

waste wise
HOTELS





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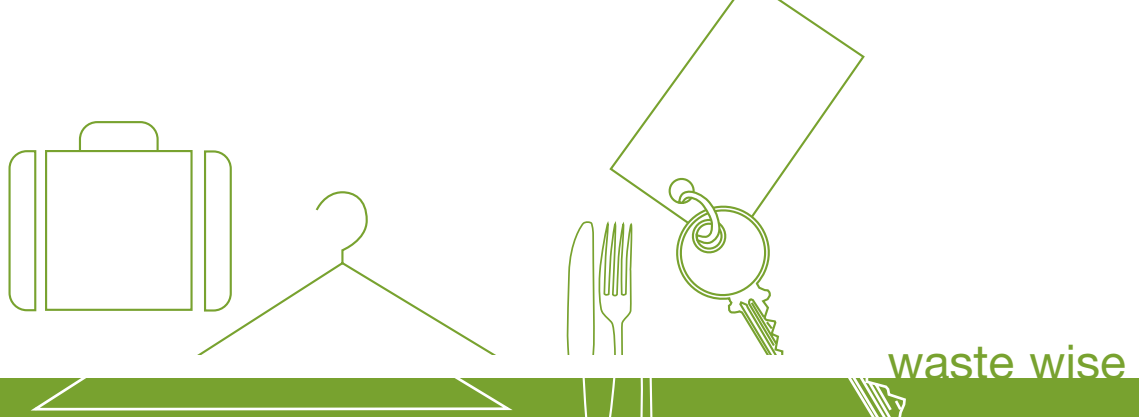
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wastewise **HOTELS**

The hotel industry is undergoing a quiet transformation. An increasing number of hotels are demonstrating that by taking a few simple steps, they can save money and resources by reducing their waste while also making a positive difference for the environment.

In addition, more and more travellers expect that the places they stay are environmentally conscious, and are favouring hotels that demonstrate this awareness in their everyday practices.

One of the simplest and most effective ways that hotels can lessen their environmental impact is to reduce the amount of waste that they produce. This toolkit is designed to enable hotels to develop practical programs for reducing waste – and the costs associated with its production and disposal – and integrate these principles into their everyday business and operating practices.

Hotels that find this approach a useful one for reducing waste are encouraged to seek certification as a 'Waste Wise' organisation.

The Waste Wise program is an initiative of Sustainability Victoria which assists organisations to reduce waste through avoidance, reuse, reduction, and recycling. Becoming Waste Wise is a straightforward step-by-step process using five steps:

Step 1 Making a Commitment

Step 2 Preparing a Waste Reduction Action Plan

Step 3 Implementation

Step 4 Reporting Outcomes

Step 5 Continual Improvement

More details on the Waste Wise Program can be found in Section 6.

This Waste Wise Hotels Toolkit contains all the necessary resources to enable an organisation to achieve Waste Wise certification, including information on the environmental and financial benefits of reducing waste, data collection templates, educational resources, case studies, and lists of suppliers of environmentally sustainable products and services.

In researching and developing the Waste Wise Hotels Toolkit, a wide range of organisations were consulted. We gratefully acknowledge the support and input of:

The City of Melbourne

ECO-Buy

Hotel Enterprize Melbourne

Hotel Grand Chancellor Melbourne

The Grand Hyatt Melbourne

Hilton on the Park Melbourne

Hotel Motel and Accommodation Australia

Holiday Inn Flinders Lane

Holiday Inn Melbourne

Hotel Ibis Melbourne

Medina Grand Melbourne

Miami Hotel Melbourne

Quay West Apartments

Quest on Bourke

Radisson on Flagstaff Gardens

The Sebel Melbourne

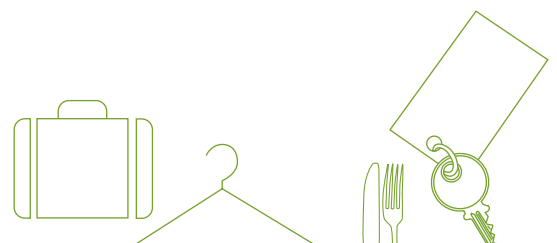
Sofitel Grand Hotel

Sustainability Victoria

Travelodge Southbank

Tourism Victoria

This Waste Wise Hotels Toolkit was researched and produced by Great Forest Australia.



wastewise HOTELSTOOLKIT

Who is This Toolkit For?

The Waste Wise Hotels Toolkit has been developed for hotel managers and those responsible for staff training programs and work practices. It has been divided into manageable tasks to enable hotels to design and implement Waste Wise initiatives at their own pace and in their own way.

The Waste Wise approach is based on the continuous improvement cycle of Plan-Do-Check-Improve:

Plan: Identify an opportunity to improve a process or processes

Do: Implement the improvements identified

Check: Assess the results to determine how effective the changes were

Improve: Implement further improvements

Becoming Waste Wise is a step-by-step process – you don't have to achieve everything at once!

Using the Toolkit

The Waste Wise Hotels Toolkit contains nine sections.

Section 1: Why Be Waste Wise?

Outlines the benefits of being Waste Wise and looks at the true costs of waste to a business.

Section 2: Waste in Hotels

Identifies where waste is created in hotels and how to reduce, reuse and recycle it.

Section 3: Taking Action

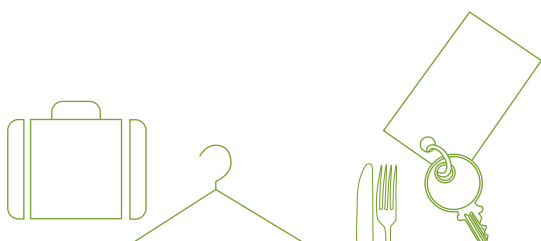
Templates to assist hotels with initial evaluation, auditing, planning and continuous improvement.

Section 4: Staff Training

Information sheets to educate staff about waste and train them in specific Waste Wise practices.

Section 5: Waste Wise Hotel Case Study

Shows how one hotel became Waste Wise and reduced their waste management costs by 50%.



Section 6: The Waste Wise Program

Detailed information on Sustainability Victoria's Waste Wise program and how to apply for certification.

Section 7: Glossary

Facts and frequently asked questions about waste and recycling issues.

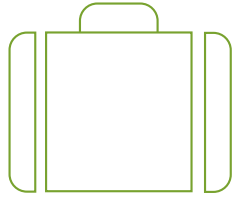
Section 8: Resources

Lists further resources to support you in developing your Waste Wise programs.

Waste Wise Catering

Sustainability Victoria also developed a Waste Wise Catering Kit which will provide more specific detail for hotels with major catering activity within their business. It is available for download from Sustainability Victoria's website at www.sustainability.vic.gov.au.





1 Why be waste wise?

There are several good reasons why minimising waste should be an important priority for hotels:

- To protect our environment and ease the pressure on our natural resources
- To significantly reduce purchasing and disposal costs
- To meet customers' expectations that the hotel is caring for the environment in a practical manner
- To contribute to a cleaner and more pleasant hotel environment for guests and staff.

did you know?

