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Sustainable procurement guide: Information communication and technology products

Queensland
Government

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v1.3	November 2018	Published
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Contact us

We are committed to continuous improvement. If you have any suggestions about how we can improve this document, or if you have any questions, contact us at betterprocurement@hpw.qld.gov.au.

Disclaimer

This document is intended as a guide only for the internal use and benefit of government agencies. It may not be relied on by any other party. It should be read in conjunction with the Queensland Procurement Policy, your agency's procurement policies and procedures, and any other relevant documents.

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Administration

Version 1.5 of this document replaces all previous versions of this document and takes effect immediately.

Table of Contents

Purpose

This guide aims to support Queensland Government staff (buyers) in implementing sustainability considerations when procuring information communication and technology (ICT) products, namely desktops, laptops and monitors. It also provides a signal to industry about government's expectations in relation to sustainability of ICT products.

Target audience

Minimum performance criteria are considered to provide benchmarks for industry performance within the supply market.

For industry: this guide provides insight into current and potential government expectations in relation to the sustainability of desktops, laptops and monitors.

For procurement professionals: this guide provides information to guide the integration of sustainability principles into the procurement of desktops, laptops and monitors.

How to use this guide

This guide is commodity specific to ICT products.

Sustainability should be incorporated at every stage of the procurement process. Opportunities and strategies exist to address environmental and social impacts during procurement planning (including demand analysis), supplier engagement and through the management of supply arrangements. The procurement process is described in more detail in later in this guide.

The suggested criteria contained in this guide may be applied at any stage of the process. The interpretation, modification and suitability of the criteria must be considered by the contract manager at the time of planning a procurement arrangement. Consider where in the procurement process the maximum benefit should be applied.

The suggested specifications will not be suitable for all agencies, or relevant in all markets or procurement contexts. The sustainable procurement responses may be affected by factors including market readiness, availability of supply, product complexity and maturity and organisational needs. Each procurement arrangement will be different.

Introduction

Scope

For the purpose of this guide the following ICT products are considered: desktop personal computers, notebook personal computers and personal computer monitors.

It does not include products such as servers, net books, tablet computers, eBook readers, thin clients or integrated desktop computers.

Fitness for purpose

For the purpose of this guide, it is assumed that the product shall be fit for its intended application and the purpose for which it was manufactured. The product must be accompanied by warranty periods emphasising durability performance.

Products are assumed to be certified by mandatory Australian Standards or equivalent international standards.

Sustainability performance of desktops, laptops and monitors

The major challenge in specifying environmentally preferable desktops, laptops and monitors is the difficulty in assessing the multitude of complex information surrounding product content and performance. Currently there are a range of independent third-party verification schemes and internationally recognised Type I Sustainability labels for ICT products developed in accordance with the ISO 14024. These include Good Environmental Choice Australia (GECA), Blue Angel and Nordic Swan.

For the purposes of this guide the Electronic Products Environmental Assessment Tool (EPEAT) standard has been used as the basis to inform desktops, laptops and monitors sustainable procurement requirements.

Electronic Products Environmental Assessment Tool (EPEAT)

The EPEAT tool rates products into three increasingly stringent tiers of environmental performance. Products are rated into the three tiers, bronze, silver or gold.

This standard is widely accepted as the environmental benchmark by the ICT hardware industry and utilised by a significant proportion of the industry. It provides sufficient product choice to service the majority of Australian business needs. Additionally, certified products deliver measurable benefits with no performance penalty and ensure minimum environmental performance criteria along with optional best practice criteria that provide an opportunity for recognition of best practice performance.

The EPEAT (available online at www.epeat.net) is a procurement tool that allows the comparison and selection of desktops, laptops and monitors based on environmental attributes. The EPEAT tool was developed as a product stewardship project of the Zero Waste Alliance under a grant from the United States of America Environmental Protection Agency and is administered and managed by staff from the Green Electronics Council. EPEAT was developed over a three-year period in an extensive consensus based process that included representatives from environmental groups, government officials, large volume computer purchasers, subject matter experts, electronics recyclers, and manufacturers. It is comprehensive in that it addresses key environmental considerations over the lifecycle of ICT products and provides consistent environmental criteria for comparison.

Desktops, laptops and monitors: Summary of sustainability impacts and responses

	Issue	Response
Design	The resources required for routine maintenance, forced disposal of non-upgradable or non-reusable desktops, laptops and monitors and poor environmental outcomes at disposal.	Procure desktops, laptops and monitors designed to be easily maintained, upgraded, reused and recycled. As a minimum the products procured should be: • upgradeable with common tools • easily disassembled • modular in design • contain a minimum 65 per cent reusable/recyclable.

