ECO BUY

GREEN PURCHASING IN AUSTRALIA

2009

Report authors:

net balance
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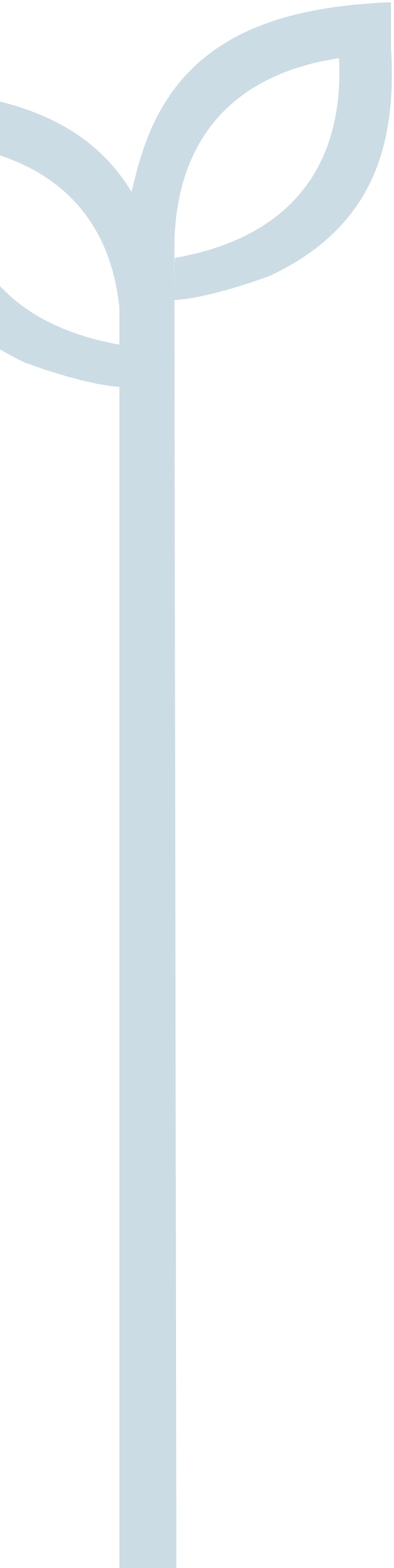
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ECO BUY

Foreword

Welcome to the Green Purchasing in Australia report, which examines the state of environmentally preferable or green purchasing in Australia.

Australia, like the rest of the world, is facing the reality of the cumulative effect its procurement, consumption, use and disposal of products and services is having on the environment.

Environmental impacts such as climate change, loss of natural habitats and production of waste and pollution, combined with the current financial climate, underline the importance of the key green purchasing tenets of buying more efficiently and sustainably, and of managing resources more effectively and sustainably.

This report presents an overview of factors which influence and characterise how Australian organisations are dealing with these impacts through their actions to purchase more environmentally preferable goods and services.

Knowledge and information on green products and purchasing is rapidly changing and can be complex, but there is both a need and an opportunity for organisations to make significant progress in this area. Information, tools and guidance are available and there are many examples of good practice to draw on.

The Green Purchasing in Australia report aims to provide valuable information to policy makers, procurement practitioners, sustainability professionals, industry bodies and government. The report concludes with a set of key recommendations to direct future development in the field, and to provide guidance to those organisations that are embarking or have started on a green purchasing journey.

The report was commissioned by ECO-Buy, a not-for-profit Centre of Excellence in Environmental Purchasing, in partnership with the Victorian Department of Sustainability and Environment, the Queensland Government Chief Procurement Office, and the New South Wales Department of Environment and Climate Change.

ECO-Buy would like to express its appreciation to the report authors, Net Balance, and the numerous contributors to the report. In all, several hundred documents were reviewed and first-hand input sought from many practitioners in industry and government.

ECO-Buy hopes that the Green Purchasing in Australia report will support, inform and accelerate the ongoing growth of green purchasing principles and practices in Australia. On behalf of the commissioning partners, I am pleased to commend this report to you.

Hugh Wareham, CEO ECO-Buy

Executive Summary

Environmentally preferable purchasing, or green *purchasing, and the broader practice of sustainable procurement, have become a priority for organisations seeking to respond to growing societal demands for reductions in environmental impacts, improved efficiency and reduced resource use.*

The market for environmental goods and services has grown significantly in Australia in recent years and a number of studies have highlighted increasing consumer interest in the area of more sustainable products and services.

There are many drivers that support the move for organisations to buy green, including reputation, environmental risk exposure, and cost saving opportunities, as well as staff and stakeholder expectations. However, there are also a number of barriers that have significantly reduced the progress made by organisations in this area. For instance, the critical challenge of defining what constitutes a green purchase has hampered progress as organisations struggle to understand what is green and how to balance competing priorities.

The purchasing policies of both public and private sector organisations often contain green elements but few organisations have a specific green or sustainable purchasing policy. In addition, often the green elements in purchasing policies are not sufficiently specific to provide practical strategies to assist purchasing staff and ensure effective implementation. As with any prudent purchasing policy the first aim should be to reduce overall consumption and to focus on efficiency. This should be the initial filter through which all subsequent purchasing decisions are subjected.

Many organisations are attempting to establish some governance in the area of green purchasing. However, there is a relative absence of rigorously considered regulation to set a legislative framework for the environmental impact of the products and services available in Australia.

Lack of standards in the areas of labelling and measuring environmental impact have led to increasing concerns about the accuracy and relevance of many environmental claims and the growing issue of "greenwash", where in the marketing of products and services, environmental attributes are misrepresented, unsubstantiated or exaggerated. This has been cited by some organisations as a reason for the lack of organisational progress in green purchasing. There is also a need for organisations to commence reporting publicly on their progress in green purchasing and a set of commonly used indicators would assist in overall measurement and transparent reporting.

Despite the barriers to green purchasing, there are many examples of organisations achieving good practice through a range of initiatives including:

- benchmarking performance and setting clear targets
- establishing champions to coordinate and drive green purchasing
- creating communication initiatives to engage with staff and develop active behavioural change
- engaging with suppliers and greening large and complex supply chains
- trialling innovative and new products

In addition, non government organisations (NGOs) and specialist organisations have positioned themselves as active stakeholders in the area by providing guidance, tools and advice to assist organisations through the barriers and complexity of establishing green purchasing policy.

To address the challenges in progressing green purchasing, this report offers a set of key green purchasing recommendations. By taking up these recommendations it is hoped that organisations and regulators will be better equipped to seize the opportunities to make significant progress in green purchasing. The recommendations for each sector (see Section 6 for more detail) are:

For Industry and Practitioners

- Start somewhere
- Set targets
- Measure and report performance
- Seek systemic change
- Focus on efficiencies not cost
- Work with suppliers
- Use tools to consider lifecycle impacts

For Regulators and Governing Bodies

- Enhance regulation
- Provide tools
- Collaborate

Contents

1. Introduction and Purpose

In recent decades developed nations have become increasingly aware of the challenges associated with their fast escalating consumption of finite resources.

To be more sustainable, organisations are recognising that they need to become more efficient with their utilisation of environmental, social and economic resources. Despite this, green purchasing still largely remains a niche sector. The total volume of products which enter the supply chain possessing substantial environmental benefits is still quite small, but there are signs of growth in this area. One illustration of this is the membership growth of green purchasing specialists such as ECO-Buy, noted in Case Study 1.

CASE STUDY 1 ECO-BUY MEMBERSHIP

ECO-Buy's membership has grown significantly since its first year as a local government buy-recycled alliance with 24 members in 2000–01. Now with a broader role to assist organisations purchase more environmentally preferable goods and services, the membership profile includes 55 local government organisations, 15 businesses and a recently established Victoria State Government program that includes 12 departments and agencies. In addition there are 22 associate members from across Australia and over 180 suppliers of environmentally preferable products.

The purpose of this report is to establish a baseline for the status of organisational green purchasing in Australia including the drivers, barriers and the opportunities for progress.

In compiling this report, Net Balance has undertaken research into the wide range of practices which aim to promote and develop green purchasing. These practices were most often in the form of policies, guidelines, regulations and standards designed to stimulate green purchasing practices.

The challenge which characterises the next stage of evolution of green purchasing is: How do we convert the substantial intent into substantial outcomes?

Or more pragmatically: What are the barriers to green purchasing and how do we overcome them?

2. Methodology

2.1 Literature Scan

An extensive search of publically available documents was undertaken. These were broadly categorised into:

- directories/resources
- standards
- labels
- governing bodies
- awards
- policies
- programs
- local government
- state government
- federal government
- organisational action

In total, approximately 220 documents were reviewed and contributed to this report. A list of these documents is available in the bibliography. In addition, a list of organisations involved in green purchasing can be found in Appendix A.

2.2 Stakeholder Engagement

Stakeholder engagement interviews were conducted to gather qualitative information on perceptions of green purchasing and actual green purchasing behaviours within a range of private and public organisations. The interviews were designed to inform the report by:

- understanding perspectives on green purchasing
- identifying the organisational drivers for green purchasing
- identifying the barriers to achieving green purchasing outcomes
- assessing the relative familiarity with green products, labels and standards both in Australia and internationally

Questions were open-ended. They encouraged conversational responses which would best facilitate the sharing of information and help to identify case studies. Case studies were selected for the report on the basis that they provided a summary of innovative green purchasing initiatives or represented frequently occurring themes in the conversations with participants. These case studies are included throughout the report.

Information and quotes from the interviews are also included throughout the report, however to preserve confidentiality they are not directly attributed to individual stakeholders.

Interviewees were selected on the basis of their involvement with:

- corporate, public sector and not-for-profit sectors
- organisations with significant expertise or involvement in green purchasing in Australia
- organisations identified by ECO-Buy

The list of respondents is shown in Appendix B.

An Overview of Green Purchasing

Green purchasing is the abbreviated term for environmentally preferable purchasing. It refers to the consideration of environmental impacts in the procurement of goods and services. It is not limited to the purchase of green products alone, but deals more broadly with the full range of procurement alternatives. For example, the purchase of a more fuel-efficient vehicle in preference to a less fuel-efficient one can be considered a green purchase, without the smaller vehicle necessarily being a green product.

Green purchasing is also about process improvements; for example, consolidating multiple user orders with a given supplier into a single order. This will result in a single delivery, thus reducing shipping costs and carbon emissions.

Finally, green purchasing is a subset of the wider concept of sustainable procurement, which generally refers to the impact of product and services from an environmental, social and economic perspective. These terms are frequently used interchangeably but it is important to recognise the distinction.

3.1 Green Purchasing and Sustainable Procurement

In contrast to green purchasing, which focuses on environmental impacts, sustainable procurement considers the triple bottom line (social, environmental, and economic) implications of procurement. Procurement can encompass two areas:

1. The transactional component or the purchase itself.

2. Other considerations such as those noted by the United Nations Environment Programme (UNEP) 'timeliness, effectiveness, efficiency, competition, transparency, equitable distribution and development'.[1]

The relationship between sustainable procurement and green purchasing is illustrated in the Figure 1.
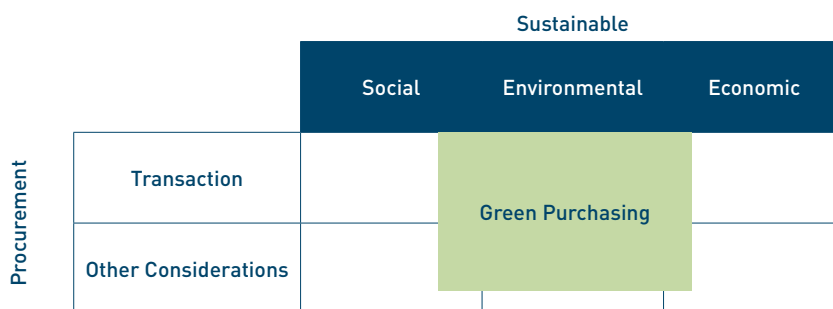
Figure 1 Green purchasing as a subset of sustainable procurement

For the purpose of this report, green purchasing is considered mostly in terms of the environmental impact of the purchase itself. However, given the strong interrelationships between the three elements of sustainability, this report does address some of the possible economic and social considerations.

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1   UNEP (2008) *Sustainable Procurement: Buying for a Better World*, p. 8.

3.2 Reduction and Substitution

The practice of green purchasing has two broad objectives as noted by Good Environmental Choice Australia Ltd:[2]

1. To reduce the amount consumed by an organisation ('reduction')

2. To purchase products which are less damaging to the environment ('substitution')

In assessing the least damaging purchasing option, consideration should also be given to the full lifecycle impact. This is highlighted in the Commission of the European Communities 'Buying Green' handbook[3] which notes that 'adopting a "life cycle costing" approach reveals the true costs of a contract'.[4] There is a range of International Organization for Standardization (ISO) documents which provide guidance on lifecycle assessment. In particular, ISO14040 and ISO14044 provide the Principles and Framework, and Requirements and Guidelines, respectively.[5]

3.3 The Benefits of Green Purchasing

The benefits of green purchasing are numerous. Those outlined in the Australian Government Environmental Purchasing Guide[6] include:

- '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
- encourage industry to adopt cleaner technologies and produce products with lower environmental impacts'[7]

These opportunities are often considered important driving factors behind the growth of green purchasing. In addition there are general benefits in terms of reputation and staff engagement.