Australians are among the most prolific waste producers, per person, in the world.

Protecting the Environment

Australians generate more waste per person than almost any other Western country. Almost one tonne of waste per person goes to landfill each year.

Despite an increase in recycling over the last decade, Victorians are generating more waste, and still sending significant amounts of it to landfill. During 2003-04, Victorians produced almost 10 million tonnes of solid waste, of which just under half was sent to landfill. That much waste, if piled up in one place, would take up 50 times the volume of the MCG!

A large percentage of everything we purchase ends up in the rubbish bin, disposed of without any thought of recovering and reusing the valuable resources it contains.

If we reduce the amount of waste we generate, we also reduce many of the environmental impacts of the waste we dispose of – such as greenhouse gases emitted from landfills, the impact of heavy vehicles transporting waste through our cities, and pollution caused by litter and spills.

Saving Money

Two-thirds of the waste produced in Victoria is generated by industry, costing businesses millions of dollars a year. The hospitality sector, including accommodation and food suppliers, generates up to 18% of the waste produced within the City of Melbourne.

Everything used in a business that does not generate a financial benefit can be regarded as waste. Many hotels are needlessly spending money on the disposal of waste that either need not have been generated in the first place, or that could be minimised, reused, or recycled – which are generally cheaper options than sending it to landfill.

The bottom line is that the more waste you are producing, the more it is costing you.

Being Waste Wise can enable hotels to reduce costs through:

- Increased awareness of how waste is being generated, handled and disposed
- Making conscious purchasing decisions to avoid creating waste in the first place
- Reducing the amount of waste that would normally sent to landfill by avoiding, reducing, reusing and recycling
- Making more effective use of materials and contractors

Customer Satisfaction

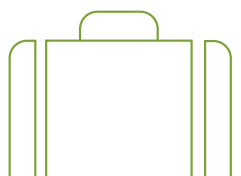
Most people are accustomed to recycling and expect it to be available in the places they visit. Research shows that an increasing number of people, including travellers, prefer doing business with companies that show a concern for the environment.

Organisers of large events such as the Melbourne 2006 Commonwealth Games and the Australian Open are increasingly making commitments to waste reduction, and are requesting businesses to assist them in meeting these commitments.

A Cleaner Workplace

Being Waste Wise at home has become a routine part of many people's lives, so most staff expect that their workplace will provide programs to reduce, reuse, and recycle waste.

Waste Wise creates the opportunity for staff to work together to reduce waste through practical tips and activities that they can easily use in their everyday work practices.



1 Why be waste wise?

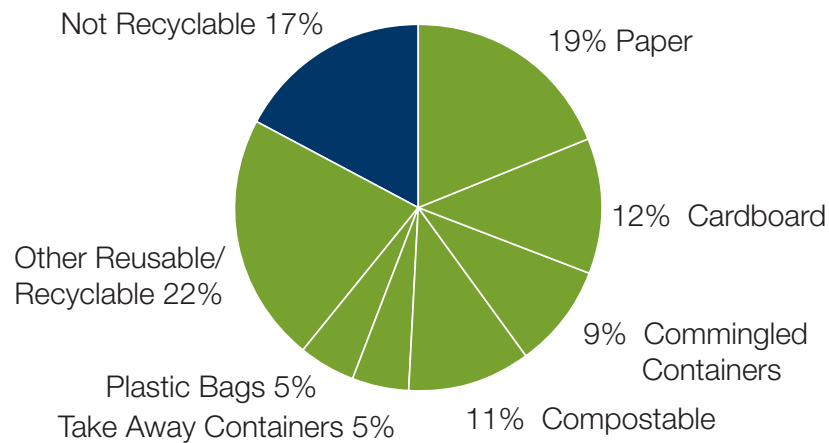
What Are We Throwing Away?

Waste is something that is left over or no longer needed, either created by the hotel's own activities or left behind by visitors and guests.

Often waste is unnecessarily generated through:

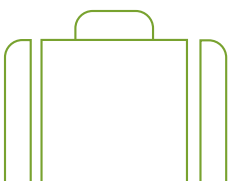
- Incorrect storage and handling
- Preparing too much food
- Inefficient service delivery
- Missed opportunities for reduction, reuse, or recycling.

The following diagram is based on waste audits from 15 Melbourne hotels conducted by Great Forest Australia during 2005. It shows that most of the items hotels are sending to landfill – aluminium, steel, glass, plastic, paper, food going into landfill bins can potentially be recycled.



did you know?

Over 80% of 'waste' generated in hotels is potentially recyclable, reusable or compostable



How Can Hotels Minimise Waste?

Avoid the generation of waste in the first place

Reduce the amount of waste you produce

Reuse materials so they do not turn into waste

Recycle as much as you can

Sending waste to landfill should always be a last resort, only after having fully explored all the Waste Wise options above.

The True Costs of Waste

The hidden costs of waste include unnecessary time spent on waste handling, storage, and clean-up, as well as the expense of disposing of materials that are not used and have to be written off as waste. These costs can represent a significant drain on a hotel's resources.

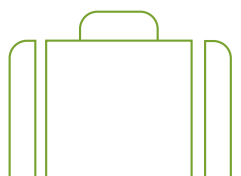
Sometimes focusing on waste can lead to unexpected savings in other areas.

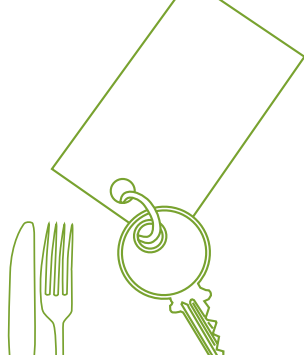
For example, one hotel manager was spending several hundred dollars per year to clean spills on carpet resulting from inefficient waste handling practices. By making some simple, low-cost changes to these practices, not only were these spills eliminated entirely, but the hotel's waste management costs were reduced, plus the new system was also more efficient and easier for employees.

In this instance, an outlay of a few hundred dollars for new equipment and some time spent training staff proved to be a sound investment in more than one way!

did you know?

Waste disposal costs represent only 10% of the total costs of producing waste when 'hidden' costs are included.





2 Waste in Hotels

All of a hotel's day-to-day operations generate waste of various kinds. The following tips will help you to identify the areas where you can avoid, reduce, reuse and recycle waste – and save your hotel money.

Contents

- 2.1 Planning
- 2.2 Purchasing, Delivery and Storage
- 2.3 Kitchens and Bars
- 2.4 Functions
- 2.5 Housekeeping
- 2.6 Offices
- 2.7 Other Areas
- 2.8 Construction and Refurbishment
- 2.9 Litter
- 2.10 Next Steps...

2.1 Planning

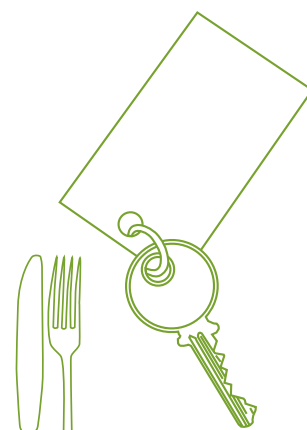
Careful planning can allow you to avoid problems later. Nothing will undermine your hotel's waste minimisation efforts faster than staff seeing recyclables sent to landfill due to lack of storage bins or contamination of materials. So it is important to ensure that there are adequate pickups and number of bins to cope with expected volumes of materials.

