

# Shop Smart Buy Green

A consumer's guide to saving money  
and reducing environmental impacts





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# Foreword



Through simple actions all Australians can make a positive contribution to improving our natural environment. As our understanding of critical environmental issues such as salinity, and global warming increases, so does the breadth and depth of available solutions allowing us to minimise our individual impacts. Australians have significantly reduced household water consumption—which makes up about 60 per cent of all urban water consumption—by simply installing and using dual flush toilets. Effective solutions like this are often a direct result of governments, industry and the wider community working together.



Products that have been designed with the environment in mind, such as an energy efficient fridge or washing machine, or a recycled plastic worm farm or compost bin, play an important role in improving Australia's environment, often resulting in financial savings for both the manufacturer and consumer.

One of the difficulties we all face as consumers is knowing how to identify and to evaluate a product's environmental performance. With the release of *Shop Smart, Buy Green: A Consumer's Guide to Saving Money and Reducing Environmental Impacts*, and its sister publication *Product Innovation—the Green Advantage: An Introduction to Design for Environment for Australian Business*, Environment Australia is providing valuable tools that will help all of us to recognise the benefits from buying and using environmentally responsible products.

I hope you find this booklet valuable and that it allows you to more fully incorporate environmental considerations into your purchasing decisions.

A handwritten signature in blue ink that reads 'Robert Hill'.

SENATOR ROBERT HILL

Minister for the Environment and Heritage



# Contents

Foreword	i
About this booklet	1
Why shop smart and green?	2
How to shop smart and green	5
Understand the environmental impacts of what we buy	5
Consider other options before purchasing	8
Make the best choice for the environment and ourselves	8
What is it made from?	9
How was it produced?	11
How is it packaged?	12
Where was it produced?	14
How efficiently does it work?	14
Can it be repaired?	17
How will it be disposed of?	18
Seeking information—how to contact industry	19
Moving towards a more sustainable future	21
Purchasing checklist	22
How to use the checklist	22
Product Assessment Checklist	25
Resources and contacts	31
Publications	31
Consumer organisations	32
Product information	32
General information	33

## About this booklet

Many of us are concerned about environmental problems facing the planet and want to know how we can make a difference.

The good news is that Australian consumers are taking environmental action in many areas, including reducing waste by recycling, composting and bringing home less packaging with our shopping. These activities all make a positive difference to our environment. However, we can do more by simply incorporating environmental considerations into our purchasing decisions.

Companies in Australia and overseas are now designing a huge variety of products—from cars and white goods to office paper and toothbrushes—which use fewer natural resources and less energy during their manufacturing, distribution, use and disposal. These companies are working in partnership with governments and other organisations to ensure we can all live more sustainably.

As consumers, we can encourage this trend by purchasing products that have been designed with the environment in mind. The good news is that choosing the best product for the environment will usually save us money as well!

This booklet is designed to help consumers understand the environmental impact of products we buy by showing us how to consider environmental impacts throughout a product's life cycle, that is its manufacture, transport, use and disposal. To assist us in choosing greener products, it includes a handy checklist, toolboxes with practical tips, hints for contacting companies and a detailed resources section.

For further information, contact:

Community Information Unit, Environment Australia

**1800 803 772**



## Why shop smart and green?

Most of us have heard about problems such as air and water pollution, loss of our native plants and animals, climate change (the enhanced greenhouse effect) and land degradation. There is a link between our consumption, the products we use everyday and these environmental problems.

We are one of the largest producers of waste per head of population, second only to the United States, sending a total of more than 18 million tonnes to landfill every year. This waste represents a loss of natural resources, which increasingly can be reused or recycled to benefit both consumers and producers, and the environment.

We are also one of the world's highest per head of population producers of greenhouse gases, of which approximately one-fifth—more than 15 tonnes per household each year—is generated by Australian households through everyday activities such as transport, household energy use and household waste decaying in landfills (see Figure 1—Household greenhouse gas emissions on page 4).

Our challenge is to maintain a high standard of living while reducing these impacts on the environment. This challenge is acknowledged worldwide, and is described as the move towards 'sustainability', which is simply living within the planet's means. For us to truly live sustainably, we need to make sure the stock of natural resources, including the quality of our land, air and water, is maintained or even improved for future generations—our children, grandchildren and those coming after them.

There are several ways to reduce our impact. We can examine our day-to-day consumption behaviours and modify these to use less. For example, we can reduce our car usage through a little forethought—by walking or cycling where appropriate, by using

public transport, or by consolidating several car trips together. These simple changes can lead to a significant reduction in our environmental impact.