	Issue	Response
Materials and manufacturing	The use of hazardous substances and heavy metals in the desktops, laptops and monitors affects workers involved in manufacturing and disposal of the products, and may limit the options for end-of-life management of desktops, laptops and monitors.	Procure desktops, laptops and monitors produced with a minimal amount of hazardous constituents, from companies that implement socially and environmentally aware practices and policies. As a minimum the products procured should meet the following requirements: • mercury eliminated from light sources • batteries used are free of heavy metals including lead, cadmium and mercury. Manufacturers and suppliers should comply with the International Labour Organisation (ILO) core framework.
Packaging and transport	**Packaging** Packaging utilises resources and generates environmental impacts during its production. Packaging may also contain toxic substances and create pollution problems if not disposed of correctly. **Transport** Transportation of desktops, laptops and monitors utilises fuel and generates greenhouse gases to the atmosphere.	Procure desktops, laptops and monitors that minimise their environmental impact through the nature and design of the packaging and the resources required for transport. As a minimum the products procured should have: • reduced or eliminated the addition of toxins in packaging • recyclable packaging • reduced volume of packaging • all packaging re-used or recycled • packaging designed to minimise resources required for transport.
Operational use	During operation desktops, laptops and monitors consume energy and other resources. Premature disposal of desktops, laptops and notebooks also contributes to waste of resources.	Procure desktops, laptops and monitors that minimise the consumption of resources by being eco-efficient and offering an extended useful life. As a minimum the products procured should: • be Energy Star compliant • have additional warranty available • have replacement parts available post model production.

	Issue	Response
End-of-life management	Inappropriate and irresponsible disposal of desktops, laptops and monitors wastes resources utilised to manufacture the product, contributes to landfill and can cause adverse social and health impacts due to exposure to hazardous materials contained in products.	Procure desktops, laptops and monitors from manufacturers/suppliers who ensure responsible recycling and disposal of equipment at the end of its useful life. As a minimum, the products procured should be covered by a take-back scheme and the product supplier should provide detailed reporting of disposal outcomes.

Suggested criteria

Desktops, laptops and monitors

The following specifications addresses the issues identified in the **Summary of sustainability considerations table (above)** and ensures that the procurement of desktops, laptops and monitors is designed to improve the environmental and social impacts associated with their manufacture, use and disposal.

Minimum performance criteria	Best practice performance criteria

Minimum specification:
 	
1. Offerors are required to meet the following specifications, to demonstrate compliance with the minimum requirements identified in the summary table (above):
  • products must be registered and certified to EPEAT silver standard
  • offerors must be signatory to Australian National Packaging Covenant
  • offerors must meet additional packaging requirements outlined below:
    – multi-packs for bulk orders
    – removal of excess CD/DVDs and documents
  • offerors must demonstrate that the manufacturers and suppliers of the product components are compliant with the ILO core framework and certified to SA 8000 or an equivalent.
 	
2. Offerors are required to meet the following specifications, to demonstrate compliance with the minimum requirements identified in the summary table (above):
  • products must be registered and certified to EPEAT silver standard
  • offerors must be signatory to Australian National Packaging Covenant
	Best practice specification:
	
	1. Offerors are required to meet the following specifications over and above the minimum specifications, to demonstrate that the sustainability performance exceeds the minimum requirements identified in the summary table (above):
	  • products must be registered and certified to EPEAT gold standard
	  • noise emissions for the offered products must be compliant with the requirements of a Type I ecolabel such as Blue Angel, Nordic Swan, GECA or equivalent, and evidence of compliance provided.
	
	2. Throughout the term of the arrangement, the successful offeror will be required to provide an end-of-life take-back scheme for all offered products and auditable reporting of product disposal outcomes.
	
	The offeror must provide an end-of-life take-back guarantee and must demonstrate that there are arrangements in place to re-use, recycle and/or dispose of waste.

Minimum performance criteria	Best practice performance criteria

• offerors must meet additional packaging requirements outlined below:
  – multi-packs for bulk orders
  – removal of excess CD/DVDs and documents
• offerors must demonstrate that the manufacturers and suppliers of the product components are compliant with the ILO core framework and certified to SA 8000 or an equivalent.
 	
3. Throughout the term of the arrangement, the successful offeror will be required to provide an end-of-life take-back scheme for all offered products and reporting on product disposal outcomes.
 	
The offeror must provide an end-of-life take-back guarantee and must demonstrate that there are arrangements in place to re-use, recycle and/or dispose of waste.
 	
Offerors are required to disclose any special provisions/conditions/exclusions in relation to this scheme.
 	
4. Offerors are required to disclose any initiatives/ strategies implemented to reduce the environmental impact of product packaging at end-of-life. This may include initiatives to collect the packaging supplied with the offered products and/or reuse the packaging materials.
 	
If the offeror is providing a packaging take-back service, they must disclose how the collected packaging will be managed and whether the packaging is recycled locally.
 	
5. Offerors are invited to provide advice regarding technology that may enhance the organisation's immediate or future sustainability initiatives.
 	
6. Offerors are required to provide products compliant with the following standards:
• ISO AS 14001:2004
• ISO AS 4801:2001.
	Offerors are required to disclose any special provisions/conditions/exclusions in relation to this scheme.

> **Contract performance clauses**
> 1. All new products offered under the arrangement must be compliant with the specified EPEAT standard.
> 2. The contractor is required to provide quarterly reporting on:
>   - disposal outcomes for all products collected under the take-back scheme (e.g. volumes recycled)
>   - volume of product packaging recycled and/or reused
>   - volume of waste sent to landfill.
>
> References: 1, 2, 3, 4 (see *References*, below).