- Hotels generally know in advance when they will be particularly busy (e.g. high occupancy and/or large events), so plan for additional pickups of waste and recycling during these periods, and ensure that collection costs are factored in to annual budgets.
- If space permits, have at least 20% additional bin capacity on the premises to cope with any missed pickups – which occasionally happen, no matter how reliable your contractors are. This will minimise the likelihood of recyclables going to landfill due to lack of recycling bin capacity on site.
- Construction and refurbishment projects within hotels can be significant sources of waste; ensure that contractors performing this work manage the resulting waste responsibly, preferably by arranging for its reuse or recycling, and that construction and demolition waste is kept separate from the hotel's normal recycling and general waste.
- When undertaking refurbishments, evaluate the effectiveness of current waste and recycling storage areas in terms of space and accessibility.

2.2 Purchasing, Delivery and Storage

The purchasing function is a very important way to minimise waste since it allows you to determine the kinds of products that are delivered to the hotel and how they are packaged. More and more suppliers are now aware of the need to minimise waste in packaging – so seek their partnership in being Waste Wise!

- Purchase cleaning products in concentrated forms, or look at reusable microfibre products.
- Purchase products containing recycled content.
- Give preference to purchasing products with minimal packaging. Purchase fresh food in reusable crates and containers that can be recycled like cardboard or paper instead of plastics.
- Engage key suppliers about their commitment to working with you to reduce waste by taking back their plastic containers, crates, polystyrene boxes, for reuse.
- If your recycling company will not collect plastic drums and large detergent and chemical containers, either reuse them or return them to your suppliers, most of which will collect, wash and refill them.
- Ensure that perishable products are placed in storage as soon as possible after delivery. Spoilage not only wastes money in terms of unused products, but also in waste disposal costs.
- Reuse or recycle empty cardboard boxes.



2 Waste in Hotels

2.3 Kitchens and Bars

Over 80% of waste produced in the average kitchen or bar can be recycled or composted, making hotel kitchens important areas to target in developing waste minimisation programs.

- Implement systems for recycling glass, metal and plastic containers (most recycling companies offer a 'commingled' recycling service where these materials can all be combined in the same bin for convenience of disposal).
- Implement a system for recycling cardboard.
- Reuse large plastic drums, or send them back to suppliers for reuse.
- Set up a system for recycling corks.
- Investigate donating excess food to a charity organisation. There are several which collect food of good quality that has not been served to the public.
- Otherwise, or in addition, collect kitchen food scraps for recycling off-site.
- Investigate if your local council collects oil drums or vegetable oils.

Waste audits in kitchens found that they accidentally dispose of an average of \$15.25 worth of undamaged crockery, cutlery and cloth tableware per kitchen per day.

Source: Eating into Waste, Tourism Training NSW.

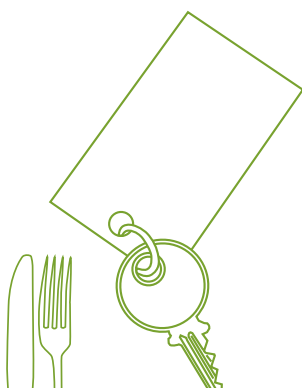
did you know?

2.4 Functions

Although often a major source of waste in hotels, function areas are sometimes overlooked in designing waste minimisation programs. As functions tend to be a hotel's busiest periods, staff can occasionally forget to comply with recycling procedures and may need to be reminded of required practices.

- Let event attendees know of the hotel's commitment to being Waste Wise and to assist by keeping recyclables like paper, cardboard separate from other materials.
- Collect leftover food for recycling
- Where paper bags and serviettes are used in catering, use recycled and unbleached products (which avoid the use of polluting chlorine in bleaching) to save resources and help build the demand for recycled products.
- Aim to provide a range of recycling bins (well signed) to enable conference guests assist you with waste sorting and recycling

For further ideas refer to the 'Waste Wise Catering Kit' www.sustainability.vic.gov.au.



2.5 Housekeeping

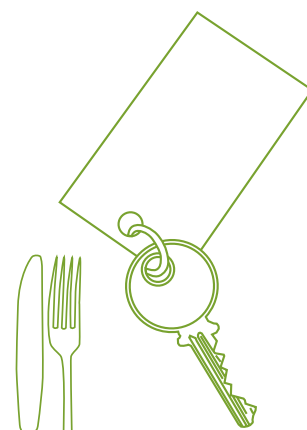
Many items left behind when guest rooms are vacated can be recycled or reused. Most guests tend to place 'wet' waste (food, food packaging, bathroom waste etc.) in waste bins and leave 'dry' waste such as newspapers, magazines, cardboard boxes (e.g. shoe boxes), and empty drink containers on tables or counters. This makes it possible to set up collection systems for recycling these items that do not involve housekeeping staff reaching into waste bins, which is undesirable from a safety viewpoint.

- Implement recycling collection for newspapers, magazines, telephone books, brochures, empty drink containers, cardboard packaging, and paper shopping bags.
- Investigate refillable containers for bathroom amenities, which can reduce waste significantly by cutting down on the use of single use items.
- Where single use items are provided, donate these to charities (see *Section 8 - Resources*).

2.6 Offices

Significant quantities of paper waste, as well as smaller amounts of other materials such as office supplies, like printer cartridges are generated in office areas. There are numerous opportunities for recycling and reuse in these areas (also see *Section 8 - Resources* for links to Sustainability Victoria's Waste Wise Office Kit and Waste Wise Resource Kit):

- Purchase office paper and supplies containing recycled content.
- Use e-mail for distribution of meeting minutes and nightly reports.
- Limit the number of computers with printer access, so documents are only printed when necessary.
- Print internal documents using printer draft option to reduce ink consumption.
- Implement paper recycling in offices, and if space permits give each desk-based staff member their own small recycling bin.
- Recycle printer cartridges by returning to supplier or Cartridges for Planet Ark.
- Reuse scrap paper by binding it and cutting into note pads for use by staff.
- Reuse copy paper boxes for file storage.
- Reuse manila folders and other office supplies eg paper clips, rubber bands.
- Remove general waste bins from individual desks and replace with individual paper bins – set up commingled recycling bin and general waste bins in kitchen or staff tea rooms.



2.7 Other Areas

While public and 'back of house' areas of the hotel generate smaller quantities of waste, it is important that they are also covered by the Waste Wise program. Below is a general guide to the types of potentially recyclable waste that may be created in these areas:

- Spa/Fitness centre – paper cups, office paper, newspapers, magazines
- Business centre – office paper, newspapers, magazines (set up recycling systems)
- Lobby area – newspapers, magazines, old flowers (papers on request)
- Car park – newspapers, drink containers (recycle bins)
- Garden – cuttings, grass clippings (composting/greenwaste collection)
- You could also setup recycling systems for those areas or avoid purchasing (Plastic cups)

2.8 Construction and Refurbishment

These activities can generate significant quantities of waste, much of which can be reused or recycled.