Financial savings are a powerful draw. A study on green public procurement in the EU found that a decrease in overall procurement costs can occur when using the lifecycle costing approach.[8]

The financial imperative is also reflected in the World Business Council for Sustainable Development's (WBCSD) definition for eco-efficiency, an important component of which is the objective of increasing the value of goods or services with a reduced environmental impact.[9] Eco-efficiency can lower costs by engaging in actions such as minimising packaging or reducing waste.[10]

2   Good Environmental Choice Australia Ltd (2004) 'The State of Green Procurement in Australia'.
3   Commission of the European Communities (2004) 'Buying Green: A handbook on environmental public procurement'.
4   ibid., p. 30.
5   International Organization for Standardization (2006) 'ISO Standards for life-cycle assessment to promote sustainable development'.
6   Australia Government, Department of Environment, Water, Heritage and the Arts (2003) 'Environmental Purchasing Guide'.
7   ibid., p. 2.
8   PricewaterhouseCoopers, Significant and Ecofys (2009) 'Green Public Procurement in the EU, Report on data collection results to measure'. Available: http://ec.europa.eu/environment/gpp/pdf/statistical_information.pdf
9   ibid.
10   World Business Council for Sustainable Development (2008) 'Sustainable Consumption Facts and Trends, From a business perspective'.

3.4 Consumer Approach to Green Purchasing

Consumer action can be a catalyst for wider action. The most important role that individuals play is not simply reducing their own environmental impacts but building support for leadership from government and business.

Recent consumer research suggests that there is an established and growing number of consumers looking for more sustainable products and services.[11, 12] Although this report does not directly focus on consumer purchasing, it is an important part of the supply chain and has a strong influence on organisational decisions.

The *Living LOHAS*[13] study segments markets according to their attitude and commitment to living a lifestyle of health and sustainability. The study identified four relatively distinct groups of consumers: *Leaders, Leaning, Learners and Laggards*. Furthermore, it was found that 'the consumer market for natural, healthy and sustainable products and services in Australia has grown over 25% to $15 billion in 2008 and is expected to reach at least $22 billion by 2010'.[14] The study did look at a far wider product range than just those that fall into a definition of green purchasing and included organic food, vitamins, yoga, meditation, personal development, eco-tourism, and socially responsible investing.[15]

The *What Assures Consumers* study conducted in 2008 by Net Balance Foundation (in conjunction with Accountability and Lloyds Register Quality Assurance),[16] identified that in order to harness the enthusiasm of green purchasers and expand the market, clearer direction must be provided to consumers and significant barriers to consumer behaviour change must be overcome. These include more leadership from government, better labelling and assurance of product claims and financial obstacles.

3.5 The Organisational Approach to Green Purchasing

The organisational approach to green purchasing has multiple dimensions. These extend beyond personal choice and the individual ramifications associated with consumer purchases.

Organisational approaches to green purchasing range from strategic, organisation-wide commitments, to small-scale single purchases. The range of approaches includes:

- strategic commitments such as green purchasing policies
- targets and public reporting of progress
- supplier strategies and strategic supply chain management
- green contracts and tenders
- strategic assessment of purchasing and priority spend areas highlighted
- green purchasing action teams and action plans
- communications to support and promote green purchasing
- measurement and review mechanisms
- specific projects and/or initiatives

Many organisations have green purchasing initiatives in place but fewer have undertaken strategic assessments of their green purchasing practices or have action plans in place. Those organisations that are most advanced have made progress towards embedding green purchasing into general purchasing practices.

The Australian Competition and Consumer Commission (ACCC) publication, Green Marketing and the Trade Practices Act[17] shows that there has been uncertainty around organisations' approaches to promoting credible green information. This adds more confusion to the green purchasing arena which currently lacks a single definitive set of guidelines.

11   Mobium Group (2008) 'The LOHAS (Lifestyles of Health and Sustainability) report'.
12   Net Balance Foundation and AccountAbility (2008) 'What Assures Consumers in Australia on Climate Change?'.
13   Mobium Group (2008) 'The LOHAS (Lifestyles of Health and Sustainability) report'.
14   ibid., p. 14.
15   ibid.
16   Net Balance Foundation and AccountAbility (2008) 'What Assures Consumers in Australia on Climate Change?'.
17   ACCC (2008) 'Green Marketing and the Trade Practices Act'.

When asked to list companies they associated with green purchasing best practice, 28 per cent of interviewees could not name any when prompted. Of those who could name an organisation, the most frequently mentioned included Westpac, Origin Energy, The Body Shop, Fuji Xerox, Toyota and Interface Carpets.

Despite the limited public awareness, it appears from the literature and stakeholder engagement that many government organisations and businesses are engaged in green or sustainable purchasing. This is illustrated by Case Study 2, which highlights Toyota's actions in relation to green purchasing.

Small to medium enterprises (SMEs) face different day-to-day green purchasing challenges to those of large organisations with more established purchasing processes. Where a national retail giant may face barriers integrating new processes into existing structures or ensuring green purchasing is understood by decentralised decision makers, a smaller organisation may not even have the resources to commence development of a green purchasing policy. Smaller companies potentially have fewer financial resources to develop and implement green purchasing and could be more vulnerable to the demands of their customer base which may be unfamiliar with the benefits of green purchasing.

Two common themes that resonated in discussions with SMEs were whether the good or service being procured is fit for purpose and whether it is aligned with the SME's core business.

CASE STUDY 2 TOYOTA AUSTRALIA – ORGANISATIONAL GREEN PURCHASING

Toyota Australia's approach to green purchasing is directly linked to two of its guiding principles:

- Guiding Principle 3: Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all activities.

- Guiding Principle 7: Work with business partners in research and creation to achieve stable, long term growth and mutual benefits while keeping ourselves open to new partnerships.

Green Purchasing Guidelines and Policy

A founding business member of ECO-Buy, Toyota developed its Green Purchasing Guidelines in 2007, incorporating its previous Supplier Environmental Management Policy.

The Green Purchasing Guidelines include an Environmental Purchasing Policy, which applies to all products and services purchased with the exception of vehicle parts, accessories and raw materials. The policy states that Toyota Australia will consider and purchase environmentally preferred products in the sourcing process whenever they perform satisfactorily and are available at a competitive price. The policy also sets out guidelines that, when practicable, employees, suppliers and contractors must adhere to when purchasing and using products and services, including:

- eliminating unnecessary purchases to minimise waste

- purchasing energy and water efficient/saving products and services, and

- not purchasing products that will release toxic substances at any stage of their life cycle.

Engaging with Employees and Suppliers

Development and deployment of the Green Purchasing guidelines and Environmental Purchasing Policy have been supported through a staff and supplier awareness and engagement program, including through:

- presentations to key internal stakeholders at divisional information sessions

- staff newsletters and intranet communication

- presentations to supplier networks

- supplier website communication, and

- sustainability reporting.

Toyota Green Purchasing Guidelines also encourage suppliers (first tier, raw materials, services and key logistics providers) to undertake environmental initiatives including:

- achieving or renewing ISO 14401 accreditation

- complete elimination of substances of concern (lead, cadmium, mercury and hexavalent chromium), and

- reducing CO_2 emissions and packaging and wrapping materials in logistics.

Toyota works with its suppliers to achieve these through a supplier development program, helping them develop and implement continuous improvement strategies.

Initiatives

Recent initiatives that Toyota has implemented as part of their green purchasing program:

- including environmental specifications in their standard tender documents for goods and services, and

- identifying and setting targets for green products on their internal 'shopping list'.

Continual Improvement

Toyota Australia is committed to reducing the environmental impacts of its purchasing practices and processes, and recognises and understands the importance of a continual improvement approach to achieve this and other organisational goals, as stated in the Toyota Way.

3.6 Green Purchasing Internationally

There are a range of green purchasing practices and initiatives around the world. Countries (or regions) associated with green purchasing best practice that were noted during the stakeholder interviews include the UK, Canada, Scandinavia, Korea, Germany and Japan.

There are many excellent green purchasing programs and collaborative initiatives occurring across a broad range of countries, although not all are widely known. Some of these include:

- The UNEP Marrakech Process was set up to deal with the issue of sustainable production and consumption. It aims to develop a '10-Year Framework of Programs on Sustainable Consumption and Production'.[18] Through the Marrakech Process, seven task forces have been established, including Sustainable Public Procurement, and Sustainable Products.[19] The Marrakech Task Forces are voluntary initiatives led by governments which, in cooperation with other local partners, commit themselves to carrying out activities at a national or regional level that promote a shift to sustainable consumption and production patterns.

- The European Commission has set up a Green Public Procurement website. This provides access to guidelines, a training toolkit and a range of other resources. In addition, the site includes links to a range of European national resources such as Austria green criteria (known as Check It!), Belgium's Guide for Sustainable Procurement and Switzerland's Green Public Purchasing website.[20]

- The International Green Purchasing Network is an organisation which promotes green purchasing internationally by coordinating those who take the initiative in green purchasing towards sustainable production and consumption. The network consists of international organisations, local authorities and NGOs.[21]

- The Mayor of London's Green Procurement Code is a free resource that assists organisations to incorporate environmental considerations into their purchasing practice. Organisations that sign up must commit to achieving targets.[22]

- The UK Government established the Sustainable Procurement Task Force in 2005 in order to achieve the sustainable procurement goals set out in their Sustainable Development Strategy. The taskforce delivered a national action plan which had six key recommendations. These were 'Lead by Example', 'Set Clear Priorities', 'Raise the Bar', 'Build Capacity', 'Remove Barriers' and 'Capture Opportunities'.[23]

- The Commission for Environmental Cooperation created by Canada, Mexico and the United States has set up the North American Green Purchasing Initiative (CEC NAGPI). The CEC NAGPI has undertaken research into green procurement, outlines the business case for green purchasing and has produced a number of 'buyers guides'.[24]

- The Canadian Government has the Office of Greening Government Operations. They have established a policy for green procurement, guidelines and training.[25]

Note that two prominent European labelling initiatives, Germany's Blue Angel and the Nordic Eco-label (Nordic Swan) are discussed in Section 4.2.

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18   Marrakech Process Secretariat: UNDESA and UNEP (2009) 'Proposed Input to CSD on a 10 Year Framework of Programs on Sustainable Consumption and Production (10YFP on SCP)'.
19   Marrakech Process Secretariat: UNDESA and UNEP (2008) 'The Marrakech Process'.
20   EUROPA (European commission) (2009) 'Green Public Procurement'.
21   International Green Purchasing Network.
22   Mayor of London (2009) 'Responsible Procurement'.
23   UK Department for Environment Food and Rural Affairs (2009) 'Procuring the Future – The Sustainable Procurement Task Force National Action Plan'.
24   Commission for Environmental Cooperation, 'North American Green Purchasing Initiative'.
25   Public Works and Government Services Canada (2009) 'Green Procurement'.

4. The Green Purchasing Landscape

The green purchasing landscape is defined by the intent and drivers for green purchasing as well as the barriers. Despite the existence of significant organisational drivers, green purchasing can be constrained by a range of barriers. These barriers can create a bottle-neck that limits green purchasing outcomes, as shown in Figure 2. Recognising and understanding each of the elements of this landscape will allow governments and organisations to better promote the positive aspects and develop real solutions to overcome the barriers.

Green Purchasing Intent

| Standards |
| Labelling |
| Governing bodies |
| Regulation |
| Awards |
| Policies |
| Programs |
| Directories/resources |

Perceived cost
Quality perceptions
Leadership buy-in
Choice confusion
Discretionary policy

Green Purchasing Outcomes

Education
Absence of regulation
Lack of certified credentials
Entrenched practices
Isolated procurement
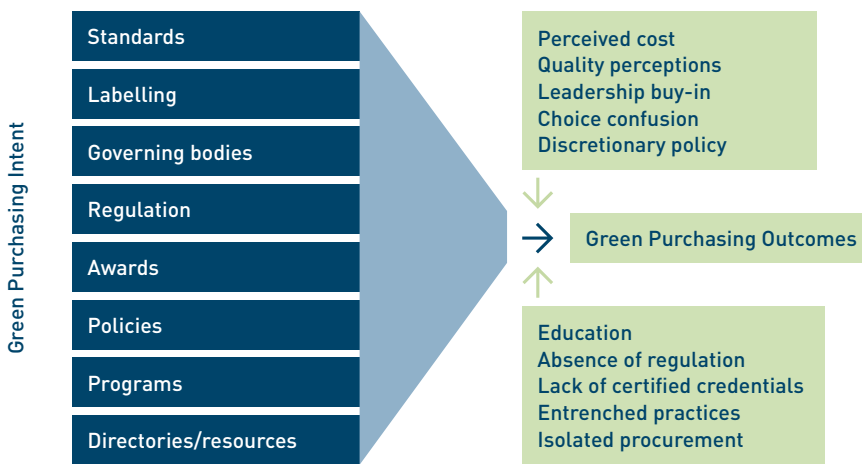
Figure 2 Green purchasing bottle-neck

4.1 Drivers of Green Purchasing

There are a range of organisational green purchasing drivers. According to the stakeholders interviewed for this report, drivers are generally attributed to two main sources – the potential for government or industry regulation and a perception that green purchasing decisions are 'the right thing'. These, along with other drivers, are depicted in Figure 3 and are explored further in the text.