Another approach is through the products that we buy. We can help reduce pollution and waste and improve the quality of Australia's land, water and air by minimising our energy consumption, through using energy efficient products, such as refrigerators and washing machines and fuel-efficient cars. We can also contribute by choosing to use products, such as office paper and furniture that have been made from recycled materials. Shopping smart and green is good for the environment and often saves us money as well.

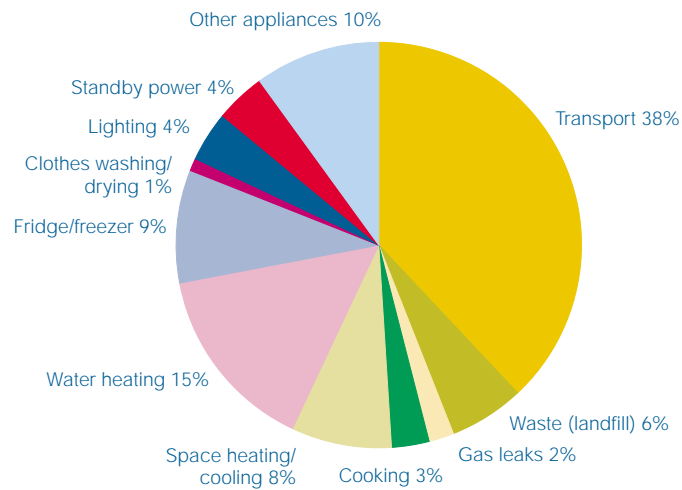
As consumer demand grows for products which are more environmentally sound, industry is encouraged to explore the options to greatly improve its environmental performance, and hence to reduce our impact on the environment even further:

*In manufacturing, transportation, forestry, construction, energy, and other industrial sectors, mounting empirical evidence suggests that radical improvements in resource productivity are both practical and cost-effective, even in the most modern industries. Companies and designers are developing ways to make natural resources—energy, metals, water, and forests—work five, ten, even one hundred times harder than they do today.*

Source: Hawking, P., Lovins A. and Lovins L.H. 1999, *Natural Capitalism: Creating the Next Industrial Revolution*, Boston, USA.



Figure 1: Household greenhouse gas emissions



Source: Australian Greenhouse Office 2000, *Global Warming Cool It*, Commonwealth of Australia, Canberra.

How can we shop more sustainably? We need to:

- understand the environmental impact of what we buy;
- consider other options before purchasing; and
- make the best choice for the environment and ourselves.

## Understand the environmental impact of what we buy

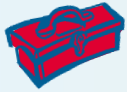
Most of the time we don't consciously make the link between our everyday lives and the environment. The fact is that everything we eat, buy, wear and use has come from the natural environment, including manufactured goods, such as televisions, cars and microwave ovens.

Even though we may live very sophisticated lifestyles, seemingly far from "nature," we rely on the environment to provide clean air, water, food and shelter, or in other words, the fundamental life support systems we need to survive and prosper.

The environment can be affected at all stages in the life cycle of a product—through the materials it's made from; the way it's manufactured, packaged and transported; how we use it in our homes; and the way it's recycled or disposed of (see Toolbox—Life cycle of a product on page 6).

While we may not always be able to find out all the impacts of certain products, it's important to be familiar with the link between our consumption and the environment. This allows us to make a difference through shopping smarter and buying greener.

Remember that it makes sense, financially and environmentally, to buy products designed to have low environmental impacts. Some companies now make these products and with increased consumer demand more companies will follow.



## Toolbox Life cycle of a product

Every product goes through a series of stages, known as its life cycle. These stages typically include material extraction and processing, manufacturing, packaging and distribution, product use, and disposal of the product. These are represented in Figure 2 opposite.

### Why is the life cycle concept relevant to the environment?

Essentially, all environmental impacts of a given product can be traced back to the resources that go into the product (energy, raw materials, water and land) and the waste generated (emissions to air, water and land) at each stage in the life cycle.