- When refurbishing, talk to architects about building in improved waste management and energy efficiency measures.
- Ensure construction, demolition and refurbishment contractors have systems in place for ensuring waste materials (wood, metal, concrete) are reused wherever possible, and/or recycled off site.
- Furniture, fittings and used linen can all be reused either by donating them to staff or to charities that will send them on to homeless or underprivileged people (see *Section 8 - Resources*).

You could also investigate purchasing more environmentally sustainable furniture. For more information contact Sustainability Victoria.

2.9 Litter

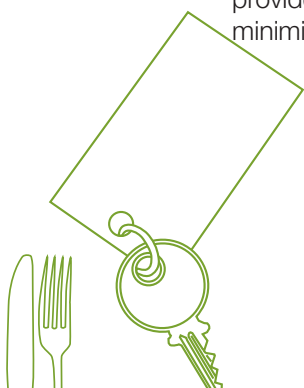
Finally, ensure that your hotel has a proactive litter control program for all outside areas, both at the front and rear of the premises, especially if there is a staff break area here. The responsibility for managing waste extends beyond the front door and nothing is more off-putting for guests than seeing litter when they arrive, regardless of whether or not it has come from the hotel.

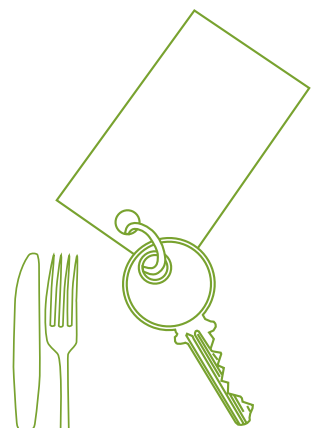
Effective management of litter is particularly important with regard to cigarette butts now that smoking is banned in most indoor areas in Australia. Aside from the aesthetic and environmental consequences of litter and the labour costs involved in cleaning it up, businesses also run the risk of fines from Councils for not properly managing litter issues outside their properties.

Section 8 - Resources contains further information on litter reduction initiatives.

2.10 Next Steps...

Section 3 - Taking Action looks at each of these functions and areas in more detail, and provides guidance on how to conduct waste audits and assessments and develop waste minimisation programs for each department and area of the hotel.







3 Taking Action

Setting up programs to minimise a hotel's waste requires careful planning. To engage staff and keep them motivated it is important to have well-defined guidelines, everyone clear about their roles in minimising waste, and a long-term action plan in place.

The first step is to find out what your hotel's current waste management arrangements are. Once this is complete a detailed waste audit¹ or assessment should be conducted to find out exactly what you are throwing away and identify ways of reducing waste and saving costs. Then using this information, develop a step-by-step plan for reducing waste.

These templates can be used as simple, effective tools to assist hotels with evaluation, planning and continuous improvement. Each sheet contains one or two examples to get you started.

Contents

- 3.1 Waste Management Overview
- 3.2 Waste Auditing
 - 3.2.1 Waste Audit - Data Collection
 - 3.2.2 Waste Audit - Data Analysis
- 3.3 Waste Stream Assessments
 - 3.3.1 Purchasing, Delivery, and Storage
 - 3.3.2 Kitchen
 - 3.3.3 Function Areas
 - 3.3.4 Housekeeping
 - 3.3.5 Offices
 - 3.3.6 Other Areas
- 3.4 Developing a Waste Reduction Action Plan (WRAP)
 - 3.4.1 WRAP Template
- 3.5 Implementing the Waste Wise Programs
- 3.6 Monitoring, Review and Continuous Improvement

¹A waste audit is a comprehensive physical evaluation, generally carried out by a trained consultant, which produces a detailed report analysing a hotel's waste output and recommending opportunities for improvement. A waste assessment, which this section describes how to perform, is a much simpler process which can generally be done in-house by hotels.

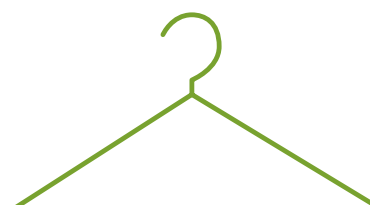
3.1 Waste Management Overview

Before beginning the waste assessment, you should find out exactly what your current contractual arrangements are for disposal of waste and recycling, and determine whether they accurately reflect the hotel's requirements. A simple 'desktop' study combined with data from waste audits can provide valuable information to guide the development of waste minimisation initiatives and reduce costs.

Finding the right level of service may require some trial and error but it will be worth it in the long run – decreased waste charges are usually achieved through a combination of reducing waste to landfill, changes to collection schedules and bin sizes, and/or renegotiating rates with waste contractors.

An important point to remember is that having a small number of large capacity bins collected less frequently is generally a cheaper option than a small number of bins collected more frequently. However, you will need to take care if your waste contains a high volume of food waste, which will need to be collected more frequently than 'dry' waste.

Material	No. and type of containers	Collection frequency - normal	Collection frequency - busy periods	Average annual cost	Contractor	Contact details
General (landfill) waste	2 x 1100 litre front load skips	3 x weekly	Daily	\$3600	ABC Waste Removal	
Office paper, newspapers, magazines etc.	4 x 240 litre	weekly	2 x weekly	No charge	XYZ Recycling	
Glass, metal, plastic, liquid paperboard (commingled) containers	8 x 240 litre	weekly	2 x weekly	\$2200	XYZ Recycling	
Cooking oil	1 x 100 litre	As needed - on call		\$450	Greasy Joe's	
Printer toner cartridges	1 box in front office	As needed - on call		No charge	Close the Loop	
etc. (list all materials for which there are separate collection arrangements)						



3 Taking Action

3.2 Waste Assessments

Section 3.2.1 provides a simple template for conducting a basic visual assessment – a simple review conducted over one or two days that analyses the types and volumes of waste being disposed of and identifies levels of contamination taking place, i.e. incorrect materials being placed in recycling bins.

Several companies conduct comprehensive waste audits on a fee-for-service basis. These provide an in-depth analysis of your hotel's waste by volume and/or weight, as well as data enabling you to identify key areas and waste items to manage, set waste minimisation targets and communicate results to staff.

For a list of companies providing such services, contact Sustainability Victoria.

Different areas and types of activities tend to generate different types of waste – kitchen areas produce large quantities of glass, cardboard and food waste, while guest rooms produce mainly newspapers and cardboard. While all areas produce a variety of different waste types, each area generally has a few types of material that predominate.

The tables in the following sections indicate the types of materials you are likely to find in your hotel's waste stream.

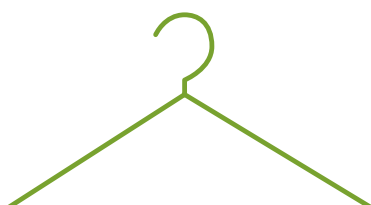
3.2.1 Waste Assessments - Data Collection

The easiest way of conducting a basic waste assessment is to place a couple of containers of a known capacity in strategic locations where waste is disposed. When each container becomes full, perform a quick visual scan of the contents and record the percentages of each type of material observed.