Competitors	Media
Consumer preferences	Regulation
Cost	Staff influence
Efficiency	Supply chain
Environmental concern	Sustainability strategy

Green purchasing drivers

Figure 3 Major drivers of organisational green purchasing

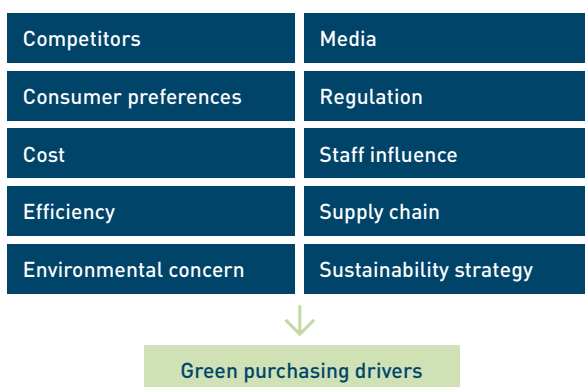### 4.1.1 Consumer Preference

Corresponding with the rise in consumer power is an increasing ability to influence the products and services offered by an organisation. When consumers begin to vote with their feet, companies take notice. As a result, organisations are motivated to review their purchasing to ensure it delivers more environmentally sound options in line with customer demands.

An organisation's marketing professionals, motivated by changes in consumer preferences, can often be the first to examine the potential offered by more environmentally sustainable options, and initiate change. From a marketing perspective, good environmental performance is often an attractive position for a company to dominate in the marketplace.

4.1.2 Competitors

When a competitor begins to establish green credentials, it is often a catalyst for others in the industry to follow to protect their market share. When green selling begins to emerge as a priority for an organisation, this is often a trigger for green purchasing behaviour.

4.1.3 Cost

Cost can act as either a barrier or driver to green purchasing. The rise in energy costs is a clear driver that is already encouraging companies to look more closely at energy usage and examine energy-efficient product options. This is illustrated by Case Study 3 which explores the projected cost savings for Melbourne Airport as a result of acquiring energy saving hand dryers.

CASE STUDY 3 MELBOURNE AIRPORT – COST

With over 24.5 million passengers flying from Melbourne Airport annually, the use of the bathroom facilities is very high.

The hand dryers in the bathrooms required upgrading and the Melbourne Airport waste sub-committee was looking to identify ways to reduce waste streams in the cleaning area. This in turn was driven by the commitments in Melbourne Airport's environment strategy to maximise efficiencies in the terminals, including water, energy and waste reduction.

A number of alternative were considered. The Dyson Airblade™ [26] hand dryer was ultimately chosen because of its high quality, energy saving and environmental benefits.

Over the life of the dryers, this single purchasing decision is projected to provide a cost saving of over 85 per cent, save 186,761 kg of CO_2e, use 76.8 per cent less energy and significantly reduce waste to landfill from paper towel use.

4.1.4 Media

The continuous reporting of environmental success stories in business is often an attractive lure for organisations to start putting rigour into their green purchasing policies, processes and procedures. Conversely, the risk associated with negative media coverage is often a powerful incentive for organisations to take significant steps to mitigate such an event.

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26   The Dyson Airblade™ hand dryer forces unheated air through a gap the width of an eye-lash, creating a high velocity 'blade' of air to dry hands. The environmental benefits and up to 80% energy savings stem from the use of a technologically advanced digital motor requiring less power use, not heating the air before use, drying time of 10 seconds compared to a 28 second average for existing hand dryers, using 1 watt on standby compared to the 3 watts of an average hand dryer and avoiding the use of paper towels, and thus avoiding waste to landfill.

4.1.5 Staff Influence

The actions taken by a few 'green champions' in the workplace can yield exceptional results. Recycling programs, reduced paper/energy/water use, and similar initiatives can be the humble beginnings from which fully-fledged green purchasing programs grow.

The stakeholder interviews revealed that having a green purchasing champion in a senior post was a key component for driving the implementation of a green purchasing policy. Equally, having a policy in place that refers to green purchasing in some way can be used as a basis for supporting the effective implementation of such behaviour, even where it is not explicitly required. As expressed by one interviewee, "where there is a reference to it (green purchasing) in a (government) policy, it provides a lot of permission for 'keen champions'." (Stakeholder statement)

4.1.6 Efficiency

A more subtle driver of green purchasing behaviour may be a greater focus on efficiency, especially in the production stage or manufacturing environment. Lean manufacturing or lean production is an example of production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.[27] Toyota, one of the pioneers of lean manufacturing, sought to eliminate the following types of waste in their production process and thus create greater efficiency:[28]

- 'transportation (moving products that [are] not actually required to perform the processing)
- inventory (all components, work-in-progress and finished product not being processed)
- motion (people or equipment moving or walking more than is required to perform the processing)
- waiting (waiting for the next production step)
- overproduction (production ahead of demand)
- over processing (due to poor tool or product design creating activity)
- defects (the effort involved in inspecting for and fixing defects).'

A decision to shift to more reliable local supply to shorten delivery lead times and reduce transport impacts may be other examples of an efficiency-led influence on green purchasing.

4.1.7 Environmental Concern

Many businesses take steps to embark on a green purchasing journey because the business owners or leaders hold personal motivations for pursuing greater environmental sustainability. These organisations often become green purchasing leaders as the organisation's environmental values become central to its operation.

A sense of being seen to be 'doing the right thing' was mentioned by several stakeholders who were interviewed. This aligned with broader corporate values and commitment to stewardship in their industry.

4.1.8 Threat of Regulation

There is significant value in pre-emptive measures. Having the processes in place to deal with regulation before it eventuates significantly reduces the risk of incurring penalties and negative brand impact as a consequence. Stakeholders interviewed mentioned regulation, with particular reference to the forthcoming Carbon Pollution Reduction Scheme (CPRS) and also broader carbon reduction commitments made by the Australian Government.

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27   Holweg (2007) 'The Genealogy of Lean Production'.
28   Womack & Jones (2003) 'Lean Thinking', p. 352.

4.1.9 Supply Chain Influence

The green purchasing journey of one member of the supply chain can provide the impetus for green purchasing to spread to other parts of the supply chain. Working across the supply chain provides the opportunity for organisations to reduce their total environmental impact. Suppliers can also benefit by differentiating themselves in the market by providing environmentally preferable goods/services. This was demonstrated by Fuji-Xerox through their sustainable supply chain management as outlined in Case Study 4.

CASE STUDY 4 FUJI-XEROX AUSTRALIA – SUPPLY CHAIN

Sustainable supply chain management is not just about risk management. There is opportunity to use leadership influence to improve sustainability outcomes in the supply chain by engaging suppliers as partners on the sustainability journey.

In order to maintain their relationship with Fuji-Xerox Australia (FXA), suppliers are encouraged to score well on the FXA sustainability code criteria and fulfil a commitment to continuous improvement. While FXA recognises that it is unrealistic to expect the business to walk away from well-established supplier relationships based on the sustainability criteria alone, where a high risk or high spend supplier consistently fails to address identified areas for concern the business will review its options.

FXA has a tiered approach to sustainable supply chain management (SSCM) as follows:

Sustainability code
There is a generic sustainability supplier code based on key standards which all suppliers are expected to meet. All suppliers are asked to sign a statement of compliance and/or commitment to continuous improvement in line with these standards as part of every procurement process. This code is a 'gateway'; in other words, these are the basic standards all suppliers are asked to consider if they are to do business with FXA.

Risk assessment for suppliers
Targeted higher risk or high spend suppliers are more deeply engaged through a sustainability risk assessment. This framework is currently in development and will be piloted with FXA logistics business. FXA are considering workshops which could be scheduled to educate for better performance on specific high-risk areas (carbon management) and those suppliers could be asked to submit action plans that address those areas of concern.

Sustainability criteria in specific tenders / SLAs
Some tenders will require the development of specific sustainability criteria against which suppliers will be assessed. These specific criteria will be informed through the risk assessment exercise above and associated action plans.

4.1.10 Sustainability Strategy

A clear driver of green purchasing is the development of a sustainability strategy that has an impact on day-to-day operations. Many companies report that one of the early focuses of sustainability strategies is an examination of the environmental impact of their operation and the products they use.

4.2 Barriers to Green Purchasing

Despite the broad spectrum of organisations engaging in green purchasing, there appear to be a range of common barriers to green purchasing. The key barriers to implementation identified in the 2007 ECO-Buy annual survey of local government members were cost, product information/availability, staff awareness/engagement and supplier/contract issues. Some of the barriers to green purchasing are outlined in this section.

Green purchasing barriers	
Certification	Measurement
Cost	Policy
Education	Procurement isolation
Entrenched practices	Quality
Green wash	Regulation
Leadership	Trade offs

Figure 4 Major barriers of organisational green purchasing

4.2.1 Cost Perceptions

Many organisations express a view that green alternatives come at a premium cost. Few organisations take a holistic approach to procurement costs by considering the savings made by reduced consumption, longer term pay-back periods or adopting more efficient and durable products as an offset for the sometimes premium costs associated with greener options.

"The fundamental issue is that all markets are set up to focus on purchase price. But unpacking all the ancillary costs in relation to running/replacing/maintaining a product is difficult for buyers. As an example – the federal government is introducing common weight units for supermarket food pricing – we need a similar tool for life cycle costing. Not just purchase price, but how long will a product last? How much does it cost to run? And all these other issues that ultimately fundamentally affect the cost. These shouldn't be done by individual manufacturers but across the board – across whole product ranges." (Stakeholder statement)

Instead, almost all organisations seek to minimise expenditure on each item they purchase.

"(Progress in green purchasing) ultimately comes down to ratepayer support and levels of revenue or resources." (Stakeholder statement)

4.2.2 Quality Perceptions

There is still a widely held view that many green alternatives do not perform as well as their less-green substitutes. Some organisations interviewed had trialled greener alternatives for products and had negative experiences.

"Product quality and security is paramount. We can't take a risk on new alternatives." (Stakeholder statement)

4.2.3 Leadership Buy-in

One of the key drivers identified in many organisations was the actions of staff to champion a grass roots green purchasing movement. The extent to which organisational leadership embraces and supports this movement could be described as variable. Some organisations have firm support from their leadership. Others report less success in getting their senior management on board and frustration at the absence of clear direction on how, and the extent to which, environmental considerations should be included in staff purchasing decisions.

4.2.4 Environmental Trade-offs

One of the most frequently mentioned barriers to green purchasing is the confusion or lack of understanding about what is actually the best choice based on environmental considerations. The complex trade-off of environmental components such as greenhouse gas emissions, waste, water use, toxicity, and impact on biodiversity is daunting. When considering a product or service over its full lifecycle and weighing this up against numerous other purchasing criteria, most purchasers find the product choice decision near impossible. The role of education, guidance and recognised certifications cannot be underestimated in overcoming this barrier. Many stakeholders reported the need for a practical framework to assist them through this process of assessment. Clearly, the scramble by many suppliers over past years to establish some sort of green credentials for their products has substantially muddied the waters in relation to product claims which have no independent accreditation or verification.

"There is some hostility in areas (to green purchasing priorities) – and some people just want clarity – there's an opportunity to resolve the information gap – to make the case that a more sustainable choice should be made." (Stakeholder statement)

This was further apparent in the stakeholder engagement; respondents highlighted a lack of direction and trusted sources of information for those looking to start on their green purchasing journey.

4.2.5 Measurement

Most organisations have no measurement of the extent to which they have committed to green purchasing. The difficulty in defining what is, and isn't, a green purchase is a major factor. Without a robust measurement process, it is not surprising that sustainability and procurement managers find it difficult to understand current purchasing and improve performance in this area.

4.2.6 Discretionary Policy

Almost all policy relating to green purchasing in both industry and government does not mandate an adherence to green purchasing objectives. The most commonly used wording in policy asks purchasers to 'consider' the environmental impact of the purchase. This can have the unintended effect of placing a low priority on environmental impacts. An optional approach in policy can work, if supported by sufficient guidance to enable staff to understand how to balance environmental and other credentials of competing products and services.

In many instances, only purchases of a certain value (e.g. $100,000) are covered by procurement guidelines. Below this pre-determined figure, decision-making is left to individuals who may not be aware of what green purchasing and associated issues are. However, smaller purchasing decisions combined can add up to a substantial proportion of an organisation's total expenditure.

"There's a mandate for larger purchases that all other factors being the same, they have to choose the most environmentally friendly choice. It just has to be the best provider for the job so there won't necessarily be questions on price." (Stakeholder statement)

4.2.7 Education

Poor staff awareness of both the need for green purchasing and how it applies to their role and/or function creates a barrier. Where purchasing decisions are not made through a central procurement department or a green purchasing policy is not in place, devolved decision making by employees or agents means green purchasing may not be enacted in practice.

"Policy is the most practical thing but general education is necessary for purchasing decisions that your business does constantly, you need to understand the whole supply chain inputs, where it comes from, what impacts it has in other countries, who are the manufacturers, what else they make, who are the suppliers, manufacturing process … you need to appreciate why it's more complicated than just certification; it sounds difficult but it's not that hard really." (Stakeholder statement)

There was a striking consensus amongst those interviewed that better education around green purchasing-related sustainability issues is needed to make green purchasing standard practice throughout organisations. This includes educating more senior figures as well as employees outside the procurement role. This will help reduce resistance and raise awareness of how green purchasing applies to an individual's role or function. It also provides an understanding of how green purchasing contributes to achieving an organisation's sustainability goals more broadly.