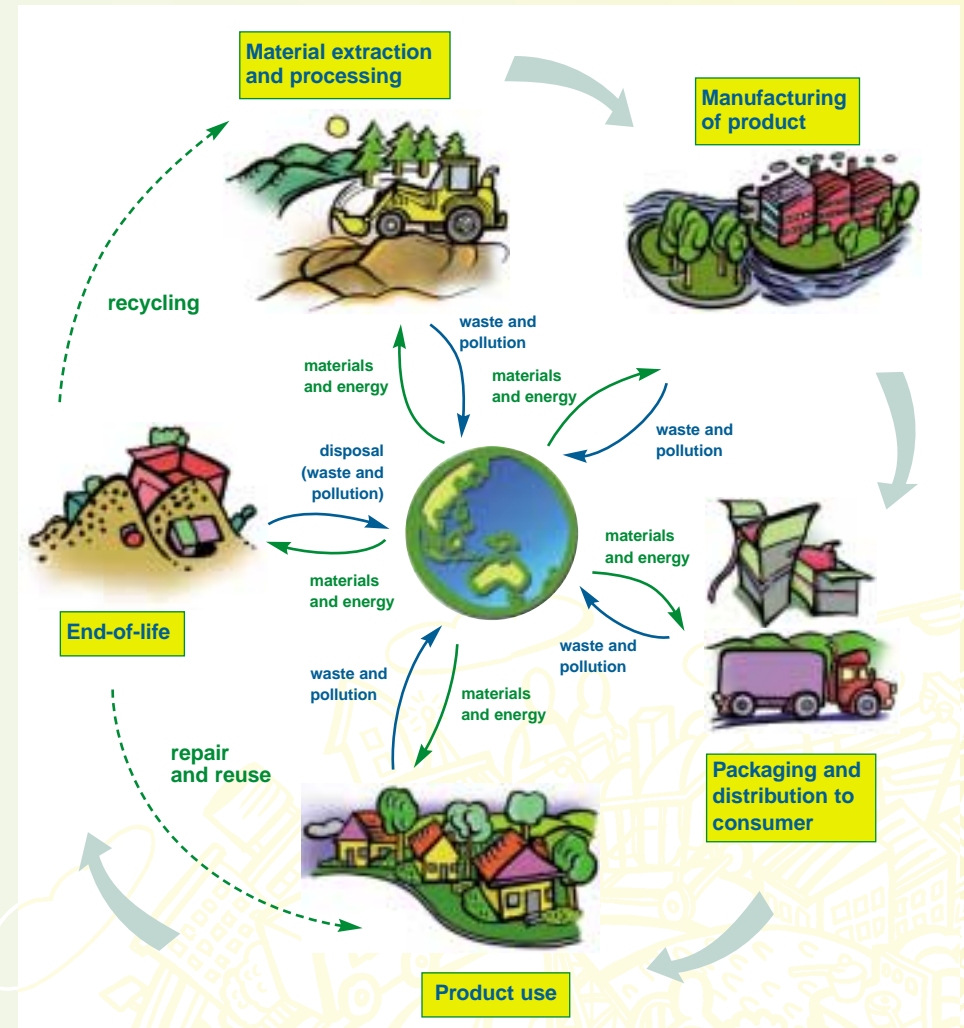
### Why is the life cycle concept relevant to consumers?

Understanding where a product's environmental impacts are most likely to occur allows us to see where we can make a difference.

As consumers, the stages where we are most able to directly reduce environmental impacts are use (by purchasing resource-efficient products) and end-of-life (by carefully considering how to dispose of the product). However, we can also encourage companies to improve the environmental performance of the other stages of a product's life cycle.

Figure 2 shows how the products we buy have environmental impacts at different stages of their life cycle.

Figure 2: Life cycle stages of a typical product



## Consider other options before purchasing

Knowing that every product we buy will affect the environment, it's worth asking ourselves the following questions before we decide to purchase a product.

- ? Do I really need it?** If the answer is "yes", then the following questions can be asked:
- ? Can I borrow it ?** for example, something only used occasionally, such as a tent.
- ? Can I share it?** for example, a lawn mower which could be shared with family or neighbours.
- ? Can I rent/lease it?** for example, power tools used for a home renovation or garden project.
- ? Can I buy it second hand?** for example a recycled or second-hand product, perhaps from a garage sale, local market or second-hand store.



## Make the best choice for the environment and ourselves

Once we have decided that we do indeed want or need to buy a product, it's time to look at how to make the best choice for the environment and ourselves.

The information on the next few pages gives some useful background on how to choose the best product, based on life cycle considerations. The checklist at the back of this booklet is the practical tool to help us apply this information.



## What is it made from?



It's not always easy to find out which materials a product has been made from and which have the lowest environmental impacts. However, manufacturers are increasingly including information about materials on product labels, and direct contact with manufacturers can often provide us with useful information. Consumer and environment groups often have lists of products which have the lowest environmental impact. In some cases, producers and environment groups are working together to ensure that material use is sustainable.