(Broken glasses and ceramics cannot be recycled and should be classified as 'other')

Date/ Time	Location	Bin size (litres)	Plastic Bottles %	Glass Bottles %	Metal Cans %	Milk Cartons %	Card %	Paper %	Organic %	Other (list) %
1/1/06 1000	Kitchen - food prep.	50	10%	5%	5%			10%	60%	10% broken crocery
1/1/06 1130	Kitchen - food prep.	50	20%	5%	10%	20%	5%		40%	
1/1/06 0930	Kitchen - room service	30		10%		10%			80%	
1/1/06 1115	House keeping pantry - level 2	50	10%	5%			25%	25%	5%	10% coat hangers
1/1/06 1130	House keeping pantry - level 3	50	10%	20%	5%	10%	10%	30%	5%	10% plastic bags
1/1/06 1200	Loading bay – cardboard recycling skip	1000					90%			10% poly- styrene foam
1/1/06 1200	Loading bay – paper recycling wheelie bin	240						95%	5%	
etc.										

For a list of companies providing such services, contact Sustainable Victoria.



3.2.2 Waste Assessment - Data Analysis

Having performed the waste assessment, you now need to analyse the data to discover how much of each material is being sent to landfill. The table in this section can be used as a template for making these calculations.

Step 1

For each area, work out the daily volume of waste being disposed of, e.g.:

Date: 1/1/06

Area: Kitchen - Food Prep & Room Service

Bin size (litres)	Plastic Bottles %	Glass Bottles %	Metal Cans %	Milk Cartons %	Card %	Paper %	Organic %	Other (list) %
50	10%	5%	5%			10%	60%	10% broken crockery
	5 litres	2.5 litres	2.5 litres			5 litres	30 litres	5 litres
50	20%	5%	10%	20%	5%		40%	
	10 litres	2.5 litres	5 litres	10 litres	2.5 litres		20 litres	
30		10%		10%			80%	
		3 litres		3 litres			24 litres	
Total	litres/day 15	litres/day 8	litres/day 7.5	litres/day 13	litres/day 2.5	litres/day 5	litres/day 74	litres/day 5

Step 2

Add the totals of each material that can be combined for collection (e.g. glass, metal, plastic, and milk cartons can generally be combined for a 'commingled' pickup service).

Combined volume of these materials = 33.5 litres per day (234.5 litres weekly)

Then apply the same method of calculation to other materials including cardboard, paper, organics, etc.

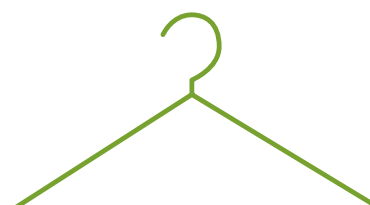
Step 3

Once the volumes of each material being disposed of are known, work out the number and size of containers required, e.g.:

234.5 litres per week of commingled materials: one 240-litre bin collected weekly

518 litres per week of organic waste: five 120-litre bins collected weekly

...and so on for each other recyclable material.



3 Taking Action

3.3 Waste Stream Assessments

Now that you have identified your hotel's waste costs and collection arrangements, performed a simple waste assessment, discovered what you are throwing away and worked out your storage and collection requirements, you can now start looking in detail at specific waste minimisation opportunities.

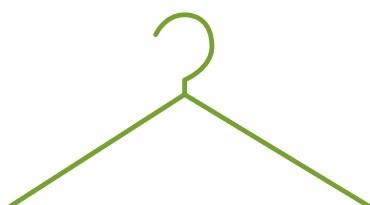
The following templates will guide you in what to look for in each area or department of the hotel.

3.3.1 Purchasing, Delivery and Storage

The first step in waste minimisation should be waste avoidance. The more you can eliminate or reduce waste at the source, the better, because then it does not have to be handled, stored or disposed of.

Try working with your suppliers to find ways of reducing packaging waste – which, after all, is in their interest as much as yours!

Supplier	Packaging used for deliveries	Waste disposal issues for hotel	Waste avoidance opportunities	Benefits
Neptune Fish Supply	Polystyrene boxes, wood crates	Polystyrene not recyclable, suppliers will not take back crates if they are damaged	Purchase, or ask suppliers to provide, reusable containers; return containers to suppliers	Reduced waste disposal costs; less clutter in storage areas & loading bay; reduced resource consumption
Acme Stationery	Plastic shrink wrap on delivery pallets	Not recyclable; takes up space in rubbish skips, inflating waste disposal costs	Ask supplier if there is a reusable or recyclable alternative they can switch to	Reduced waste disposal costs & collection schedules; reduced resource use
Fred's Fresh Fruits	Waxed and plain cardboard	Waxed cardboard not recyclable	Ask supplier if they can take back waxed boxes (alternatively, reuse boxes in hotel)	Reduced waste disposal costs & collection schedules; reduced resource use
(list all other suppliers)				

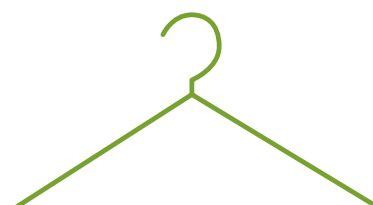


3.3.2 Kitchens

Almost 90% of all waste produced in hotel kitchens is recyclable, making them key areas to target in hotel's waste minimisation efforts

Waste item	Current disposal procedures	Opportunities for waste minimisation	Procedure	Number & type of bins
Cardboard boxes (plain and waxed)	Sometimes reused for storage, but generally discarded with other wastes	Recycle plain cardboard boxes and reuse waxed boxes wherever feasible	Kitchen staff to flatten boxes and take to recycling skip in loading bay	One 3 cubic metre skip in loading bay
Glass, metal & plastic containers (bottles, jars, cans)	Glass is recycled but not other types of containers	Add metal and plastic containers to hotel's recycling program	Combine metal and plastic with glass in kitchen recycling bins	2 additional 240- litre bins in kitchen area
Broken crockery, cutlery	Often put in recycling bins by mistake	Reinforce correct disposal procedures		
Paper serviettes	Sent to landfill	Implement organics recycling program		
Excess food, food scraps	Sent to landfill	Implement organics recycling program		
(list all other waste materials)				

For detailed guidance on how to apply Waste Wise principles and practices in catering operations, please refer to the Waste Wise Catering Toolkit (see *Section 8 – Resources*).



3 Taking Action

3.3.3 Function Areas

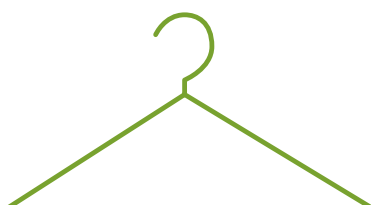
Functions such as banquets or other catered events produce large quantities of waste related to food and beverages (e.g. plate scrapings, glass and plastic bottles) while meetings and conferences tend to generate smaller quantities of waste-predominantly paper.