Integrating sustainable procurement throughout the procurement process

Sustainability considerations should be incorporated at every stage of the procurement process. Prior to incorporating any specifications or information contained within this guide:

- consider the specific market conditions and organisational needs prior to deciding if and where to apply these criteria

- document the options and decisions for how sustainability will be addressed in a plan for significant procurement or a business case.

Procurement planning

Demand analysis

Rethinking the need for a purchase can help avoid unnecessary consumption.

Consider both the 'need' for the ICT product. For example:

- explore opportunities to not buy:
    - extend the 'useful life' of products (e.g. revise the automatic replacement dates from three to four years, or greater if circumstances allow)
    - are there opportunities to reuse or upgrade existing ICT products
    - is there access to redundant ICT products either within the agency, groups of agencies or whole-of-Government
    - can the quantity of the products procured be reduced whilst achieving the same output, through job or desk sharing.
- increase standardisation of configuration and limit the model range for ease of redistribution, repair, reuse and replacement
- utilise standardised connectivity to facilitate multiple use, replacement and repair
- ensure that the product and its components are reused, recycled and disposed of effectively by requiring that the clients/end-users are utilising the product take-back scheme provided by the supplier
- ensure the agency's asset management plans and asset disposal policies clearly address sustainability impacts, as well as measures to improve sustainability outcomes through demand management and sustainable end-of-life disposal of products
- consider procedures and behavioural and cultural changes that can support improved sustainability outcome, for example:
    - users being required to turn off equipment for prolonged periods of non-usage
    - users being made aware of disposal impacts of electronic equipment and the required disposal procedures

– activating power saving features by default within the Standard Operating Environment (SOE).

Supply market analysis

Collect information to identify the capacity of the supply chain to deliver the products in accordance with sustainability requirements.

Use the sustainability issues identified in this guide to develop a pre-tender questionnaire that will help lead discussion with suppliers.

Conduct pre-tender supplier briefings in order to:

- engage potential suppliers, identify existing sustainable suppliers and develop an overall understanding of the market's sustainability performance and capability

- determine whether the recommended minimum performance criteria identified in this guide are sufficient or if the best practice performance criteria would be more suitable.

Identify opportunities for collaboration between government and industry/specific suppliers in relation to sustainability issues contained in this guide.

Supplier engagement

The criteria in this guide can be used to develop requirements in the invitation to offer documents, as follows:

- minimum performance criteria for ICT products may be set as mandatory specifications
  - ensure that 'mandatory' requirements are able to be delivered by the majority of potential suppliers as those who do not meet the mandatory specifications are not evaluated during the tendering process.

- best practice performance criteria for ICT products may be set as desirable specifications
  - these criteria relate to industry leaders in the sustainability field and therefore it is unlikely that all suppliers will be able to compete on this level
  - best practice performance criteria provide a market for more sustainable products
  - specifying for best practice may incur a price differential. Identify whether or not there is a price differential in the upfront cost and whether ongoing savings maybe realised over the life of the product (e.g. where the price of the product includes costs for end-of-life take-back and sustainable disposal of the product).

- a full value for money assessment should be undertaken. The whole-of-life environmental, social and economic gains that derive from improved sustainability outcomes may warrant an increased upfront cost. This may occur where the up-front cost of procuring an energy efficient ICT product is higher. Whilst energy-efficient machines have an increased upfront cost compared with standard hardware, over the life of each machine, savings from the reduced energy consumption may result.

Managing supply arrangements

Key performance indicators (KPIs) are an effective tool to ensure suppliers implement progressive sustainability improvements during the term of the arrangement. For example:

- if at the specification development stage it is determined that the potential supplier does not have a capability or capacity to meet a particular sustainability requirement at that point in time, the sustainability criterion may be set as part of KPIs.

- best practice criteria that are set as KPIs could be used to progress a supplier towards best practice via continuous improvement over time.

Reporting and measurement

Contract reporting requirements should specifically demonstrate the environmental and social benefits achieved by procuring more sustainable products.

Incorporate sustainability reporting requirements into contract/arrangement terms and conditions.

Measurements of sustainability performance for ICT products could include:

- expected reduced energy use

- dollar spend on EPEAT Gold and EPEAT Silver products (this can be converted to environmental outcomes through the EPEAT calculator)

- reduced volumes of waste to landfill (e.g. tonnage of packaging recycled or reused)

- volumes of metals and resources recovered through recycling

- reduced hazardous substances content

- improvements in sustainable design.

References

1. EPEAT criteria (IEEE Standard 1680 – Section 4: Environmental performance criteria), 2006.

2. Local Governments for Sustainability for the United Nations Environment Programme (UNEP)-Division of Technology, Industry and Economics, Sustainable procurement guidelines for office IT equipment (basic and advanced), 2008.

3. Responsible Purchasing Network, Responsible Purchasing Guide-Computers, 2008.

4. European Union Green Public Procurement (EU), IT equipment product guide, 2008.