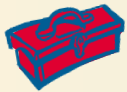
It's a good idea to avoid products made from hazardous materials—stay in touch with consumer groups and media reports about such items. Remember that products made from recycled materials—for example paper and cardboard, aluminium, steel, and some plastics—have usually minimised their impact at this stage of the life cycle.

## Made from recycled plastic

Some companies are now making products from 100 per cent recycled plastic. For example, you can buy compost bins and worm farms that are made from recycled polypropylene, which comes from car batteries, milk crates and industry scrap. They are safe to use and save thousands of tonnes of waste plastic from ending up in the tip.

Innovative Australian furniture companies have started designing furniture with recycled plastic shells. These products are not only stylish and reduce the demand for virgin material, they are also easily recycled at the end of their life—an all round win for us and the environment.





## Toolbox The best raw materials options

Look for the following information:

- % recycled (e.g. on paper products)
- Unbleached (e.g. on paper products)
- Made from recycled plastic
- Made from sustainably managed timber (e.g. on wooden products)
- Recycled content (for metals and plastics)

Check out the *Buy Recycled Guide*, produced by NSW Waste Boards, for a large range of products made from recycled materials (see Resources and contacts at the end of this booklet).



## How was it produced?



The manufacturing process itself can cause environmental impacts. However, simple changes to processes can often reduce these impacts significantly. We can ask whether the manufacturer has tried to improve the production process to use less energy, materials and water, or create less waste. We can ask whether the producer has tried to minimise the variety of materials, reduced the number of components, or simplified assemblies. These measures, as well as reducing the product's weight will all have an environmental benefit. Improving environmental performance also usually means lower costs for the producer, so it's a win-win situation.

Even if direct information about manufacturing processes is not available, there are programs that companies can join to assist them in reducing their overall impacts. Some companies include ISO 14001 certification on product labels—this means they have set goals to improve their environmental performance and have a system in place to meet these goals. Other companies may have public environment reports available with details of their programs for environmental improvement. These reports often contain data about a company's environmental performance, targets and useful contextual information.

In Australia, some companies have joined the Federal Government's Greenhouse Challenge, a voluntary program in which participating companies reduce their level of greenhouse gas emissions. A list of signatories to the Greenhouse Challenge is available at <http://www.greenhouse.gov.au/>.







## How is it packaged?



Packaging, particularly for smaller products, is a major cause of household waste. Increasingly manufacturers and retailers are getting the message that we want only essential packaging. By choosing the product with the least packaging we can reinforce that message.

We can also ask manufacturers or retailers about returning some packaging—for example, retailers will often take back large cartons and bubble wrap which they can reuse. We need to ask about this before having the product delivered.

### Cutting back on packaging

There are a number of initiatives which are working to cut back on packaging. The National Packaging Covenant is a partnership between industry and government. It aims to minimise the environmental impacts of packaging waste throughout the entire life cycle by encouraging packaging reduction and developing systems to collect waste for reuse and recycling.

Manufacturers are involved in the Covenant through voluntary agreements that encourage:

- reducing the amount of packaging;
- packaging take-back schemes; and
- greater recyclability of packaging.

For more information see:

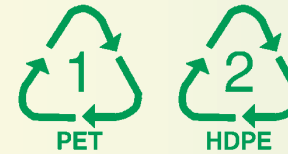
<http://www.environment.gov.au/epg/covenant/index.html>

## Toolbox

### Which plastic packaging can be recycled?



Many plastic containers have a circular recycling symbol and a number. However, just because a plastic has a recycling symbol doesn't always mean there are recycling programs for it in Australia.



The numbers 1–7 are a code to identify the plastic polymer type. Plastics numbered 1, 2 and sometimes 3 are usually recycled by local councils. Plastics numbered 4–7 are often not recycled. Check with your local council to see which are recyclable.



## Where was it produced?



Transporting a product has an environmental impact too. The further a product is transported, the more fuel used. This contributes to air pollution and greenhouse gas emissions. Products made locally will usually have the lowest transport impact, while imported products will generally have the highest impact. Where possible we should choose locally or Australian-made products.



## How efficiently does it work?



It's now possible to check how efficiently a wide variety of products use electricity, gas, water, petrol and diesel. Remember a more efficient product will cost less to run and have lower environmental impacts at this stage of its life cycle.

Different environmental rating systems are used for whitegoods, appliances that use gas and water, and cars. These labels allow us to easily compare environmental performance and to choose the most efficient product (see Toolbox—Rating systems on page 16). If there isn't a rating system on a product, ask the retailer or manufacturer for more information on the product's efficiency.