Waste item	Current disposal procedures	Opportunities for waste minimisation	Procedure	Number & type of bins
Cans, bottles	Recycled "when there is time"	Recycle all materials consistently	Ensure that staff follow recycling protocols no matter how busy	Two 240-litre bins in service corridor next to function room
Paper serviettes	Sent to landfill	Implement composting program/worm farm	All paper serviettes go into compost bin	One 240-litre bin in service corridor next to function room
Excess food, food scraps	Sent to landfill	Implement composting program/worm farm	All plate scrapings (except meat & fish) go into compost bin	One 240-litre bin in service corridor next to function room
Brochures, magazines, notepads left behind after conferences	Small quantities are recycled but majority is landfilled	Add to office paper recycling program	Keep paper separate from other materials and put in recycling bin	Bring empty paper recycling bin from loading bay
Cardboard	Recycled	Ensure this is done consistently	Flatten boxes and take to skip	One 3 cubic metre skip in loading bay

3.3.4 Housekeeping

Another area that had good potential for minimising waste is guest rooms.

Waste item	Current disposal procedures	Opportunities for waste minimisation	Procedure	Number & type of bins
Cans, bottles sitting on tables in rooms	Sent to landfill	Recycle materials	Have 2 bins on trolleys for effective sorting - dispose in central bins	2 per trolley
Telephone books	Sent to landfill	Recycle through office paper recycling program	Collect when new edition arrives	



3.4 Developing a Waste Reduction Action Plan

Now that you have completed the waste assessment process, the next step is to develop a Waste Reduction Action Plan (WRAP).

A WRAP Includes

- A list of materials identified in the waste assessment that could be reduced, reused or recycled.
- Key actions to reduce, reuse or recycle these selected materials.
- Identified goals or Key Performance Indicators (KPIs) for each action and a target date for completion of each action.
- The department or person(s) responsible for making these changes happen.

Other Items to Include in the WRAP

- Achievements to date.
- Priorities for the next two years.
- KPIs to be used to monitor improvements.

Examples of KPIs

- Total waste generation (per guest night or per annum).
- Increased percentage of hotel's total waste being recycled (e.g. currently 50%, increase to 80%).
- Reduction in percentage of recyclable materials in the landfill waste stream.
- Dollar value or percentage of hotel's total goods/services purchased from environmentally preferred suppliers.

Communicating the WRAP

It is important to regularly report the progress and achievements of your WRAP to staff through regular communications and meetings. These will motivate staff to change habits and offer their own comments and suggestions for improvement.

Examples of Reporting Objectives

- Progress toward targets to be monitored quarterly.
- Targets to be reviewed annually and updated as required.
- Outcomes of monitoring to be reported as a permanent agenda item at regional meetings.
- A summary of progress to be provided in the hotel's annual report.

Waste Wise Certification

Completion of the WRAP is a key stage in the Waste Wise Certification process. Section 8 contains further details on the Waste Wise program and its requirements.



3 Taking Action

3.4.1 WRAP Template

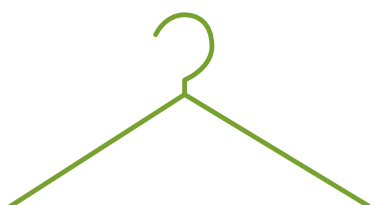
(Modify or add more detail as required)

Business name:

Address:

Contact person and details:

Area/Waste Streams	Waste Minimisations Opportunities		Who	When	KPIs
Food Preparation (glass, metal, plastics)	Reduce	Provide diners with options of serving sizes			
	Reuse	Use offcuts from one dish as garnishes, stocks, etc.			
	Recycle	Implement recycling programs for glass, metal, plastics, cardboard, paper, food waste etc.			
	Other ideas				
Purchasing (paper, cardboard, office supplies)	Reduce	Print purchase order sheets double sided Where possible buy in bulk to avoid excess packaging Purchase products in concentrated forms Purchase products with minimal packaging			
	Reuse	Talk to suppliers about reducing packaging by using returnable and reusable cartons			
	Recycle	Recycle all cardboard that is not being returned/reused			
	Green purchasing	See 4.1 What is green purchasing?			
Housekeeping (glass, metal, plastic, paper, cardboard)	Reduce	Switch to dispensers for shampoo etc. so that partially used bottles are not discarded and sent to landfill			
	Reuse	Donate used magazines that are in good condition to charities and/or staff Reuse partly used toilet rolls from guest rooms by placing in staff toilets and/or giving away to staff or charity			
	Recycle	Collect used drink containers, newspapers, magazines, and paper packaging (shopping bags, shoe boxes, etc.) from guest rooms for recycling Recycle empty cardboard boxes from housekeeping storage rooms			



3.4.1 WRAP Template continued

Area/Waste Streams	Waste Minimisations Opportunities		Who	When	KPIs
Offices (paper, cardboard, office supplies)	Reduce	Introduce 'think before you print' policy Set computer printing defaults to reduce paper use (i.e. reduce font sizes and margins so that documents fit on fewer pages) Use software that allows faxes to be sent/received directly by computer without need for printing Reduce use of fax cover sheets			
	Reuse	Provide containers near copiers to collect waste paper printed on one side only for making into notepads			
	Recycle	Implement office paper recycling program, ensuring that there are adequate numbers of containers and staff know what to put in them Send obsolete or broken computer equipment back to suppliers or other companies for refurbishment or environmentally sound disposal			
	Green purchasing	Trial use of recycled content office paper and other products containing recycled content			
Printer cartridges	Reduce	Print documents for internal use using 'draft' setting on printers, saving toner			
	Reuse	Use recycled cartridges			
	Recycle	Recycle printer cartridges			
	Green purchasing	Buy recycled cartridges			
Litter	Avoidance	Provide litter/butt bins in outdoor areas where litter is a problem			
	Reduction	Educate staff to minimise litter and pick it up when possible			
	Cleanup	Hotel to hold periodic cleanups of the neighbourhood in conjunction with other local businesses			

How will the hotel's Waste Wise progress and achievements be communicated, both internally and externally?