CASE STUDY 5 WHITEHORSE CITY COUNCIL – STAFF TRAINING

Whitehorse staff have been trained in the use of their guidelines, including the recommended procedures to follow and worked examples.

Whitehorse also has a team of EcoLeaders from different departments across the organisation who meet regularly to share information about environmentally preferable products and work practices. General reminders to use green products and materials in council works are also promoted on the intranet, at staff inductions and through training on the purchasing system.

Prior to the submission of the ECO-Buy Annual Report each year, staff from various departments are invited to attend a briefing on the green purchasing policy incentives and encouraged to include green specifications in their purchases in the year ahead.

4.2.8 Absence of Regulation

Regulation can exist at the industry level or in local, state or federal legislation and sometimes at an international level. Successful examples include the banning of chlorofluorohydrocarbons (CFCs) and other potentially harmful ingredients (leaded petrol, some pesticides/herbicides, asbestos etc.). Other forms of regulation include building codes and environmental taxes. There is a notable absence of regulation to mandate government and business green purchasing.

"Government is somewhat behind in thinking of the sustainability issues for (our) industry, so it's probably going to need to be developed by corporations… suppliers." (Stakeholder statement)

"Our top 20 purchases account for around 80 per cent. There's zero knowledge on whether they are environmentally friendly or not. There are requirements around things like nutritional analysis – if there were similar templates to be sent out to suppliers, we could get the ball rolling. We could then provide customers with that kind of information." (Stakeholder statement)

4.2.9 Certified Credentials

A recurring theme in conversations with stakeholders was frustration at the lack of certified credentials among green 'suppliers'. Programs such as Good Environmental Choice Australia (GECA) received praise for introducing some analytical rigour with a trusted technical base. It was acknowledged that there is still a long way to go in achieving greater consumer awareness of the good progress their activities have made.

"Lack of knowledge of the alternatives for an SME with no resources to be searching for ages, especially if it's not what you're trained to do. There needs to be information at – for example – trade fairs." (Stakeholder statement)

4.2.10 Entrenched Practices

Existing practices often prove hard to break in the area of procurement. Most companies and organisations have invested heavily in entrenching preferred supplier arrangements in an organisation. Switching to a new supplier of green products is often a challenging and time-consuming process. Larger organisations especially, have much to 'unlearn' before new approaches to green purchasing can be adopted.

Many of the organisations associated with green purchasing best practice have still not fully embedded it into their core business and strategy.

"Most mainstream products are not 'green'. There are only a few special lines of products with genuine green credentials." (Stakeholder statement)

To advance the green purchasing agenda, products need to be fit for purpose, easy to implement and cost effective. Green purchasing criteria should be part of the wider procurement strategy and integrated into existing systems as far as possible. Moreover, organisations should challenge the need to purchase in the first place.

"Setting up a system is also a lot of work. But is an essential component of green purchasing – or it won't be done by everyone in the company. Management systems are the guts of the implementation – so you need appropriate professionals in your organisation to implement it." (Stakeholder statement)

4.2.11 Isolation of Procurement Functions

Isolating the procurement function can often mean that green considerations are overlooked. Frequently, the management of environmental issues exists separately to the procurement function.

"Procurement shouldn't happen in isolation. It is counter productive to have your policy objectives, environmental objectives, financial objectives and then conduct procurement in isolation. Procurement and policy need to speak to other objectives." (Stakeholder statement)

4.2.12 Greenwash

Lack of standards in the areas of labelling and measuring environmental impact have led to increasing concerns about the accuracy and relevance of many environmental claims, and this underpins the growing issue of 'greenwash', where in the marketing of products and services, environmental attributes are misrepresented, unsubstantiated or exaggerated. This has been cited by some organisations as a reason for the lack of organisational progress in green purchasing.

5. Green Purchasing Intent

This section focuses on policy, labels, and regulation. However, it should be noted that green purchasing intent also includes a range of aspects such as awards, standards, programs and governing bodies. These are all important factors that promote the drivers of green purchasing and can overcome the barriers to green purchasing.

5.1 Policy

5.1.1 Government Overview

Government procurement is estimated to account for 10–15 per cent of gross domestic product (GDP) in OECD countries[29] and as such has a significant role to play in progressing green purchasing.

A wide range of government policies require environmental impacts to be considered in government procurement choices. This is largely in terms of 'value for money'[30], or the pursuit of broader government objectives that encompass elements such as 'valuing the environment'.[31] A weakness in some government policy is the non-mandatory nature of the need to choose the greener option. Most frequently the policy stops at requiring the environmental impact to be merely considered.

A review of procurement conducted in 2006 by the Commissioner for Environmental Sustainability in Victoria[32] identified that:

"Value for money and greener procurement are frequently perceived as conflicting outcomes. Value for money for the government is not simply the lowest purchase price, but optimum combination of quality, quantity, risk timeliness and cost for government on a whole-of-life basis. The concept of value for money is not clearly understood across the Victorian Government."[33]

As discussed previously in this report, an optional recommendation or prompt for consideration has its use as a driver for greener procurement, but only with appropriate guidelines in place as to how this should be actualised. Government should therefore 'focus on creating the conditions to facilitate greener procurement'[34], including better coordination of greener procurement activities, clear leadership and accountable structure.

"Last year sustainable procurement ceased to be optional for some government agencies. They now need to devise a plan for sustainable purchasing, including targets which are then monitored and support by appropriate training." (Stakeholder statement)

The Australian Procurement and Construction Council (APCC) has developed a government procurement framework to incorporate all three elements of sustainability into one document. The Australian and New Zealand Government Framework for Sustainable Procurement (Framework)[35] is a set of principles to guide Australian state, territory and federal governments and the New Zealand Government in implementing sustainable procurement.

This framework supports and encourages collaboration between government jurisdictions to develop national programs and tools to promulgate the principles of sustainable procurement.

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29   Australian Procurement and Construction Council 'Australian and New Zealand Government Framework for Sustainable Procurement'.
30   Victorian Government, Commissioner for Environmental Sustainability (2006) 'Review of Procurement: Part 3 Government procurement of goods and services'.
31   ibid.
32   ibid.
33   ibid., p. 4.
34   ibid., p. 5.
35   Australian Procurement and Construction Council 'Australian and New Zealand Government Framework for Sustainable Procurement'.

The application of homogenous approaches to sustainability in contracting reduces duplication of effort across jurisdictions, delivers cost savings and aims to send a clear consistent message to the market regarding the governments' commitment to sustainable alternatives.

There are four main principles of the framework:

- 'Adopt strategies to avoid unnecessary consumption and ensure demand management.
- Select products and services which have lower environmental impacts across their life cycle compared with competing products and services.
- Foster a viable Australian and New Zealand market for sustainable products and services by supporting businesses that demonstrate innovation and sustainability.
- Support suppliers to government who are socially responsible and adopt ethical practices'.[36]

The Total Environment Centre (TEC) has recently undertaken a useful review of 'Sustainable Government Procurement'[37] which includes an assessment of policies, practices and identifies opportunities for improvement. This review notes that there has been progress on the development of sustainable procurement policies in Australian governments, but 'despite this progress, current policies are flawed in key respects and there are considerable opportunities (and necessity) to improve sustainable procurement policies'.[38]

The TEC review also observes that The Australian and New Zealand Government Framework for Sustainable Procurement cited above has a weakness in that it fails to 'provide any guidance to overcome the current dominance of price (in government purchasing decisions)'.[39] The review also notes that the framework 'provides no guidance on development of monitoring and reporting processes'.[40]

5.1.2 Federal Government

The Commonwealth Procurement Guidelines (CPGs) establish the procurement policy framework within which government agencies determine their own specific procurement practices. The updated CPGs took effect from 1 December 2008 and are meant to be read in conjunction with the procurement-related Finance Circulars.[41] 'Value for money' is the core principle of Commonwealth procurement and should take into account:

a. 'fitness for purpose

b. the performance history of each prospective supplier

c. the relative risk of each proposal

d. the flexibility to adapt to possible change over the lifecycle of the property or service

e. financial considerations including all relevant direct and indirect benefits and costs over the whole procurement cycle, and

f. the evaluation of contract options (for example, contract extension options)'[42]

36   ibid., p. 8.
37   Total Environment Centre Inc. (2009) 'Sustainable Government Procurement. An assessment of current policies, practices and
        opportunities for improvement'.
38   ibid., p. 1.
39   ibid., p. 4.
40   ibid., p. 4.
41   Australian Government, Department of Finance and Deregulation (Asset Management Group) (2008) 'Commonwealth Procurement
        Guidelines'.
42   ibid., p. 6.

Environmental procurement decision making takes place within this framework. The Australian Federal Government environmental purchasing guide and checklists are available on the Department of Environment, Water, Heritage and the Arts website for voluntary use. The checklists available for 15 different products or services and contain information on the appropriate environmental issues, key commonwealth policies, suggested environmental purchasing criteria, tips, success stories and links to further information.[43]

Of note, a House of Representatives Review of Green Procurement Audit in 2006 media release stated that 'The Committee was deeply concerned by the shortcomings in government agencies' green procurement performances, ... and the apparent lack of a clear policy framework to drive ecologically sustainable practices.'[44]

5.1.3 State Government

State level green purchasing policies vary widely from more prescriptive requirements, to less structured guidance (where all factors are equal, there is a requirement to demonstrate why the greenest option has not been chosen), to considering environmental criteria on purchases over a certain value.

5.1.3.1 Tasmania

The Tasmanian Department of Treasury and Finance Procurement and Disposal Policy includes climate change and environmental considerations in its procurement principles.[45] The procurement principles, along with a range of purchasing policies in this area, which detail the climate change and environmental parameters that apply to government procurement, came into effect on 1 January 2009.[46] The policies cover climate change, energy conservation and greenhouse gas emissions, ozone depleting substances, and waste, as well as water efficiency and quality.[47]

5.1.3.2 South Australia

In the Greening of Government Operations (GoGO) Framework 2004, green procurement was noted as one of eight priority areas.[48]

The South Australian State Procurement Board has an environmental impact policy.[49] The policy notes, 'Chief Executives will contribute to the maintenance of environmental quality and safety and the minimisation of waste through a preference for environmentally sound products (where this is consistent with the guiding principles for procurement reform including the Value for Money principle)'.[50] In the Procurement Board's Strategic Plan 2008–2010 a number of strategies are listed, one of which involves the development of strategies and guidelines on a range of issues including life cycle costing.[51]

5.1.3.3 Northern Territory

The Procurement Policy Unit administers the policies relating to Northern Territory Government procurement practices.[52] In 2008–09, development of a Northern Territory Government 'sustainable' procurement policy is a priority.[53] It will encompass 'all government business that nominates "green" initiatives as part of tendering or contractual requirement'.[54]

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43   Australian Government, Department of Environment, Water, Heritage and the Arts (2009) 'Environmental Purchasing'.
44   House of Representatives, Standing Committee on Environment and Heritage (2006) 'Review of Green Procurement Audit highlights need for Sustainability Charter'.
45   Tasmanian Government, Department of Treasury and Finance 'Procurement Principles: goods and services'.
46   Tasmanian Government, Department of Treasury and Finance 'Procurement and Diposal'.
47   Tasmanian Government, Department of Treasury and Finance 'Climate Change and Environmental Policies'.
48   South Australia Government (2004) 'Greening of Government Operations (GoGO) Framework 2004'.
49   South Australia Government, State Procurement Board (1999) 'State Supply Board Policies, Number 10, Environmental Impact'.
50   ibid., p. 1.
51   South Australia Government, State Procurement Board (2008) 'Strategic Plan 2008–2010'.
52   Northern Territory Government, Department of Business and Employment 'Procurement Policy'. Available: http://www.nt.gov.au/dcis/procurement_policy/index.html
53   Northern Territory Government, Department of Corporate and Information Services 'Annual Report 2007/08'.
54   Northern Territory Government, Department of Corporate and Information Services 'Annual Report 2007/08', p. 40.

5.1.3.4 Australian Capital Territory

In the ACT, the Government Procurement Board issued a procurement circular regarding sustainable procurement 2007–08. The circular outlines sustainable procurement and details how to incorporate sustainability considerations into the procurement of goods and services.[55]

5.1.3.5 New South Wales

The Government of New South Wales has well rounded procurement policy guidelines to environmental management which have a number of aims such as integrating ecologically sustainable development and minimising environmental impacts.[56] The policy notes four principles to be applied throughout the procurement process. These are:[57]

- avoid
- reduce
- reuse
- recycle/reprocess.

The waste reduction and purchasing policy (WRAPP), 'requires all state government agencies to develop and implement a WRAPP Plan to reduce waste and increase the purchase of recycled content materials in four areas:

- paper products
- office consumables (e.g. toner cartridges)
- vegetation and landscaping material
- construction and demolition material.'[58]

Furthermore, progress must be reported every two years.[59]

Programs such as Sustainability Advantage, Sustainable Choice, North East Waste Forum (NEWF) and Green Goods[60] continue to provide guidance and build capacity through work with local government and staff.