## How much energy can we save?

Australians spend, on average, about \$1,500 per household on energy (electricity and gas), and approximately \$6600 on transport (mostly on car use) each year.

Around 90 per cent of electricity in Australia comes from burning fossil fuels such as coal, which release greenhouse gases into the atmosphere. By choosing products wisely, you can save money on running costs and reduce the environmental impacts.

For example:

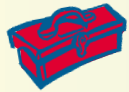
- installing an AAA-rated energy-smart shower head will save an average household up to \$100 annually on water and energy bills, and reduce greenhouse gas emissions by up to one tonne per year;
- installing just one energy-efficient compact fluorescent light bulb will save around \$50 on energy bills and half a tonne of greenhouse gas over the bulb's lifetime;
- if you buy only efficient whitegoods with top star ratings, you can save up to \$1400 and 14 tonnes of greenhouse gas over a product's life of 10 years;
- a large refrigerator (540 litres) can release up to 11 tonnes of greenhouse gas over its lifetime and cost \$1100 to run but if the fridge has one of the top star ratings available, it will save you up to \$450 and 4.5 tonnes of greenhouse gas over its lifetime; and
- a reduction in car fuel consumption of 1 L/100km could save consumers about \$135 and reduce greenhouse gas emissions by approximately 350 kilograms each year.



## How much water does a household use per day?

Many people think it's only a few litres, but the average Australian household uses between 700 and 1100 litres per day. Saving water not only saves money, but if we all use less water, public funds need not be diverted to new essential infrastructure such as dams and sewerage treatment systems.

There are many ways that water can be saved in the home, for example, dual flush toilets have a low average flush volume, about one quarter of the average single flush (11 litres). They can reduce the water usage of a family of four by as much as 225 litres each day.



### Toolbox Rating systems

#### Energy rating labels

It's now compulsory for manufacturers to put energy rating labels on dishwashers, airconditioners, refrigerators, freezers, washing machines and clothes dryers. The label has a number showing the kilowatt hours the appliance uses per year and a star rating. The more stars (up to six), the more energy-efficient the appliance.

Be aware that the star rating only compares appliances of similar sizes. A large appliance with a high number of stars will be energy-efficient for its size. However, it may still use more energy than a smaller appliance. So decide first on the size of appliance you need and then compare star ratings and the kilowatt hours of energy used each year.

There is a gas energy rating label that shows gas efficiency for room heaters, ducted heating systems and water heaters. This label also displays a star rating (up to six) and a figure showing the average gas consumption.

## Water conservation labels

There is also a voluntary rating scheme to show the water efficiency of products such as shower heads, dishwashers and washing machines. Products that have been tested to the relevant Australian Standard can display a Water Conservation Rating label with up to three As. The more As, the more efficiently the product uses water.

## Fuel consumption labels

The new fuel consumption label is required to be displayed on the windscreen of all new vehicles up to 2.7 tonnes—including passenger vehicles, four wheel drives and light commercials—sold in Australia. This label includes a number which represents the average number of litres used per 100 kilometers traveled, allowing for the comparison between different makes and models. The lower the number on the label, the less fuel the car uses.



See Resources and contacts for more details on these labels.



### Can it be repaired?

Choose long-lasting and easy-to-repair products. Find out if the product can be easily and cheaply maintained and repaired and how long it is likely to last. Does it come with a guarantee? The length of the guarantee is often an indication of the durability of the product, how easy it is to repair, and the company's commitment to environmental improvement.



## How will it be disposed of?



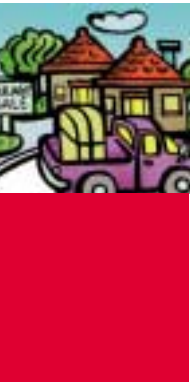
Before buying a product, we need to think about how it will eventually be disposed of. This is where we come back to the familiar three Rs—reduce, reuse, recycle.

Products thrown away add to the amount of waste going to the tip. Some products can take many years to break down and can cause toxic substances to escape. Throwing them out can also be a huge waste of valuable materials and resources.

**Is the product really at the end of its life?** Could someone else use it? Could it be sold or given to a charity.

**Can the product be remanufactured?** Some companies take products back and recondition them so they can be used again. This information should be available at the point of sale.

**If it can't be reused, can it be recycled?** Some products can be taken apart and components recycled for other uses. Look for products that are recyclable—they tend to have fewer materials and may be stamped or embossed with recycling information, such as the numbered recycling symbols found on different plastics.