Signed by:
Hotel General Manager

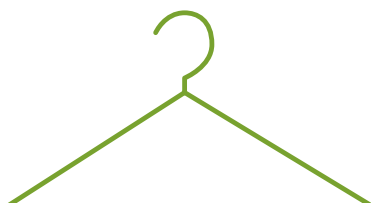


3 Taking Action

3.5 Implementing the Waste Wise Programs

Step 1: Avoid/Reduce	<ul style="list-style-type: none"> Review and implement Sections 2 & 3 Complete Taking Action 3.1-3.4 	
Step 2: Reuse	<ul style="list-style-type: none"> Identify packaging that can be reused as storage containers or returned to supplier Identify what packaging containing recycled content can be purchased See Frequently Asked Questions 4.2-4.3 on packaging 	
Step 3a: Recycle Identify items that can be recycled	Perform a waste audit to identify items that can be recycled; number and placement of containers; collection schedules; training requirements, etc.	
Step 3b: Recycle Decide on items to be recycled	The basics	Further improvements
	Commingled glass, metal, and milk and juice bottles (i.e. plastics 1,2,3) Cardboard Paper Printer cartridges Used oil Wine bottle corks	The basics plus: Organic waste (food scraps, plate scrapings, coffee grounds, paper serviettes, etc.) Electronic and electrical equipment
Step 3c: Recycle Put out bins and post signs around hotel	<ul style="list-style-type: none"> Place bins in suitable areas as identified during audit (colour coded bins are easy for staff to comply with) and signs clearly indicating correct recycling procedures Establish responsibilities for cleaning waste bins, especially food waste containers, and address odour and pest issues Ensure unimpeded access for collection vehicles The amount of space available for waste management will determine the size and number of bins on site, as well as the frequency of waste and recycling collections 	
Step 3d: Recycle Conduct staff training and motivation	<ul style="list-style-type: none"> Inform staff of where the bins are and what can be recycled (See Section 5 Toolbox Talks) Develop waste reduction targets and regularly inform staff of progress towards achieving these 	
Step 4: Monitoring, Review, and Reporting	<ul style="list-style-type: none"> Set up internal systems for monitoring progress, and work with waste and recycling contractors on ways to improve the Waste Wise effort Ask your recycling company to provide regular information on volumes of recyclable material collected (i.e. the amount diverted from landfill) and contamination rates Review constantly – and don't expect to get it right the first time. It takes a while to set these systems up and get them working effectively, especially during busy periods Ask staff for comments and suggestions for improvement on an ongoing basis Report regularly to staff on progress towards achieving Waste Wise objectives 	
Step 5: Continuous Improvement	<ul style="list-style-type: none"> Modify Waste Wise processes where monitoring and review programs indicate need to do so (e.g. if waste reduction targets are consistently not being met) If targets are being met, implement measures to achieve even greater reductions in waste (e.g. greater focus on reduction and reuse, or additional recycling programs) Incorporate new waste minimisation targets in planning, monitoring, and reporting systems 	
Remember:		
<ul style="list-style-type: none"> Occupational health and safety issues, both of staff and contractors, must always be addressed when handling and storing waste Large food waste bins should only be filled up to 50% capacity; otherwise they become too heavy to move Keep all areas and departments informed of any changes to program requirements, storage arrangements, and collection schedules. Plan waste management and recycling collection arrangements well in advance to cope with periods of significant waste generation, e.g. high occupancy periods, events, conferences, etc. 		

By diverting all your glass, metal, plastic, paper and cardboard and other recyclables from the landfill waste stream, you should be able to reduce the size of your general waste bin, and/or the frequency of collection, and thereby save costs.

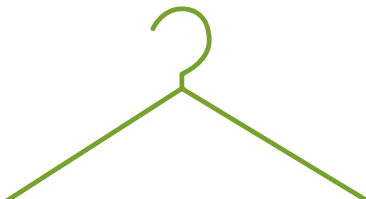


3.6 Monitoring, Review, and Continuous Improvement

This activity enables you to capture the information of your progress.

To keep staff motivated, report back on progress to date.

Department/Area	Waste Wise Issue	Action Recommended	Date of Review
Kitchen			
Banquet & conference			
Housekeeping			
Offices & front desk			
Engineering			
Garden			
Car park			





4 Staff Training

waste wise

Being Waste Wise involves all hotel employees, from management to staff operating across all areas of the business. The resources in this section can be used to educate staff about waste and train them in specific Waste Wise practices.

Don't be surprised if you find most of your staff have a positive response to reducing waste. Many people already recycle at home, so seek their support and make them part of the process. You may find they will provide creative and innovative ideas on reducing waste and saving money.

Roles and Responsibilities

The responsibility for putting the hotel's waste reduction program into action needs to be clearly defined. Ideally there should be one person for each department whose role, in addition to their normal duties, is to implement the program in their area.

Staff may need training or guidance to understand and implement waste management practices, or they may need to have their responsibilities redefined.

Maintaining Enthusiasm

- Give staff positive feedback on their participation in the Waste Wise program.
- Provide regular updates on performance – how much waste has been diverted from landfill since the start of the program.
- Offer staff monthly rewards for the best Waste Wise ideas.

Contents

- 4.1 Why Do We Need to Reduce Waste?
- 4.2 What Are We Throwing Away?
- 4.3 Avoid > Reuse > Recycle
- 4.4 Is Recycling Worth All the Effort?

4.1 Why Do We Need to Reduce Waste?

Key Message

Reducing waste benefits the environment and reduces costs

What is Waste?

Waste is anything that is left over or no longer needed. In a hotel, this can include paper, glass, metal, plastic, cardboard, food, packaging, broken items, and obsolete equipment.

How much of it do we produce?

- Australians are, per capita, the world's biggest waste producers.
- During 2003-04, Victorians generated 9.6 million tonnes of solid waste, enough to fill the MCG 50 times over. Only 52% of this was recycled.

What Happens to it?

Everything that we do not reuse or recycle ends up going to landfill. There are many environmental problems associated with this method of disposal:

- Unsightly, causing odour and litter.
- Can harm our native flora, wildlife and fisheries.
- Potential to leach harmful by-products into the soil.
- Emits greenhouse gases into the atmosphere.
- Wastes potentially valuable resources by burying them.
- As we throw away useable resources we need to mine more raw materials, resulting in additional greenhouse and pollution impacts in extraction, transport and processing.

It costs more – in terms of both dollars and environmental impacts – to put our waste products into landfill than it does to reduce, reuse and recycle them.

What's the Government doing about it?

The Victorian Government has set a number of waste targets, including 80% recovery of solid waste for reuse and recycling by 2014 from the commercial sector. If we all work together to achieve this:

- 7 million tonnes less waste will be generated.
- 11 million tonnes of additional materials will be recovered and recycled.
- 140 million gigajoules of energy will be saved (equivalent to 15 months energy for every household in Victoria).
- 95 gigalitres of water will be saved (1 gigalitre = 1,000 million litres, the equivalent of 1000 Olympic swimming pools).
- 18 million tonnes less waste will be sent to landfill (avoiding filling landfill space equivalent to 127 MCGs).
- 16 million tonnes of greenhouse gas will be prevented from entering the atmosphere (equivalent to the annual emissions of 2.7 million vehicles).



4.2 What Are We Throwing Away?

Key Message

Over 80% of the 'waste' from a typical hotel is potentially recyclable, reusable or compostable

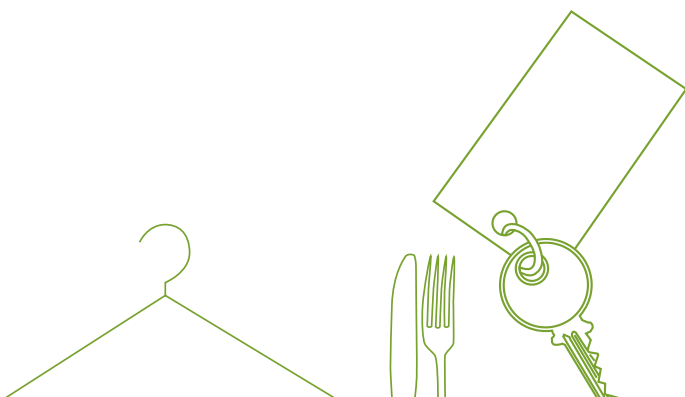
Questions for Staff

- Do you think about waste differently at work and at home?
- What kinds of waste and what quantity, do you think your area generates each day?
- What types of waste produced in the hotel are unnecessary and could be avoided?
- Are there practices that create waste that could be changed to produce less waste?
- What could we do to minimise our waste?