5.1.3.6 Western Australia

The Western Australian State Supply Commission has a state supply sustainable procurement policy that requires 'public authorities to consider environmental impacts and opportunities during the procurement process'.[61] It directs the reader to broad frameworks for guidance:

- Western Australian State Sustainability Strategy
- Sustainability Code of Practice for Government Agencies and Resource Guide for Implementation
- Australian and New Zealand Government Framework for Sustainable Procurement

5.1.3.7 Queensland

The Queensland Government's Procurement Policy includes their commitment to sustainable procurement and requires agencies to integrate sustainability into the procurement of goods, services and construction. This incorporates asking budget sector agencies to set, measure and report on sustainable procurement targets.[62] It is noted in the policy that 'targets should be regularly reviewed and progressively improved (as a minimum, annually) to meet the increasing sophistication of agencies' capability with regard to achieving sustainable procurement outcomes.'[63]

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55   Australian Capital Territory Government, Procurement Board (2007) 'Sustainable Procurement'.
56   New South Wales Government (2006) 'NSW Government Procurement Guidelines, Environmental Management'.
57   ibid., p. 5.
58   New South Wales Government, Department of Environment and Climate Change (2009) 'WRAPP reporting guidelines 2009, NSW Government Sustainability Policy'. Sydney South, p. 2.
59   New South Wales Government, Department of Environment and Conservation 'WRAPP'.
60   New South Wales Government Sustainable Procurement program.
61   Western Australian Government, State Supply Commission (2009) 'Appendices: Sustainability', p. 1.
62   Queensland Government 'Key Policy Concepts'.
63   ibid.

The Queensland Government also has a range of resources and tools, some of which are currently under development, to guide and assist agencies on sustainable procurement. These include a supplier questionnaire, information about Eco-labels, and a sustainable procurement commodity database. The database will be 'a repository of information relating to high/common spend and high sustainability risk commodity areas. Links will be provided to relevant standards and example specifications.'[64]

CASE STUDY 6 QUEENSLAND GOVERNMENT CHIEF PROCUREMENT OFFICE

Queensland Government Chief Procurement Office establishes and manages a number of whole-of-government purchasing arrangements designed to service government clients across Queensland - including agencies, state hospitals, state schools, government-owned corporations and statutory authorities.

The whole-of-government arrangement for desktop PCs, portable computers and servers (ICT Arrangement (QP707)) delivers significant financial and environmental savings to the Queensland Government.

The Queensland Government fleet of desktop PCs delivers benefits of reduced operating costs relating to energy efficiencies, and associated environmental benefits of reduced carbon emissions have also been attained.

Whilst energy-efficient machines have a greater upfront cost in the order of $30–50 each compared with standard hardware, the payback period to recover this cost is approximately 12 months. Therefore over the three-year life of each machine, savings from the reduced energy consumption will be approximately $60. This will save the government a further $6 million dollars in reduced energy costs of its PC fleet, an estimate based on today's electricity pricing which is anticipated to rise significantly in coming years.

These savings equate to 2.2 million tonnes of CO_2 emissions per year from this sector alone, or 67 million kilometres travelled (by car).

The intention of the QGCPO was to develop an arrangement that would demonstrate best practice in sustainability and showcase the significant benefits that could be realised by integrating sustainability requirements into purchasing decisions. A key feature of the arrangement is that it addresses energy efficiency, content of hazardous substances, packaging, product take back and reuse, eco-design and sustainable goods development.

5.1.3.8 Victoria

The Victorian Government, Department of Treasury and Finance, Strategy and Policy, Government Services Group has the Good Practice Guidelines – Environmental Procurement.[65] Annual reports published by participating departments, agencies and authorities are required to detail their performance against identified activities to reduce their office-based environmental impacts. They are also required to include a statement on their environmentally responsible purchasing activities in support of the objectives of the Victorian Government's Environmental Purchasing Policy. The data for inclusion in annual reports is derived from the department's environmental management systems.

The Victorian State Government engaged ECO-Buy to run a pilot program and now a full program to assist departments and agencies to develop greener procurement resources. The program has focused on addressing policy requirements and improvements in areas such as prioritising environmental risk/influence of spend and guidance on environmental specifications and evaluation criteria. The independent Commissioner for Environmental Sustainability recognised the value of the pilot as follows '[the] ECO-Buy pilot supported change in operational processes and Departments starting to rank their material procurement impacts to ensure that the focus is given to procurement activities with the highest impact'.[66]

64   Queensland Government 'Sustainable Procurement, Resources and Tools'.
65   Victorian Government, Department of Treasury and Finance, Strategy and Policy, Government Services Group (2009) 'Good Practice Guidelines – Environmental Procurement'.
66   Commissioner for Environmental Sustainability, Victoria, Strategic Audit of Victorian Government Agencies' Environmental Management Systems, 2009.

CASE STUDY 7 VICTORIAN DEPARTMENT OF TREASURY AND FINANCE

The Department of Treasury and Finance (DTF) establish and manage state purchase contracts for the Victorian Government. Recognising the importance of engaging with existing suppliers around green procurement, in 2009 DTF worked with their sole supplier of stationery and office products to develop an environmentally preferable product range. This was undertaken in conjunction with ECO-Buy to ensure clear environmental criteria apply to the range.

DTF then promoted the new range to their own staff and to all of state government by hosting a launch, presentation and supplier expo, attended by over 100 staff from across Victorian State Government.

Environmental requirements and evaluation criteria for the Desktop and Notebook Computer Request For Tender were developed by DTF, again in conjunction with ECO-Buy. This large and complex tender now includes requirements for tenderers to demonstrate their environmental responsibility and respond against specifications covering the environmental performance of the product across materials use, end-of-life considerations, energy conservation and packaging.

In 2009, DTF also reviewed the whole-of-Victorian-Government Request for Tender Procurement templates, and updated them to include stronger environmental criteria.

5.1.3.9 Conclusion

Some states simply incorporate green procurement issues into value-for-money considerations or as part of wider procurement policies. Others have developed additional guidelines to support their procurement policy. However, evidence of policy implementation is patchy across government departments and agencies nationally. State policies need legislation and regulation from the federal level to avoid confusion – a gap that was also identified through stakeholder engagement interviews.

5.1.4 Local Government

While there is no detailed picture of how local governments are progressing in green purchasing across Australia, there is significant activity in green purchasing through programs such as the ECO-Buy Local Government Program (in Victoria) and Sustainable Choice (in NSW), which attract the majority of local governments in their jurisdictions. The local governments involved in these programs are implementing green purchasing in procurement decisions mostly through inclusion of environmental considerations in a general procurement policy, or based on cost-saving criteria for efficient products.

Local governments are very responsive to community concerns, particularly in the areas of climate change and water saving. Councils are showing leadership in reducing greenhouse gas emissions and water use. Initiatives such as ICLEI's Cities for Climate Protection Program have helped local governments to measure and then reduce their emissions, creating impetus for green purchasing of higher efficiency vehicles, lighting and appliances, and Green Power for local government buildings and street lighting.

Green purchasing is becoming more standard practice in local government departments. For example in parks and gardens there is greater use of water tanks, drought resistant plants and grasses, and recycled water for parks and ovals. Fleet managers are also doing good work to downsize vehicles, shifting from six- to four-cylinder models and when possible, bringing in hybrid or even the first electric vehicles.

However, most local governments have decentralised purchasing systems and therefore it is a significant challenge to influence all staff purchasing decisions to include consideration of environmental impacts. Education for staff on environmental impacts, green products and how to select and specify for environmental criteria in contracts generally remains the responsibility of environment staff, with help from behaviour change programs such as Sustainable Choice, ECO-Buy and ICLEI.

As purchasing becomes more strategic in local governments, it will be important to include responsibility for consideration of environmentally preferable products in the roles of purchasing and contract managers across local governments. Huge potential exists for inclusion of environmental specifications in contracts and capital works projects, as well as the use of environmental criteria in tender evaluation.

5.1.5 Business

Green purchasing policies are becoming more common among larger private firms, driven by a combination of 'push' and 'pull' factors including impending carbon regulation, opportunities to reduce costs, first mover benefits and consumer or contractual demands. Reflecting the public sector experience, green procurement policies are frequently found to be in the early stages of development; they are included in wider sustainability policies or environmental commitments but are not yet properly monitored in their implementation or supported by a robust sustainable procurement management system or function. SMEs are less likely to have an official green purchasing policy and more likely to include green purchasing considerations as part of their wider culture.

5.2 Labelling

Clear guidance around green purchasing choices, will allow organisations to develop confidence in the purchasing decisions they make. Furthermore, this would provide an avenue for organisations to substantiate any green claims made about a product or service. This section will focus on labelling, although there is a range of other guidance tools in this area such as standards and directories.

Among companies and consumers alike there is confusion and a lack of understanding around various labels and what they actually mean. A third of stakeholders consulted as part of this report could not name a label or standard relating to green purchasing when asked.

Recognised Australian labels mentioned by stakeholders included those used to indicate the Green Star rating system and the Forest Stewardship Council (FSC), both of which are used in this report to provide some general measurement indicators around green purchasing (See Section 5.4). Other indicators mentioned by stakeholders were Greenhouse Friendly[67, 68] and Good Environmental Choice Australia (GECA).[69, 70]

This small snapshot of recognised labels highlights the range of labels that promote different environmental aspects. A study by UNEP[71] notes that the categorisation of eco-labels needs to be tailored with a specified methodology. It should include aspects such as whether the label is single-issue or multi-issue, voluntary or mandatory. Furthermore, the study recommends additional information should be taken into account, such as:

- objective and means (e.g. an objective could be to promote sustainable consumption of sugar; the means could focus on a retail market, industrial market or both)

- organisational level targeted (e.g. global, corporate, business unit, production facility, product line, individual product/service)

- flexibility built into criteria and level at which specifications are set (e.g. 75% of criteria defined as performance requirements at site level)

- whether a label is important in achieving an objective (e.g. communication to consumer determines net influence) or important in establishing market-based or other incentives to adopt the ecolabel (e.g. need for a communication tool but not necessarily an ecolabel)

- provisions for harmonisation with other labels (e.g. technical equivalence or mutual recognition framework)

- basis for prioritisation of issues and development of criteria (e.g. science, consumer surveys, none).[72]

Until these elements are integrated, it is important for an organisation to clearly define their environmental objectives and have a dynamic framework in place that can adjust to the unique needs of a purchasing decision and subsequently the most appropriate certification scheme. There are specialist organisations such as ECO-Buy and NSW Sustainable

67   Greenhouse Friendly – is an Australian Government initiative administered by the Department of Climate Change. It provides accreditation for greenhouse neutral products provided they have had objective independent verification process of the product or services life cycle assessment and use approved Greenhouse Friendly abatements.

68   Australian Government, Department of Climate Change (2008) 'Greenhouse Friendly'.

69   Good Environmental Choice Australia (GECA) – is a national life-cycle based Eco-label that is accessible to all products and services with environmental benefits. Furthermore GECA is internationally recognised and ISO 14 024 compliant.

70   Good Environmental Choice Australia Ltd (2008).

71   UNEP 'The Trade and Environmental Effects of Ecolabels: Assessment and Response'.

72   ibid., p. 39.

Choice which provide independent advice on the environmental issues associated with different products. This assists consumers (both organisational and domestic) in making the purchasing decision appropriate for them. See Appendix A for a range of organisations working in the green purchasing arena. A notable absence from this list is the Buy Recycled Business Alliance which ceased operations as of 22 April 2009.[73]

Australian labels do not appear to have achieved a critical mass in participation or consumer awareness. In Australia, Energy Star Ratings as well as previously noted Forest Stewardship Council (FSC), GECA, and Greenhouse Friendly have gained acceptance and provide valuable points of entry for organisations to better communicate their commitments. A study in 2005 noted that '20% of consumers recognise the Good Environmental Choice label'.[74]

International labelling initiatives that have gained traction to become recognised and broadly accepted include:

- European Union's EU Flower[75, 76]

- Nordic Ecolabelling (often referred to as the 'Nordic Swan')[77, 78]

- Germany's The Blue Angel[79, 80]

- Japan's Eco-Mark[81, 82]

These are just a select few; see Appendix C which provides a list and links to a range of international eco-labels.

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73   New South Wales Government, BUY Recycled Business Alliance.
74   Good Environmental Choice Australia 'Manufacturers Application Information Centre'.
75   The European Commission administers the EU Flower which is the European Union's Eco-label. The EU flower requires an environmental life cycle assessment. The EU Flower is part of the broader promotion of sustainable production and consumption. Main aspects of the scheme are that it is selective, transparent, voluntary, works with a multi-criteria and can be used throughout the EU and in Norway, Iceland and Liechtenstein.
76   European Commission (2009) 'Eco-label'.
77   Nordic Ecolabelling (often referred to as the "Nordic Swan"), was introduced in 1989 by the Nordic Council of Ministers including Denmark, Finland, Iceland, Norway and Sweden. Nordic Swan aims to direct purchasing towards products that have less of a burden on the environment. The Nordic Swan also sets criteria with regard to quality and performance. The Nordic Swan's criteria are specific for different product groups.
78   Nordic Ecolabelling (2008).
79   The Blue Angel, sponsored and administered by the German Federal Environmental Agency and the quality assurance and product labelling institute (German Institute for Quality Assurance and Certification), is the first and most well-known eco-label worldwide. Since 1978 it has set standards for eco-friendly products and services selected by an independent jury in line with defined criteria. The Blue Angel is awarded to organisations for their commitment to environmental protection. The award is then used as a tool to promote their eco-friendly products in the market.
80   The Blue Angel (2008).
81   The Japan Environment Association Eco-Mark program is managed in accordance with the standard and principle (ISO 14020 – An environmental label and declaration, a general principle, ISO 14024 – An environmental label and declaration, a type I environmental-label display, a principle and procedure) of International Organization of Standardization (ISO).
82   Japan Environment Association 'Eco Mark Office'.