## Toolbox Reduce, reuse, recycle

Steps in cutting out waste are:

- **Reduce**—if we generate less waste in the first place, there are fewer problems to deal with later.
- **Reuse a product several times**—finding new ways to use it can significantly reduce waste.
- **Recycle as much as possible**—an important way of limiting the amount of waste going to rubbish tips.

## Seeking information how to contact industry



Don't be afraid to ask companies for information about their products or to tell them what you'd like to see changed or improved, about their products. After all, they need to make products we want, or they won't stay in business.

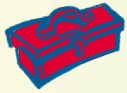
The things we buy and the comments we make to companies play a major role in their decisions about what products to make and sell.

If we can't find products with low environmental impacts, we can start requesting them from manufacturers. Directly contacting companies can be a powerful way of moving towards a better quality of life for us and reducing our impacts on the environment.

We can phone, email or write to companies with questions, praise or complaints. Some companies consider that one phone call represents the views of several hundred customers, while a letter represents the views of significantly more!

If we are making a specific complaint about a product or service and we expect a particular action from the retailer or manufacturer, we can contact either the Australian Consumers' Association or the Australian Competition and Consumer Commission for help. See Resources and contacts for more details.





## Toolbox

### Environmental claims in advertising

Environmental information on labels can be useful to us as consumers, as long as claims are specific, accurate, substantiated, relevant to the product, easy to interpret and true for the whole product, taking all relevant aspects of its life cycle into account. It's not always easy for us to judge environmental claims, however we can question the company when claims are not clear. We can ask for more information when vague claims such as the following are presented on labels:

- ? 'Environmentally safe'
- ? 'Earth friendly'
- ? 'Ozone friendly'
- ? 'Recyclable'
- ? '... free' when it's unlikely that material would be used in the product anyway.



## Moving towards a more sustainable future

Many companies are actively working to improve their products and their overall environmental performance. They realise that this makes economic as well as environmental sense. Others are seeing these changes and thinking about what they can do.

As consumers, we have a dual role in the move to sustainability:

- by reducing our consumption through awareness and behavioural change; and
- by seeking products with high environmental standards, we can encourage Australian companies to improve products now and in the future

Using the checklist and shopping smart and green, we can all do our bit towards achieving sustainability.





# Purchasing checklist

This checklist has been designed to allow us to quickly evaluate and compare the environmental performance between two or more similar products over their entire life cycle—materials, manufacturing, packaging, distribution, use and disposal. It can be used to assess a wide variety of products, from simple items like toothbrushes to more complex products like washing machines and fridges.



## How to use the checklist

The checklist is designed to help you include environmental criteria into your purchasing decisions by answering a series of simple questions for each life cycle stage. Depending on the complexity of the product, the availability of information, and the detail you wish to go into, the checklist should take you between five and 10 minutes to complete.

There are three steps to completing the checklist.

### Step One

Work out the product's environmental rating for each life cycle stage

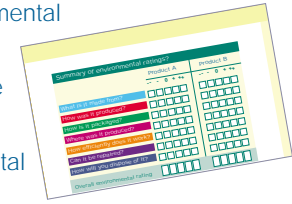
For example, starting with 'what is it made from', answer as many questions on the list as you can. If you tick 'yes' for all questions, you might give the product a rating of '+', or even '++' if you think the product is outstanding. Conversely, products ticked mainly as 'no' will probably score as '-' or worse. You can also tailor the checklist to reflect your individual environmental concerns by weighting the score for the questions you feel are most important.



### Step Two

Summarise the environmental ratings

Once you have worked out your environmental rating for each life cycle stage, transfer these scores to the summary table (page 29). Then draw these ratings together to give each product an overall environmental rating for its whole life cycle.

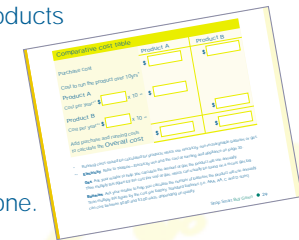


### Step Three

Complete the comparative table

The final step of the checklist allows you to work out the financial savings, or in some cases the costs, of your purchasing decisions. This stage is particularly applicable for products which use electricity, non-rechargeable batteries or gas. It is possible to utilise the table to compare products that use different sources of energy—for example a gas hot water heater versus an electric one.

The upfront cost of a product does not include the ongoing operating costs. Sometimes what appears to be the least expensive product, may not be the most efficient and it may actually cost more over its life. The comparative cost table helps us make a more informed purchasing decision.



### Example

Figure 3 on page 22 shows how to complete the checklist for two different products. We can make an assessment about the best choice, even if we don't have all the information at hand.



