycle and evaluate it against specific criteria. Examples include the *Energy Rating (Star) Label*, the *Fuel Consumption Label*, and the *Greenhouse Friendly Label;* all administered by the Australian Greenhouse Office.

- Production labelling schemes: These assess the method of production. Many of these examples can be found in the areas of food production (such as the various organic labels) and forestry (in Australia, the *Australian Forestry Standard*). Some examples can extend to service provision, such as US labelling of "green hotels".

- Comprehensive labelling schemes: These are based on life cycle assessments and attempt to evaluate the overall environmental impact of a product or service against a set of comprehensive pre-established criteria. Examples include *Blue Ang*el (Germany), *Green Seal* (United States) and *Eco Mark* (Japan).

There is currently no government-endorsed, comprehensive, third-party verified, eco-label in Australia. Purchasers should note that, while eco-labels can assist in purchasing decision making, they do not necessarily indicate the best environmental performer within an industry, or the best product within a range of environmentally significant products.

Integrating environmental considerations into purchasing

Departments should include a clear statement in all relevant tenders that gives notice to potential suppliers of the Australian Government's intention to consider environmental issues in purchasing decisions.

Environmental factors can be integrated into purchasing decision-making in several different ways. The most appropriate approach will vary with the product or service being purchased as well as the department or agency involved. Some options are given below. One or more of these can be used in a given purchasing evaluation.

In some cases, departments or agencies may specify that a product or service must meet specific environmental performance requirements. Bids that do not comply with the

16

environmental performance requirements would be eliminated from the tender process. Such requirements might include the following.

- Computers must qualify to carry *Energy Star* labels (requirement of the Australian Government's Energy Policy).

- Suppliers of laser printers must guarantee that their equipment is compatible with high quality recycled paper.

- Copiers or printers must provide for duplexing (double-siding).

Buyers may decide to allocate a specified proportion of the selection criteria to environmental performance. The allocation would vary, depending on the product or service.

> The City of Seattle required computer vendors to answer environmental questions. The answers were rated equally with price and equipment features and were included in recommendations for City product choices. Following on from this equal weighting approach, Seattle continues to work with vendors while on contract to ensure ongoing improvements in environmental performance.
> For more information see: www.seattle.gov/environment/purchasing.htm

Developing an environmental performance score to be included in product selection can be done in many different ways. The Environmental Purchasing Toolkit on this website provides the framework for a recommended approach.

Monitoring and reporting environmental purchasing activities

Under the *Environment Protection and Biodiversity Conservation Act 1999*, Australian Government departments and agencies are required "to include in their Annual Reports a section detailing the environmental performance of the organisation and the organisation's contribution to Ecologically Sustainable Development."

For many departments and agencies, normal office operations may be a significant aspect of their environmental performance, through use of energy and other resources. Environmental purchasing can help to reduce the environmental effects of departmental operations. Departments should therefore include details of their environmental purchasing activities within the s516A environmental information in their Annual Report.

To make meaningful reporting possible, departments may establish simple programmes for monitoring environmental purchasing. These could include, for example, keeping records of environmental provisions in specifications, tenders or contracts, and purchases of energy efficient products, products made from recycled materials, or other environmentally preferable products.

One efficient and effective technique for monitoring and reporting on environmental purchasing is to have it as an aspect of your agency's EMS and Greenhouse Challenge Agreement.[5] It may seem difficult to make a definitive link between a new purchasing decision and environmental benefit, but it is often possible to obtain data from manufacturers and suppliers that can fill this information gap.

To illustrate, by working with data on appliance energy efficiency, an agency could determine that the new appliance requires X amount less energy per year, which means Y tons of carbon dioxide (CO_2) emissions from electricity generation avoided.

In some cases, your purchasing activities can make an important contribution to the quality of data in your agency's EMS. For example, many companies that recycle office equipment consumables (such as toner cartridges) will supply certificates of diversion from landfill that will quantify the amount of waste reduction your actions have achieved.

When you have monitored and reported internally on your environmental purchasing initiatives, you may wish to report these back to the Department of the Environment and Heritage. The Greening of Government website includes an archive of environmental purchasing "Success Stories" at: www.ea.gov.au/industry/sustainable/greening-govt/successstories.html

Training for environmental purchasing

Departments should ensure that their purchasing officers are suitably trained to understand all aspects of Australian Government procurement, including environmental issues and considerations. Departments should ensure that training providers are aware of the Government's environmental and sustainability policies, and of the contents of this Guide. Some departments may find it useful to hold training sessions on particular aspects of environmental purchasing.

---

[5] In the language of ISO14001, an environmental aspect is a part of an organisation's operations that interacts with the environment. Through the process of developing an ISO14001-consistent EMS, these aspects are identified and then put through a risk assessment procedure to determine those that are significant. These "significant aspects" are then the focus of performance improvement efforts, including the setting of objectives and targets, and the monitoring of performance against those targets.

