

Environmental Purchasing Checklist

Dishwashers

This checklist suggests environmental criteria for use by Australian Government departments and agencies in purchasing dishwashers. It is anticipated that environmental criteria will be considered together with price, quality and other purchasing criteria in accordance with the [Commonwealth Procurement Guidelines and Best Practice Guidance](#). The checklist also provides tips for purchasers and users and links to further information. Purchasers may choose to amend the criteria and specifications to meet their own requirements.

WHAT ARE THE ENVIRONMENTAL ISSUES?

All products or services have some impact on the environment, which may occur at any or all stages of the product's life cycle – raw material acquisition, manufacture, distribution, use and disposal. This checklist focuses on the environmental impacts that may be relevant to purchasers of dishwashers. A dishwasher consumes energy, water, and detergent. This creates environmental effects, such as greenhouse gas emissions, air pollution and water pollution. An efficient dishwasher can reduce your use of energy, water and detergent, and can save you money.

KEY AUSTRALIAN GOVERNMENT POLICIES

The [Commonwealth Procurement Guidelines and Best Practice Guidance](#) state that the core principle governing Australian Government procurement is value for money, a concept evaluated on a whole of life basis of the goods or services being procured. Officials buying goods and services need to be satisfied that the best possible outcome has been achieved, taking into account all relevant costs and benefits over the whole of the procurement cycle.

According to the [Commonwealth Procurement Guidelines and Best Practice Guidance](#), “officials should be aware of any relevant environmental legislation and targets set by the Commonwealth, and ensure they take into account matters affecting the environment ... when formulating requirements. They should include relevant environmental criteria in specifications and requests for tender.”

The [Australian Government Energy Policy](#) “Measures for Improving Energy Efficiency in Commonwealth Operations” requires:

- all new appliances to have 2-star or better Energy Rating under the Appliance Energy Efficiency Rating Label Scheme.
- tenant's light and power use in office buildings to achieve a target of 10,000 MJ per person per year by 2002

Sustainable use of water is a fundamental tenet of the [National Strategy for Ecologically Sustainable Development](#) and the [Environment Protection and Biodiversity Conservation Act 1999](#).

SUGGESTED ENVIRONMENTAL PURCHASING CRITERIA FOR DISHWASHERS

Give consideration to dishwashers ...	Comments
<p>... having an energy rating of at least two stars, and preferably more. (A few 4 star very efficient dishwashers are available (in May 2002); there is a wide choice among models with 3.5 and 2.5 stars).</p>	<p>Specifying a dishwasher that gets at least 2 stars, and preferably more, may reduce your energy use by more than 200 kilowatt-hours per year.</p>
<p>... having AAA water rating.</p>	<p>This will ensure water efficiency and reduce the amount of detergent needed.</p>
<p>... with capacity suited to the expected loads to be washed.</p>	<p>Some dishwashers can handle small or partial loads, reducing water use to suit.</p>
<p>... having an economy or eco operating mode that allows dishes to air dry without extra heating.</p>	<p>Some options offered by different models can greatly reduce energy use.</p>
<p>... with low operating noise levels.</p>	<p>The noise of a dishwasher may be distracting if offices are located nearby. Ask manufacturers to provide information on operating noise levels because models vary. A <i>Choice</i> magazine test in 2001 found noise levels during the normal cycle ranged from 46 to 58 decibels (dB) for different models.</p>
<p>... with low environmental impact packaging.</p>	<p>See Packaging checklist.</p>
<p>... from companies that document additional environmental benefits of their products or superior environmental performance of their companies.</p>	<p>Documentation for products could include external verification of claims, e.g., certification of the product through a reputable environmental labelling program. (Imported products may be certified under an overseas program.) Documentation for companies could include environmental management systems certified to ISO 14001, public environmental reporting, Design for Environment (DfE) policies etc.</p>

TIPS FOR PUCHASERS

You can require suppliers to include the take back of all packaging in their bids and specify how they dispose of that material.

You can request that suppliers specify what, if any, recycled content is used in the dishwasher.

You may also wish to specify a particular water efficiency range in which all bids must fall.