Figure 3: Comparison between two fridges



# Product Assessment Checklist



What is it made from?								
Product A						Product B		
No	Don't know	Yes	No	Don't know	Yes	<i>refer to page 9</i>		
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How long is the product's guarantee?

Product A  Product B

Can it be repaired?					
Product A			Product B <small>refer to page 17</small>		
Less than B	Equal than B	Better than B	less than A	Equal than A	Better than A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- - 0 ++			-- - 0 ++		
Environmental rating <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					

Environmental rating



Is the product made of materials which can be recycled?

Has it been designed to be easily recycled?

How will you dispose of it?					
Product A			Product B <small>refer to page 18</small>		
No	Don't know	Yes	No	Don't know	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- - 0 ++			-- - 0 ++		
Environmental rating <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					

Environmental rating

Summary of environmental ratings?										
	Product A					Product B				
	--	-	0	+	++	--	-	0	+	++
What is it made from?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How was it produced?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How is it packaged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where was it produced?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How efficiently does it work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can it be repaired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How will you dispose of it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall environmental rating	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				

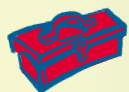
Comparative cost table		
	Product A	Product B
Purchase cost	\$ <input type="text"/>	\$ <input type="text"/>
Cost to run the product over 10yrs*		
Product A		
Cost per year** \$ <input type="text"/> x 10 =	\$ <input type="text"/>	
Product B		
Cost per year** \$ <input type="text"/> x 10 =		\$ <input type="text"/>
Add purchase and running costs to calculate the Overall cost	\$ <input type="text"/>	\$ <input type="text"/>

\* Running costs should be calculated for products which use electricity, non-rechargeable batteries or gas.

\*\* **Electricity.** Refer to Toolbox—Electricity use and the cost of running and appliance on page 30.

**Gas.** Ask your retailer to help you calculate the amount of gas the product will use annually. Then multiply this figure by the cost per unit of gas, which can usually be found on a recent gas bill.

**Batteries.** Ask your retailer to help you calculate the number of batteries the product will use annually. Then multiply this figure by the cost per battery. Standard batteries (i.e. AAA, AA, C and D sizes) can cost between \$0.80 and \$3.00 each, depending on quality.



## Toolbox

### Electricity use and the cost of running an appliance

Average kW per hours used per year**	Cost			
	1 year	2 years	5 years	10 years
250	\$30	\$60	\$150	\$300
300	\$36	\$72	\$180	\$360
350	\$42	\$84	\$210	\$420
400	\$48	\$96	\$240	\$480
450	\$54	\$108	\$270	\$540
500	\$60	\$120	\$300	\$600
550	\$66	\$132	\$330	\$660
600	\$72	\$144	\$360	\$720
650	\$78	\$156	\$390	\$780
700	\$84	\$168	\$420	\$840
750	\$90	\$180	\$450	\$900
800	\$96	\$192	\$480	\$960
850	\$102	\$204	\$510	\$1020
900	\$108	\$216	\$540	\$1080
950	\$114	\$228	\$570	\$1140
1000	\$120	\$240	\$600	\$1200
1050	\$126	\$256	\$630	\$1260
1100	\$132	\$264	\$660	\$1320
1150	\$138	\$276	\$690	\$1380
1200	\$144	\$288	\$720	\$1440

- Costs are calculated using 12 cents per kW hour, which is the approximate peak rate for Australian capital cities.
- The average kW hours used per year can be obtained from the energy rating label on the product.

## Resources and contacts



### Publications

#### Biodiversity. Nature's variety, our heritage, our future

An easy-to-read brochure which clearly explains biodiversity and its importance. It also includes tips to help us protect Australia's biodiversity.

Available free from Environment Australia's Community Information Unit.

Phone: **Free call 1800 803 772**

Web: [www.environment.gov.au/](http://www.environment.gov.au/)

#### Time to Act. Everyday tips to help protect the environment

Includes tips on easy things you can do around the house, at work or when you are enjoying Australia's beautiful natural environment.

Available free from Environment Australia's Community Information Unit.

Phone: **Free call 1800 803 772**

Web: [www.environment.gov.au/](http://www.environment.gov.au/)

#### Fuel Consumption Guides

These guides provide reliable comparative data on fuel consumption on new passenger cars and some classes of four-wheel drives and light commercials. Available free from the Australian Greenhouse Office's infoline.

Phone: **1300 130 606**

Web: [www.greenhouse.gov.au/transport/fuelguide](http://www.greenhouse.gov.au/transport/fuelguide)

#### Global Warming Cool It

This booklet provides information on Australian household's contribution to global warming and provides easy-to-follow tips and examples of how to minimise these impacts.