The Environmental Purchasing Toolkit

Introduction

The Environmental Purchasing Toolkit is designed to help purchasers consider environmental issues when purchasing a selected range of products and services. Its web address is: www.ea.gov.au/industry/sustainable/greening-govt/tools.html

The provision of tools for environmental purchasing supports the e-procurement direction taken in the development of the Commonwealth Electronic Tender Service.

Buyers may choose to incorporate parts of the Toolkit into their existing purchasing systems. Alternatively, the Toolkit can be used to undertake a stand-alone environmental evaluation of selected products and services. A step-by-step guide given at the end of this section summarises options for using the Toolkit.

The Environmental Purchasing Toolkit comprises:

- environmental checklists; and

- environmental specifications.

These components are described below.

Environmental checklists

Environmental checklists summarise important considerations for evaluating a product or service, together with supporting environmental information, relevant Australian Government policies and, where applicable, testimonials and tips for purchasers and users.

An initial set of environmental checklists available for use covers the following types of products and services: (Additional checklists may be added in the future.)

Products

- Office equipment (including computers, monitors, photocopiers, printers, plotters, fax machines, scanners, multi-function devices and mainframes)

- Office equipment consumables, such as toner for printers and copiers

- Refrigerators

- Dishwashers

- Task lighting / desk lamps

- Paper and cardboard

- Recycled products (encompassing a wide range of products that are made from recycled materials)

- Packaging

Services

- Printing

- Waste management

- Cleaning

- Building management

New checklists will be added over time.   Show me a sample checklist

At the Environmental Purchasing website, buyers can find out whether a checklist is available for a given product or service, by either:
- selecting from the appropriate menu; or
- searching by product or service name.

Environmental specification

The environmental checklist criteria provide a basis for generating specification language – what questions to ask in a tender and what type of information to require of bidders.

The criteria are assigned relative weightings, depending on their environmental importance. Default values are given based on a qualitative assessment by the Department of the Environment and Heritage, the Australian Greenhouse Office and their consultants. This assessment involves consideration of Australian environmental priorities, key government policies, market conditions, and relevant international examples of environmental purchasing criteria / specification sets.

Purchasers can amend these weightings if they hold different views about the relative importance of the various criteria. A buyer may decide, for example, to reduce the default weighting allocated to noise produced by a piece of equipment if the equipment will always be located well away from staff.

Show me a sample environmental specification

Using the Environmental Purchasing Toolkit

The following step-by-step guide shows how purchasers can use the Environmental Purchasing Toolkit to include environmental factors in purchasing decisions. By following the steps, purchasers integrate environmental performance into the product and service selection process. (See section on *Integrating environmental considerations into purchasing* above.) Alternatively, some purchasers may choose to use only portions of the Toolkit, such as using only some of the suggested criteria or parts of a specification.

A step-by-step guide to using the Environmental Purchasing Toolkit.

Step 1: Consider how you will integrate environmental considerations into your purchasing decision. Nominate a percentage weighting to be allocated to environmental performance if required.

Step 2: Go to the Environmental Purchasing Toolkit section of the Greening of Government website.

Step 3: Check whether an environmental checklist has been prepared for the product or service you are purchasing. Either **select** from the appropriate menu or **search** by product or service name.

Step 4: Read the checklist criteria and supporting information as applicable.

Step 5: Use the checklist criteria and supporting information in developing your specification.

Step 6: Adjust default criteria weightings if appropriate.

Step 7: Issue the environmental specification.

Step 8: Respond to tender queries using guidance contained in the Guide and checklist.

Step 9: Evaluate responses using your normal evaluation tools.

Glossary

Design for Environment (DfE)	Refers to reducing the environmental impacts of products through better design (such as using less toxic components, or making the product easier to disassemble and reuse).
Environmental impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.
Ecologically Sustainable Development (ESD)	ESD is defined in Australia's National Strategy for Ecologically Sustainable Development (1992) as "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased."
Extended Producer Responsibility (EPR)	Where the manufacturers bear substantial physical and/or financial responsibility for the environmental impacts of their products. This includes "upstream" impacts arising from the choice of materials and the manufacturing process, through to "downstream" impacts, from the use and disposal of products. EPR is generally applied to post-consumer wastes that place increasing physical and financial demands on municipal waste management.
External costs	Costs to society and/or the environment that are not reflected in market transactions. Pollution represents an external cost because damages associated with it are borne by society as a whole and are not reflected in market transactions. Also referred to as "externalities".
Life Cycle Assessment (LCA)	Compilation and evaluation of the inputs, outputs and potential environmental and other impacts of a product system throughout its life cycle.

Life cycle costing	The process of assessing the total cost of a product over its life cycle. (This guide uses a narrower form of costing, also usually called life cycle costing, which only covers the direct monetary costs to the purchaser associated with the initial purchase and ongoing consumables, such as energy, etc.)
Product stewardship	An approach in which all aspects of the product's life cycle, from production through distribution to consumption and disposal, are subject to environmental management and stakeholder responsibility. The principle of product stewardship seeks to implement environmental management policies that focus on the product rather than on materials or a single stage of its life cycle.
Supply chain	The network of participants involved in processes and activities delivering value in the form of products and services to users.