The success criteria outlined for the EU label itself, rather than its users is shown in Figure 5.

	Success Criteria		Assessment Indicators
Finality	Environmental Improvement		Suitability of the product groups
			Relevance (nature and magnitude of the associated environmental impacts)
			Potential (potential environmental benefits)
			Steeribility (extent to which the product groups can be influenced by product labelling)
			Use of the label in public and private procurement (use of the eco-label as a standard)
Get Momentum	Adequacy with the demand of the market = being a market tool with manufacturers and retailers (in order to increase the supply of labelled products by manufacturers and retailers.		Number of companies awarded (manufacturers, retailers)
			Impact of the image of companies awarded
			Number of shelves in stores with eco-labelled products
			Range effect (assortment of labelled products, product families)
			Level of environmental concern of the purchasers
	Level of development		Number of products labelled
			Number of articles labelled
			Market shares of labelled products
	Visibility (to increase the demand by consumers)	Spontaneous notoriety	% of European consumers that recognised the EU eco-label logo as a label of environmental excellence as the EU eco label
		On the shelves	Leaflets
			Merchandising
			Number of stores where eco-labelled products are stored
			Number of promotional actions per year in the stores
Results	Growing Path		Annual growth rate of the number of awarded companies
			Ex-factory sales-value of the labelled articles
			Number of new product groups per year and related growth
			Budget and staff

Figure 5 Success criteria and assessment indicators of the EU eco-label[83]

83   European Commission/DG Environment (2001),'Investigation of the Market Impacts and Penetration of the European Eco-label over the years 1992-2000 and 2001–2004, Final Report' cited in OECD (2005) 'Effects of Eco-labelling Schemes: Compilation of Recent Studies', p. 21.

The OECD[84] has identified key elements for the success of an eco-label as:

- informative and easily understood by consumers
- reducing product-related environmental pollution through innovation and diffusion of environmentally improved products
- providing sufficient economic incentive to manufacturers to respond to the programme.

There have been environmental and economic benefits attributed to eco-labels. An increase in market share or new customers for around half of those using the Flower eco-label has been noted.[85] The economic success of Japan's Eco-Mark has been measured as '62% of companies experienced increased sales of their Eco Mark-certified products, while only 10.3% stated the opposite'.[86]

The economic incentive and marketing components of an eco-label are significant drivers.[87, 88] Although the environmental benefits may not be the priority, they are a consequence of the uptake of green products or services. The economic incentive is driven by the purchasers' understanding and value of the label. As a result, the use of labels by government and retailers is a powerful tool for attracting consumers.[89]

"(organisations) must remain competitive. There's no perceived advantage at this time without credible labelling." (Stakeholder statement)

'…Ecolabelling can have a significant role in combination with other policy tools. It can provide a tool for operationalising public or private environmental policy measures, particularly in regard to procurement policies'.[90] Such a benefit may include being able to easily incorporate an environmental component into tenders.[91]

Eco-labels are tools which provide guidance on green purchasing provided they are credible, trusted and well known. However, if products with eco-labels constitute 'a share higher than 30%, eco-labels no longer selectively identify a sub-set of products that are environmentally preferable to other products in the same category'.[92] In this situation they can become a de facto voluntary standard and potentially create a barrier to market entry.

5.3 Regulation

The role of regulation in Australia related to green purchasing is often debated. Some industry stakeholders comment that changes to green purchasing outcomes will only come with regulation.

'If it is left to industry, nothing will get done.' (Stakeholder statement)

'(Only) legislation will force the (green purchasing) issue.' (Stakeholder statement)

Others recognise that self regulation will play a significant role.

There are, however, a number of areas relating to green purchasing which are subject to regulation such as Energy Star ratings for appliances. While most regulations are for products in the domestic sphere, where these product areas cross over into organisation purchasing they also affect business and government purchasing.

84   OECD (2005) 'Effects of Eco-labelling Schemes: Compilation of Recent Studies', p. 5.
85   IEFE – Università Bocconi, Adelphi Consult, IOEW, Valør & Tinge A/S (2005) 'EVER: Evaluation of EMAS and Eco-label for their Revision'.
86   OECD (2005) 'Effects of Eco-labelling Schemes: Compilation of Recent Studies', p. 13.
87   UNEP 'The Trade and Environmental Effects of Ecolabels: Assessment and Response'.
88   IEFE – Università Bocconi, Adelphi Consult, IOEW, Valør & Tinge A/S (2005) 'EVER: Evaluation of EMAS and Eco-label for their Revision'.
89   ibid.
90   UNEP 'The Trade and Environmental Effects of Ecolabels: Assessment and Response', p. vi.
91   AEA Technology Environment (2004) 'The Direct and Indirect Benefits of the European Ecolabel – Final Report'.
92   OECD (2005) 'Effects of Eco-labelling Schemes: Compilation of Recent Studies', p. 5.

There tend to be four main areas of environment-focused regulation directed at purchasing in Australia:

- **Statutory restriction** on the sale and use of certain substances including banned or restricted substances. For example, persistent organic pollutants, CFCs, vehicle exhaust emissions).
- **Minimum standards** on products and buildings. For example minimum energy performance standards (MEPS) on certain electrical appliances and five star energy efficiency standards on new homes in Victoria.
- **Compulsory labelling** schemes including energy and water consumption star ratings on appliances and fuel consumption labels on vehicles.
- **Trade Practices Act legislation** governing misleading or deceptive conduct (including environmental claims in marketing). This has been applied to help overcome the widespread issue of 'greenwash' in the marketing of green products and services.

Soft forms of government legislation and interventions, such as market mechanisms also play a role; for example, trading schemes such as the Carbon Pollution Reduction Scheme (CPRS). Other forms may include subsidies to offset costs of environmentally friendly products and taxes for environmentally damaging products.

While the regulations outlined above have an impact upon a number of significant purchasing areas, stakeholders appear sceptical that current regulation is effective.

"Real weight and credibility needs to be invested to build trust and robust regulation." (Stakeholder statement)

Sixty per cent of the stakeholders interviewed for this report believed that guidance on green purchasing should come from government at a federal level. While 'guidance' does not only refer to regulation, there is a clear call for government leadership in this area.

Addressing the large gaps that remain in environmental regulation of products, including in the business and government procurement area (for example, minimum standards on recycled paper, office products, vehicles and buildings) could well be a focus area for future action.

There is also a need to ensure that existing regulation is adequate to bring about real environmental improvements, through a combination of purchasing decisions and pressure on manufacturers to develop more efficient products. This may include the passing of more stringent regulation guided by overseas experience where applicable.

Regulation should be developed in collaboration with stakeholders, including industry bodies that understand the challenges and opportunities for integrating green purchasing into existing systems. Consumer watchdogs and appropriate not-for-profits may play a role in ensuring fair and independent monitoring and adherence to regulation.

Regulation might cover areas such as:

- assessment processes for environmental performance of products and services in tender/contract evaluation
- accepted definitions of green purchasing and the scope of 'green procurement'
- criteria and performance descriptions of green claims, standards or labels
- requirements for integrating green criteria into contracts and tenders
- recognised measurements for performance relating to green purchasing
- guidance on systems and processes to support green purchasing policies – possibly a national register of programs and resources
- systems for monitoring adherence to green purchasing regulations
- training, professional qualifications and education.

With any kind of early regulation, a balance needs to be found between keeping regulation under ongoing review to address the changing landscape of green purchasing and environmental claims, whilst at the same time allowing enough flexibility to apply to a wide range of needs.

"Get the policy frameworks right and the information protocols established ... Make sure the scope for discretion is established. Eventually you want to allow for more devolved, meaningful decision making to take place." (Stakeholder statement)

5.4 Measuring Green Purchasing

Despite many organisations expressing an interest or commitment to green purchasing, there are relatively few organisations in Australia that are publicly tracking and reporting on their purchasing of environmentally preferable products. In fact, the whole practice of measuring green purchasing represents something of a challenge for a number of reasons, including confusion around what constitutes a green product.

A study conducted by AEA Technology Environment[93] in 2004, quantified the direct benefits of the EU eco-label. This was done for each product category covered by the label through the process outline in Figure 6.
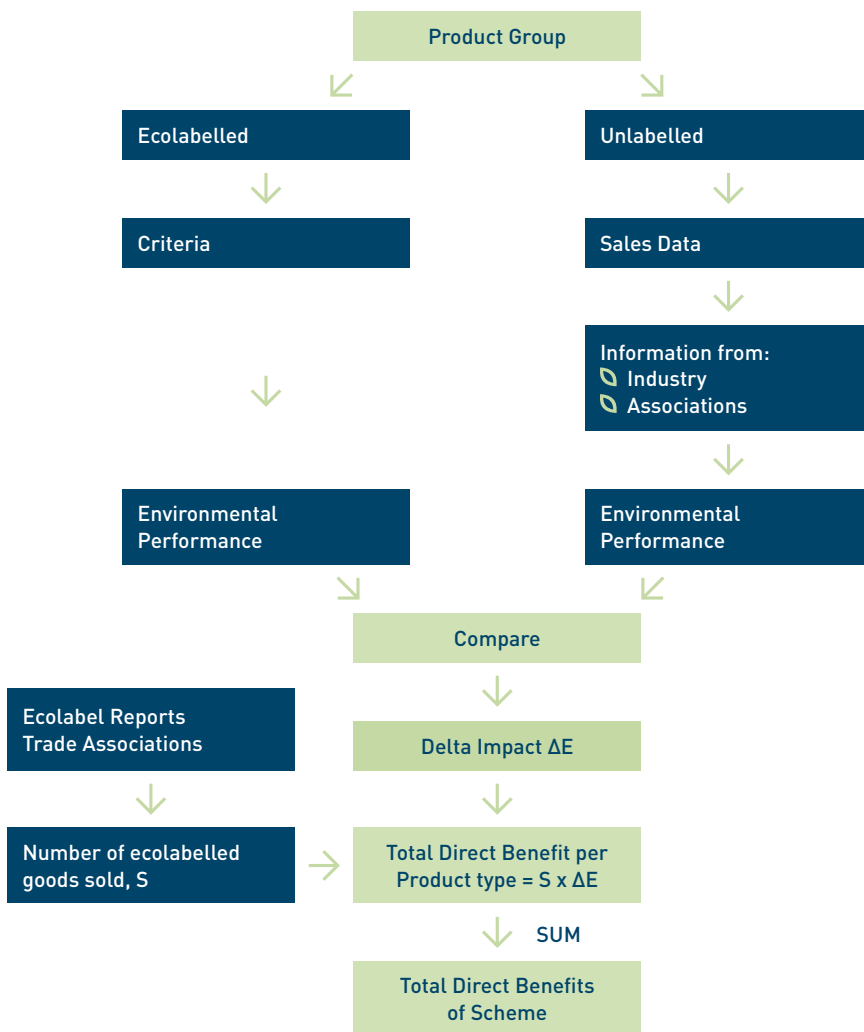

Figure 6 Calculation of difference in environmental performance of products with the European Eco-label against products without the eco-label[94]

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93   AEA Technology Environment (2004) 'The Direct and Indirect Benefits of the European Ecolabel – Final Report'.
94   ibid, p. 4.

The direct benefits from all the product categories[95] based on an estimated market share of EU labelled products were amalgamated and are outlined in Figure 7.