Copies are available free from the Australian Greenhouse Office's Infoline and on the web.

Phone: **1300 130 606**

Web: [www.greenhouse.gov.au/](http://www.greenhouse.gov.au/)





## Consumer organisations

### Australian Competition and Consumer Commission (ACCC)

You can obtain a free copy of the ACCC's environmental marketing guidelines. The ACCC also runs a hotline for complaints about misleading claims on **1800 802 715**. Check your phone book for contact details in each capital city.

Web: [www.accc.gov.au](http://www.accc.gov.au)

### Australian Consumers' Association

The Choice Consumer Help website contains detailed information about the environmental impacts of product choices.

Phone: **02 9577 3333**

Web: [www.choice.com.au](http://www.choice.com.au)

## Product information

### Australian Gas Association

The AGA has a directory of all gas appliances carrying a star rating in Australia. You can download it from the website or phone to ask for a free copy.

Phone: **03 9580 4500**

Web: [www.gas.asn.au/directory/index.html](http://www.gas.asn.au/directory/index.html)

### Energy Efficiency Ratings

On the website you can find out the energy rating of domestic appliances and work out the yearly running costs for your household.

Phone: **1300 130 606**

Web: [www.energyrating.gov.au](http://www.energyrating.gov.au)

### Water Efficiency Ratings

The Water Services Association of Australia conducts the National Water Conservation Labelling Scheme.

Phone: **03 9606 0678**

Web: [www.wsaa.asn.au/rating.html](http://www.wsaa.asn.au/rating.html)

### Fuel Consumption Labelling

This site provides information relating to the fuel consumption label.

Phone: **1300 130 606**

Web: [www.greenhouse.gov.au/fuellabel](http://www.greenhouse.gov.au/fuellabel)

## General information

### Environment Australia (Commonwealth Department of the Environment and Heritage)

The Environment Australia Eco-efficiency and Cleaner Production website has information on Design for Environment, Public Environmental Reporting and Life Cycle Assessment. It also has case studies of businesses and products.

Phone: **1800 803 772**

Web: [www.environment.gov.au/eecp.html](http://www.environment.gov.au/eecp.html)

### Cool Communities

An innovative project to reduce greenhouse gases in the community by providing information and resources to help householders cut emissions, save money and improve their lifestyle. It is an Australian Greenhouse Office project delivered in collaboration with non-government environmental community groups from each state and territory. For further information, contact the Cool Communities Project Manager.

Phone: **02 6247 0877**

Email: [ccserac.greenhouse@ecoaction.net.au](mailto:ccserac.greenhouse@ecoaction.net.au)

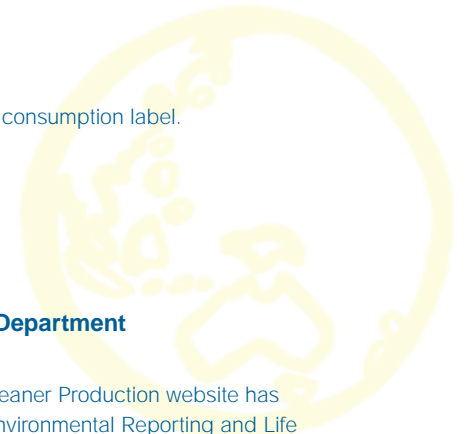
### Local Councils

The environment or waste education officer at your local council is a good source of information on many ways of reducing environmental impacts. Check your phone book for contact details.

### State Environment Protection Authorities

The environmental agencies in all States and Territories (such as the NSW Environment Protection Authority) have information and publications on many aspects of eco-efficiency. Look in your phone book for local contact details or check your State or Territory on the government directory website

[www.directory.gov.au](http://www.directory.gov.au)—search under 'environment'.





### **EcoRecycle Victoria**

Information on sustainability, recycling and waste management.

Phone: **03 9639 3322**

Web: **[www.ecorecycle.vic.gov.au](http://www.ecorecycle.vic.gov.au)**

### **The Buy Recycled Guide**

A guide to sourcing products made from recycled materials.

Phone: **02 4940 0400**

Web: **[www.buyrecycled.wasteboards.nsw.gov.au](http://www.buyrecycled.wasteboards.nsw.gov.au)**



Includes:

- Practical tips for assessing the environmental impact of products
- An environmental purchasing checklist
- Energy and water rating information
- How to contact manufacturers; and
- A resource guide for further information.