A mandatory national scheme for water efficiency labelling of appliances is currently under development. See <http://www.ea.gov.au/water/urban/scheme.html>

TIPS FOR USERS

You could post a sign near the dishwasher with tips for efficient use:

- Fill up the dishwasher before operating; it takes the same amount of energy and water to wash a few dishes as a full load.
- Place dishes directly into dishwasher; pre-rinsing is normally not necessary
- Select the lowest temperature or shortest running program on your machine that will satisfactorily wash the load. Be aware that some “quick” programs may use more water than an “economy” cycle.
- Eliminate the drying cycle by choosing an economy or eco mode, which lets the dishes air dry without extra heating.
- Use the minimum amount of detergent and rinse aid that will produce clean dishes. Detergents take substantial amounts of energy to manufacture; they are derived from petroleum and many other chemicals. They also contribute significantly to water treatment loads.

SUCCESS STORIES

The Communications Centre adjacent to the John Gorton Building in Canberra is being refurbished by the Department of the Environment and Heritage in order to provide a high quality working environment for the Australian Greenhouse Office. The refurbishment will be a leading example of environmentally sustainable development and will set new benchmarks for energy consumption and environmental performance in refurbished office space. The dishwashers chosen for the fit out are a single dish drawer, with a 3 star energy rating that uses approximately 9 litres per wash and as little as 7.5 litres in economy mode.

Further success stories can be found at the [Greening of Government website](#).

LINKS TO FURTHER INFORMATION

The **Greening of Government** website provides the policy framework for Greening of Government, as well as a range of Green Procurement Tools and other useful information.

<http://www.ea.gov.au/industry/sustainable/greening-govt/index.html>

Choice magazine and **Choice Online** provides useful information about dishwasher features and operation, as well as covering energy efficiency aspects (requires paid subscription): <http://www.choice.com.au/>

Energy label website contains star ratings of all dishwasher models.

<http://www.energyrating.gov.au/consumers/con1.html>

Design for Environment - Reducing environmental impacts through better design (such as using less toxic components, or making the product easier to disassemble and recycle or reuse) is referred to as Design for Environment or DfE. Many manufacturers, suppliers and industry associations may be able to provide information on their DfE activities. The Department of the Environment and Heritage has an introduction to DfE in business available at <http://www.ea.gov.au/industry/finance/publications/producer.html>

Environmental Specification

Dishwashers

Purchasers should request information from potential suppliers at the time of requesting a quotation. This environmental specification is intended to provide assistance in obtaining environmental data from suppliers. The information that would be requested from suppliers is shown in the Information required column. Items in this specification are based on criteria in the Environmental Purchasing Checklist for Dishwashers.

Consideration will be given to products ...	Information required from companies	Weighting (total= 100%)
... having an Energy Rating of at least two stars, and preferably more.	Identify the Energy Rating of the dishwasher.	Required by Australian Government Energy Policy
... with low energy use.	List the energy consumption of the dishwasher in all operating modes.	25-35%
... having AAA water rating.	Identify the water rating of the dishwasher and specify water use in all operating modes. Specify the amount of detergent recommended for use in all operating modes.	10-20%
... with capacity suited to the expected loads to be washed.	Specify the capacity of the dishwasher. Provide details on ability to wash small or partial loads with reduced energy and water consumption.	5-15%
...having an economy or eco operating mode that allows dishes to air dry without extra heating.	Provide details, including energy and water consumption for all economy operating modes	10-20%
... with low operating noise levels.	Identify the maximum ambient noise levels during the normal program, measured 1 m away from the machine and 1 m above the ground.	5-15%
... with low environmental impact packaging (this criterion to be used only where packaging is significant)	List the types of packaging used in delivering your product, including bulk delivery packaging. Specify:	5-15%
	<ul style="list-style-type: none"> the total weight per unit product, the proportion of recycled material used, and 	
	<ul style="list-style-type: none"> whether the packaging can be recycled locally. 	
	State whether you will take back the packaging after delivery for reuse or recycling.	

	Describe any disposal advice provided on your product packaging, including the size, location and colour of the advice notice.	
	Specify whether your packaging includes any loose fill material.	
	Specify whether your company is a signatory to the National Packaging Covenant . See http://www.ea.gov.au/industry/waste/covenant/signatories.html	
... from companies that document additional environmental benefits of their products or superior environmental performance of their companies.	Provide appropriate documentation to support any environmental claims made.	5-15%