Resource saved/avoided per year	Amount saved per year by scenario %		
	5% take-up	20% take-up	80% take-up
Electricity (Gigawatt hours)	14,700	59,000	147,600
CO_2 produced from energy use (tonnes)	9,318,000	37,270,000	93,175,000
Water use (Megalitres)	12,285,000	49,138,000	122,846,000
Reduced hazardous substance use	13,800	55,400	138,400
Material savings (other than hazardous substance) (tonnes)	530,700	2,122,700	5,306,700
Reduced discharges to water (tonnes) to chemical Oxygen demand	30,400	121,700	304,200
Reduced air pollution (tonnes)	17,500	70,100	175,300

Figure 7 Direct environmental benefits of using EU eco-labelled products[96]

Another example of green purchasing measurement can be found in the Victorian Commissioner of Environmental Sustainability's review of procurement. This report measured and calculated the environmental benefits of various government green purchasing initiatives. These include the default use of duplex printing as shown in Figure 8.[97]

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95   EU Ecolabel products include: Copying and graphic paper, tissue paper, cleaners for sanitary facilities, all-purpose cleaners, detergents for dishwashers, hand dishwashing detergents, laundry detergents, washing machines, dishwashers, refrigerators, televisions, personal computers (system unit and monitor), laptop computers, light bulbs, footwear, indoor paints and varnishes, hard-floor coverings, mattresses, soil improver, textiles, vacuum cleaners.
96   AEA Technology Environment (2004) 'The Direct and Indirect Benefits of the European Ecolabel – Final Report', p. iv.
97   Victorian Government, Commissioner for Environmental Sustainability (2006) 'Review of Procurement: Part 3 Government procurement of goods and services'.
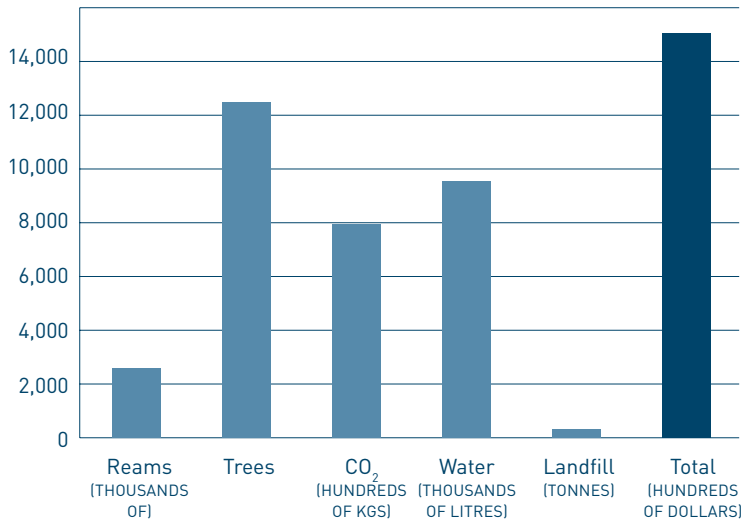
Figure 8 Potential reductions resulting from defaulting government staff computers to duplex printing[98]

This type of quantitative data provides valuable information that should be regularly reported by organisations for effective tracking of performance. Key documents in which this type of reporting could occur include organisational sustainability or annual reports, internal reports to management and organisational websites. Regularly tracking and reporting to staff, stakeholders and the public will develop tangible measures for green purchasing.

5.4.1 Surrogate Indicators

A challenge associated with green purchasing measurement is the effective quantification of macro-level performance of Australian business and government sectors. This is an important mechanism for providing a guide to how green purchasing is progressing.

Three high-level surrogate indicators have been chosen to give a brief and approximate snapshot of how Australian organisations are progressing on the green purchasing journey. These are:

- Green Star Building Certifications
- Forest Stewardship Council Certifications
- Green Power consumption

A wide variety of green purchasing indicators were examined as part of this report, but were precluded due to factors such as data access and inconsistency as well as incomparable time frames. As a result, local government best practice case studies are included to identify and promote the benefits of measurement.

The measures identify positive growth in the area of green purchasing in recent years; however, there is scope for significant increases.

5.4.1.1 Green Star Building Certifications

The voluntary Green Star scheme is an initiative of the Green Building Council of Australia (GBCA). GBCA, launched in 2002, is a national, not-for-profit organisation supported by government and business.[99] The GBCA 'key objectives [are] to drive the transition of the Australian property industry towards: sustainability by promoting green building programs, technologies, design practices and operations integration of green building initiatives into mainstream design, construction and operation of buildings'.[100]

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98   ibid, p. 40.
99   Green Building Council Australia (2008).
100   ibid.

Green Star 'assesses the environmental impact that is a direct consequence of a project's site selection, design, construction and maintenance'.[101] The Green Star Rating is calculated using the Green Star Rating tool which is based on credits given to a project in nine distinct categories.[102] There are three levels of Green Star ratings available:[103]

- Four-star certified rating indicates 'best practice'
- Five-star rating indicates 'Australian excellence'
- Six-star rating indicates 'world leadership'.

The figure below indicates the total number of building projects across Australia receiving either 4, 5 or 6 Green Star rating in 2004–2008 inclusive.
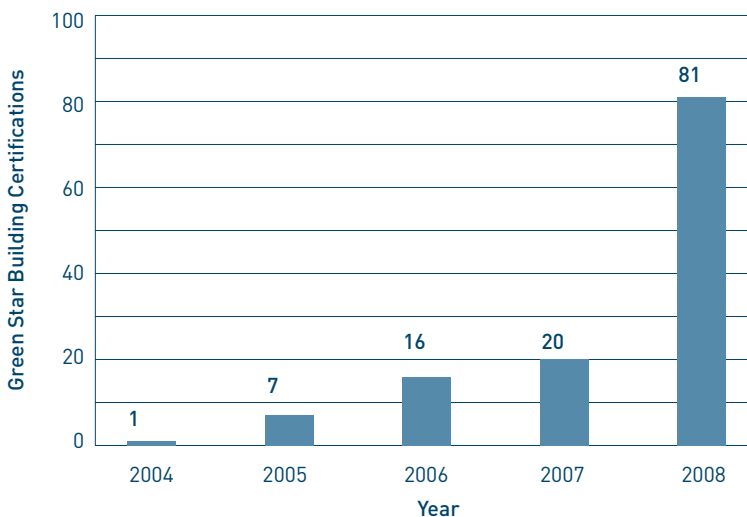

Figure 9 Green Star building certifications[104]

This indicator looks to recognise the shift towards sustainable development and the trend in green office space in the Australian commercial property sector.

5.4.1.2 Forest Stewardship Council Certifications

'The Forest Stewardship Council (FSC) shall promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests'.[105]

FSC-certified forests are tracked through the production process through chain of custody (CoC) certification. This is applicable to manufacturers or others, who process, transform or trade forest products. Figure 10 represents the number of companies accredited with FSC CoC in 2004–2008 inclusive.

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101   ibid.
102   Nine categories are: Management, Indoor Environment Quality, Energy, Transport, Water, Materials, Land Use & Ecology, Emissions
       and Innovation.
103   Green Building Council Australia (2008).
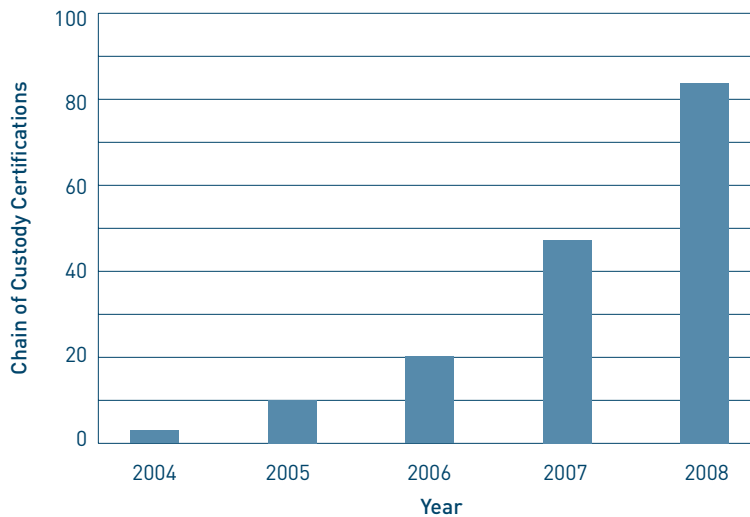104   ibid.
105   Forest Stewardship Council (2009).

Figure 10 Forest Stewardship Council chain of custody certifications[106]

These figures are a rough indicator of how many Australian companies are committed to the production of goods using wood and wood products from responsibly managed forests. However, it cannot be declared a comprehensive figure as the FSC is not the only timber certification scheme in Australia.

5.4.2 GreenPower Consumption

GreenPower is a nationally accredited government program for renewable energy.[107] GreenPower has an accreditation and annual audit process as well as an associated GreenPower logo. The 'accreditation standard includes:

- not allowing the use of native forest wood waste in biomass generators

- not allowing hydro generation that involves the redirection of environmental water flows in rivers

- only allowing generation from facilities built since 1997; this is because we need to create "new" renewable energy facilities. Other renewable energy exists, but it was built before 1997, and was already contributing energy to the electricity grid.'[108]

The figure below outlines the total number of Megawatt hours (MWh) of Green Power that have been purchased by commercial customers each year in 2004–2008 inclusive. It should be noted that while these figures have shown some impressive growth over recent years they still only represent less than 1% of total electricity sales to commercial customers.

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106   Forest Stewardship Council (2009).
107   GreenPower (2009) 'Accredited Renewable Energy'.
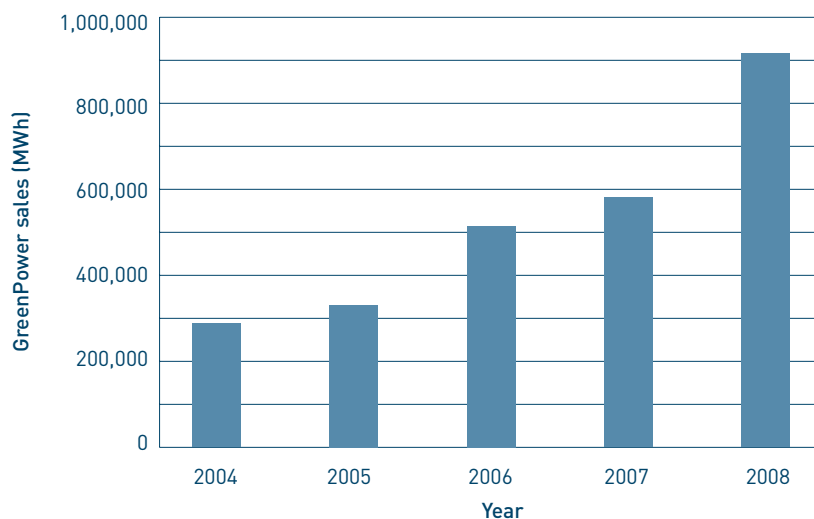108   GreenPower (2009) 'Accredited Renewable Energy'.

Figure 11 GreenPower sales to commercial customers[109]

5.4.3 Local Government Case Studies

This section identifies the progress made by local government in Victoria and New South Wales implementing environmental purchasing programs through ECO-Buy and Sustainable Choice. This information was included as these are sector-specific programs that include a measurement aspect.

5.4.3.1 Local Government Case Study 1: ECO-Buy

Local government is one of the few sectors where there is some tracking and reporting green product expenditure on a regular annual basis. In Victoria the ECO-Buy Local Government Program has been operating for eight years and requires local government members to track and report green product purchasing every year. Members can now report on over 600 types of green products listed in the ECO-Buy Annual Report template. Products are classified into the following categories:

◊ Recycled content

◊ Greenhouse friendly (including energy-saving and fuel-efficient products)

◊ Other green products (including water-saving and low-toxicity products)

◊ GreenPower.

Each category has related definitions and criteria. For example, an appliance can only be listed in the energy saving area of the greenhouse friendly spreadsheet if it is energy rated 4-star and above .

Of the ECO-Buy local government members, 49 per cent had a tracking system in place for green product purchases in September 2008, with a further 21 per cent in the process of setting up a system. For most local governments, check boxes or tracking codes which correspond to the ECO-Buy green product classifications are incorporated into electronic purchasing software such as Finance One, Technology One or AXS One. A summary is then collated and reported to ECO-Buy annually.

Green purchasing results are communicated to council staff and ratepayers through internal newsletters, council newspapers and local media. Certificates and individual progress reports are also provided to members showing their progress over time and benchmarking their performance against other councils of a similar size.

ECO-Buy is also working to quantify the environmental benefit of reported expenditure on environmentally preferable products by our members. For example, reporting local government members purchased 100,000 mobile garbage bins

(MGBs) in 2006–07 with a minimum recycled content of 30 per cent. By purchasing recycled content MGBs, ECO-Buy's local government members saved around 970 tonnes of greenhouse gas emissions compared to buying the equivalent number of virgin plastic bins. Greenhouse, water and land use savings of key purchases are also reported individually for each reporting council.

Figure 12 represents expenditure by all reporting ECO-Buy local government members over the history of the Local Government Program. Between 2000 and 2008 reported expenditure has increased from $5 million in 2000–01 to $71.5 million in 2007–08: at least $383 million invested in environmentally preferable products over the history of the ECO-Buy program.
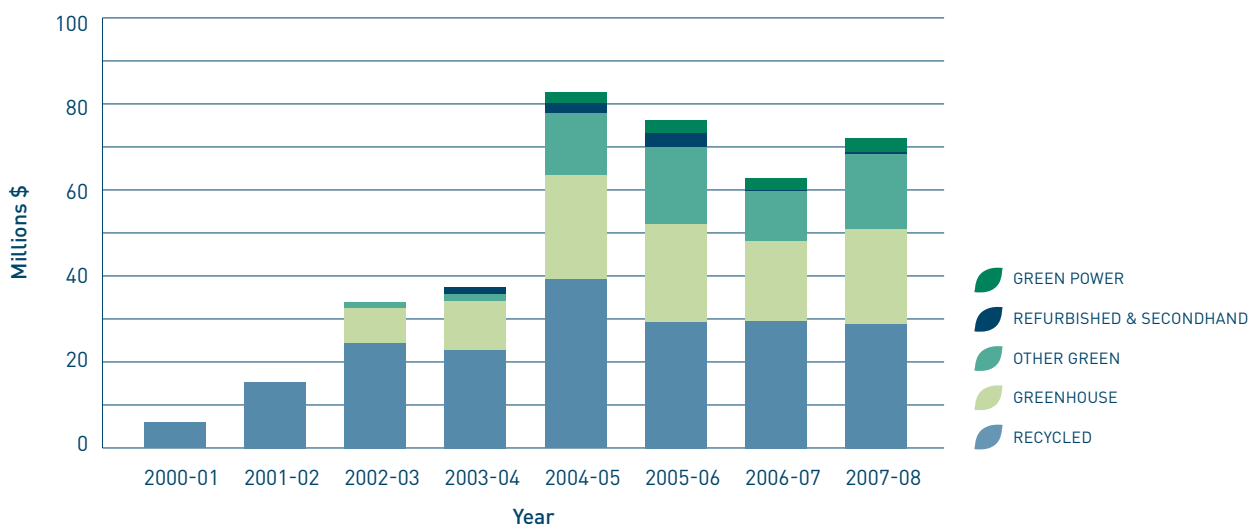

Figure 12 Total expenditure on green product categories by reporting members of ECO-Buy's Local Government Program

The data provided by local government members are best available assessments of green purchasing expenditure. It is therefore likely that this graph under represents rather than over represents spending on green products by local government members.

Direct comparisons between different reporting years are constrained by changes in the ECO-Buy reporting template.[110] The number of members submitting an annual report has also varied year to year.

While the reporting process is not simple or perfect, organisations can only manage what they attempt to measure, and reporting is an essential component of any continuously improving green purchasing program. ECO-Buy strives to help members improve the accuracy of their tracking and reporting of green product purchases over time, as well as improving the value of the reporting process to members.

5.4.3.2 Local Government Case study 2: Sustainable Choice

The Sustainable Choice program in New South Wales, modelled on the ECO-Buy program, has been operating for three years; it too helps individual participating councils track and report green purchases annually.

Members are required to complete a survey each year with details of products purchased. In addition to expenditure, the survey asks local governments to assess how often sustainable purchasing decisions are made for any given product – always, sometimes, never or don't know. This enables the program to track indicative behaviour change and shifts in the decision-making process for specific products over time.

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110   In 2000–01 and 2001–02, only spending on recycled content products (under the then Local Government Buy Recycled Alliance) was reported. In late 2006 a review of the reporting template took place. This resulted in a range of changes to what local government members could report on in 2006–07 and 2007–08 – removing the GST component of purchases and excluding reused products and products with a sleep function for example.

So far the program has collected only two years' data but already some interesting tends have emerged. Recycled content paper is the most commonly purchased sustainable product, purchased by 80 per cent of member councils 'sometimes' or 'always'.

Sustainable Choice also collates qualitative data on a wide range of issues from participating councils. For example, the main motivation for members to pursue sustainable procurement is:

- achieving environmental outcomes
- boosting council's credibility, and
- 'practising what we preach' .

The major reported barriers are:

- changing established behaviour patterns
- decentralised purchasing systems
- budget constraints, and
- the need for ongoing support and education.

In this way, both Sustainable Choice and ECO-Buy are supporting the local government sector in their respective states to not only implement and pursue sustainable procurement, but also to track and monitor results, and in the process provide critical purchasing data to help inform, benchmark and ultimately improve the procurement process.

Despite many organisations expressing an interest or commitment to green purchasing, there are relatively few organisations in Australia that are publicly tracking and reporting on their purchasing of environmentally preferable products. Tracking and reporting to staff, stakeholders and the public makes green purchasing a tangible measure.

6. Conclusions and Recommendations for Green Purchasing

This report highlights the many challenges facing organisations in developing and implementing effective green purchasing programs. Despite the significant barriers restricting progress in this area, there is a substantial opportunity to move forward and show leadership and commitment in terms of what can be achieved; Australia could take a leadership role in the area of green purchasing at a time of increased focus on environmental issues.

The following key recommendations have been developed to provide practical direction for industry and government. These recommendations are designed to help Australian organisations and regulators achieve higher levels of green purchasing outcomes. The recommendations are based on research and are informed by the many success stories encountered during the research process. In particular they pay attention to practical approaches to overcoming the numerous barriers identified.

6.1 For Industry and Practitioners

6.1.1 Start Somewhere

An interesting feature of green purchasing is the frequency with which the initial impetus comes from junior ranks in organisations. Many companies report that an initiative to start considering environmental impacts of purchases came from grassroots levels. As 'lack of leadership buy-in' is cited as a barrier to further action, the challenge to organisations is to support and foster green purchasing initiatives from anywhere in the organisation, then create the environment for momentum to build. Many organisations report that it is important just to make a start. Typical steps in starting a green purchasing program include:

- developing a green purchasing policy
- setting targets relating to green purchasing
- conducting a review of current spending involving an assessment of environmental risks
- measuring the current spend on green goods and services
- prioritising opportunities for green purchasing by identifying the spend areas where environmental impact can be reduced
- seeking training and educational opportunities for relevant staff in the field of green purchasing
- seeking membership to organisations which seek to promote green purchasing.

6.1.2 Set Targets

Among private sector and government organisations that have a policy which deals with environmental impacts of their procurement, most stop at a requirement to 'consider' the environmental impact of purchases. Non-mandatory wording often results in limited green purchasing outcomes unless supported by proactive guidelines to assist employees in understanding how they should consider better environmental performance.

A useful approach to prioritise environmental sustainability in policy is the setting of specific targets for procurement of greener choices. These targets can take many forms (at the organisational, executive and individual employee levels) and should be considered critical performance indicators. Examples of targets could include a proportion of expenditure on environmentally preferable goods and services, targets for individual products or performance indicators for senior staff.

6.1.3 Measure and Report Performance

In conjunction with setting targets, organisations should measure and publicly report their progress towards those targets. One highly effective action is to map environmental impacts and risks within procurement categories to target priority areas of greatest environmental impact and risk. If you have measured your spend profile (see 'Start somewhere') you will then be able to monitor your progress.

6.1.4 Seek Systemic Change

Green purchasing does not begin and end with the procurement function. To achieve best results a whole-of-organisation approach should be adopted to consider the impact of all parts of the business. Integration of green purchasing considerations into executive evaluation, internal communication, education and training, reward systems, transport policy (for example, consider public transport packages instead of fleet vehicles), and other business systems and processes helps to embed green purchasing and other sustainability principles as well. The aim should be for environmental considerations to be part of day-to-day purchasing decisions.

6.1.5 Focus on Efficiencies Not Cost

Green purchasing should not be viewed as a costly exercise. One of the characteristics of a greener approach to purchasing is the tendency to question the real need for a purchase in the first place. By approaching green purchasing with a 'total cost' perspective, organisations are likely to find that the small premiums paid for some products are offset by substantial savings in others.

6.1.6 Work with Suppliers

Working with suppliers allows organisations to consider their total environmental footprint and provides an opportunity for suppliers to respond to changing requirements. Supplier engagement communicates the importance that organisations attach to green purchasing. Organisations can also set policies that identify minimum requirements and specify specific requirements through contracts and tenders.

6.1.7 Use Tools to Consider Lifecycle Impacts

The true cost of any purchase should consider the environmental and social costs in addition to the financial costs. Organisations should consider the development or adoption of tools and decision frameworks to help understand the full lifecycle impact of major purchases. These tools, combined with training and targeted communication, can bring about effective organisational change.

6.2 For Regulators and Governing Bodies

6.2.1 Enhance Regulation

One barrier to green purchasing is inadequate regulation. Improved and enhanced regulation to help guide organisations (CFC banning, water restrictions, and poisons regulation are often referred to) through the minefield of self-regulation would be welcomed by many sectors.

6.2.2 Provide Tools

Regulators and government in particular can help facilitate increased green purchasing by equipping industry with tools and decision frameworks to guide decision making.

6.2.3 Collaborate

Standards and labelling in Australia require significant attention. In many sectors there are numerous overlapping and sometimes conflicting standards resulting in confusion and duplication. The question of how industry associations, NGOs and government collaborate to create a series of widely accepted standards is no easy task, but will be an important vehicle to enable better decision making by purchasers.

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8. Appendix A: Australian Organisations Involved in Green Purchasing

Green Purchasing Programs	Audience	Website
ECO-Buy	◊ Purchasing organisations ◊ Members nationally: large businesses and ◊ Associate members ◊ Members in Victoria: local and state government	www.ecobuy.org.au
ICLEI Sustainable Purchasing initiative	Local government nationally	www.iclei.org/index.php?id=purchasing
Sustainable Choice	NSW local government	www.lgsa-plus.net.au/sustainablechoice
Government		
Energy Rating website	Energy efficient appliances	www.energyrating.gov.au/
Federal Department of the Environment, Heritage, Water and the Arts	Commonwealth Procurement Guidelines 2008	www.environment.gov.au/settlements/government/purchasing/index.html
Green Power	Electricity purchasers	www.greenpower.gov.au/home.aspx
NSW Government Sustainable Procurement Program, Green Goods	NSW Government departments and agencies	www.greengoods.nsw.gov.au/index.htm
NSW Government Our Environment It's a Living Thing education program	NSW purchasers	www.livingthing.net.au/Go/Default.aspx?tabid=1132
Sustainability Victoria Shop Smart program	Individual purchasers	www.saveenergy.vic.gov.au/shopsmart.aspx
Sustainability Victoria Waste Wise Shopping Guide	Purchasers	www.sustainability.vic.gov.au/www/html/1679-waste-wise-shopping-guide.asp
Organisations/Alliances		
Chartered Institute of Purchasing & Supply Australia and New Zealand (CIPSA)	Purchasing professionals	www.cips.org/australasia/default.aspx
ECO-Specifier	Green product directory for designers, architects and builders	www.ecospecifier.org
GECA	Ecolabelling	
Green Building Council	Building design and ratings	www.gbca.org.au
Packaging Covenant	Manufacturers and retailers	www.pca.org.au/?id=8
Sustainable Packaging Alliance	Manufacturers and retailers	www.sustainablepack.org/aboutSPA/default.aspx
Consultancies		
Australian Green Procurement	Consultancy	www.greenprocurement.org.au
Blue Sky Green	Consultancy	www.blueskygreen.com.au/site/index.cfm?display=103380
Green Purchasing Pty Ltd	Training for purchasers	www.greenpurchasing.com.au
Net Balance	Consultancy	www.netbalance.com
Portland Group	Consultancy	www.portlandgroup.com.au
PMMS Consulting	Consultancy	www.pmms.com.au/

9. Appendix B: Contributors

All Things Chocolate	www.allthingschocolate.biz
Australian Ethical	www.austethical.com.au
Bunnings Warehouse	www.bunnings.com.au/
City West Water	www.citywestwater.com.au
Corporate Express	www.ce.com.au
Department of Sustainability and Environment	www.dse.vic.gov.au
Eco-Buy	www.ecobuy.org.au
Ferguson Plarre Bakehouses	www.fergusonplarre.com.au
Foster's Group	www.fosters.com.au
Fuji-Xerox	www.fujixerox.com.au
Good Environmental Choice Australia	www.geca.org.au
Mandurah Council	www.mandurah.wa.gov.au
Melbourne Health	www.mh.org.au
Melbourne Airport	www.melbourneairport.com.au
Queensland Government Chief Procurement Office	www.qgm.qld.gov.au
Sensis	www.sensis.com.au
Sustainable Choice New South Wales	http://www.lgsa-plus.net.au/www/html/956-sustainable-choice.asp
Toyota	www.toyota.com.au
Wattle Range Council	www.wattlerange.sa.gov.au
Whitehorse City Council	www.whitehorse.voc.gov.au
World Vision Australia	www.worldvision.com.au

10. Appendix C: Eco-Labels[111]

Country	Eco-Label	Website
Australia	Good Environmental Choice Australia Ltd.	http://www.geca.org.au/
Brazil	Associacao Brasileira de Normas Tecnicas (ABNT)	http://www.abnt.org.br/default. asp?resolucao=1280X720
China	China Environmental United Certification Center	http://www.sepacec.com/
Croatia	Ministry of Environmental Protection and Physical Planning	http://www.mzopu.hr/
Czech Republic	Ministry of the Environment	http://www.ekoznacka.cz/
EU	European Commission	http://ec.europa.eu/environment/ ecolabel/index_en.htm
Germany	Federal Environmental Agency (FEA)	http://www.blauer-engel.de/
Hong Kong (GC)	Green Council	http://www.greencouncil.org/eng/index. asp
Hong Kong (HKFEP)	Hong Kong Federation of Environmental Protection (HKFEP) Limited	http://www.hkfep.com/
Japan	Japan Environment Association (JEA)	http://www.ecomark.jp/english/
Korea	Korea Eco-Products Institute (KOECO)	http://www.koeco.or.kr/eng/
New Zealand	Environmental Choice New Zealand	http://www.enviro-choice.org.nz/
Nordic 5 Countries	Nordic Ecolabelling Board	http://www.svanen.nu/Default. aspx?tabName=StartPage
North America (Canada)	Terra Choice Environmental Service Inc, Environment Canada	http://www.terrachoice.com/
North America (U.S.A.)	Green Seal	http://www.greenseal.org/
Russia	Saint-Petersburg Ecological Union	http://www.ecounion.ru/ru/site.php
Chinese Taipei	Environment and Development Foundation (EDF)	http://greenliving.epa.gov.tw/greenlife/ green-life/index.aspx
Singapore	Singapore Environment Council	http://www.sec.org.sg/
Sweden (SSNC)	Swedish Society for Nature Conservation (SSNC)	http://www.naturskyddsforeningen.se/
Sweden (TCO)	TCO Development	http://www.tcodevelopment.com/
Thailand	Thailand Environment Institute (TEI)	http://www.tei.or.th/
Ukraine	Living Planet	http://www.ecolabel.org.ua/

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