Activity

Have staff make a list of the types of waste that are created in their work area, then discuss how each type of waste could be minimised through reduction, reuse or recycling.

Following this discussion, present the diagram showing typical contents of hotel waste, and highlight the fact that over 80% of the 'waste' from a typical hotel is potentially recyclable, reusable or compostable.



What are we throwing away?

Reusable/Recyclable products	22%
Paper	19%
Other waste	17%
Cardboard	12%
Compostables (food)	11%
Commingled (glass & plastic) containers	9%
Plastic Bags	5%
Take Away containers	5%



4.3 Avoid > Reuse > Recycle

Key Message

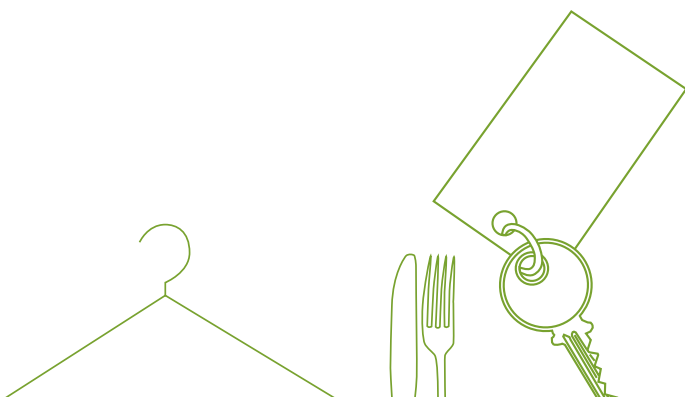
The first priority should always be to avoid creating waste, followed by reuse and recycling

Questions for Staff

- What types of waste can we **avoid** producing at our hotel? e.g. paper, food scraps, packaging, etc.
- What can we **reuse**, either internally or externally? (e.g. by donating items to staff or charities), e.g. excess food, used linen, furniture
- What are we currently **recycling**?
- What colour are the bins used for recycling?
- What is our hotel's system for recycling waste?
- What happens if the recycling streams are contaminated with the wrong materials?



towards zero waste



4.4 Is Recycling Worth All the Effort?

Key Message

Recycling captures precious resources, saving both money and the environment

Isn't Waste just a normal part of doing business?

- No - waste is costly in terms of labour, storage, disposal, and the environment. Businesses who reduce their waste always end up saving money.

Does Recycling really make any difference?

- Recycling aluminium saves lots of energy. Making aluminium cans from recycled material requires less than 5% of the energy used to make aluminium cans from raw materials.
- Recycling steel cans uses only 13% of the energy it takes to make them from raw materials.
- Recycling glass uses only 26% of the energy it takes to make glass from raw materials.
- About 5 sheets of office paper can be made from a recycled milk carton.

Isn't sending Waste Food to Landfill okay because it decomposes just like in compost?

- The acids in food waste cause undesirable chemical reactions in landfill and can lead to generation of methane, a greenhouse gas.
- Food waste is a major contributor to the formation of leachate (liquid run-off) in landfills, which pollutes ground water.
- Food waste does not compost when buried because there is no oxygen to assist with breakdown of organic matter.
- Food waste has many nutrients that are useful when composted.
- Each tonne of food waste consumed by worms and microbes creates approximately 400 kg of rich compost that can be used to fertilise the food we eat.

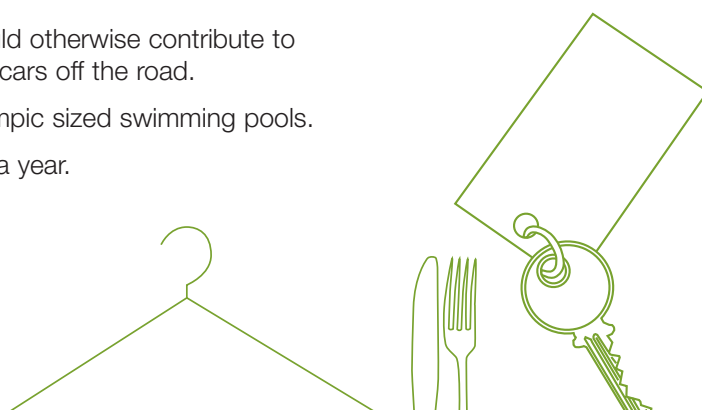
People love to Recycle

- Over the last ten years, recycling at home has increased dramatically, with 92% of households having access to kerbside recycling services.
- About 87% of Victorian households participate in kerbside recycling and 66% compost their waste.
- In 2003-04 Victorians recycled a record 53% of their solid waste. Ten years ago we were recycling only about 40%.
- On average, each household puts out 211 kg of recyclables every year.
- Over half (55%) of recyclables are paper and cardboard, followed by glass (26%).

Recycling is worth the effort!

In one year, householder recycling in Victoria saves:

- 310,000 tonnes of greenhouse gases (e.g. CO₂) that would otherwise contribute to global warming, which is the equivalent of taking 52,000 cars off the road.
- 8,360 megalitres of water, enough water to fill 1,671 Olympic sized swimming pools.
- The net environmental benefit is more than \$73.5 million a year.





5 Waste wise hotel case study

This case study shows how a Melbourne hotel implemented Waste Wise programs and achieved significant environmental and cost savings – with minimal outlay and strong staff participation.

Holiday Inn on Flinders Melbourne – Being Waste Wise Pays!

The Holiday Inn on Flinders Melbourne was one of fifteen hotels that participated in the Waste Wise component of the City of Melbourne's Savings in the City program between July-December 2005, which provided hotels with support in working through the steps involved in becoming Waste Wise.

Actions Taken

The hotel was already proactive in regard to recycling, and had a recycling program for commingled glass, metal, and plastic collected from guest rooms and the restaurant/bar.

During the waste auditing and assessment process it became apparent that there was also strong potential for collecting cardboard and office paper for recycling, and minimising other types of waste, by making some simple changes within the hotel and involving staff in the process. The proposed waste minimisation initiatives had strong backing from the hotel's general manager and top level support from Intercontinental Hotels.

The Waste Reduction Action Plan (WRAP) that was developed from this waste assessment enabled the hotel to focus on specific types of wastes, develop internal waste minimisation processes and identify which staff and departments would be responsible for implementing these programs.

The first action that was taken was to form an environmental committee consisting of the general manager, engineer, head chef, front office manager and purchasing officer. Each committee member was assigned responsibility for implementing various initiatives within the WRAP. The environmental committee meets every month to review the hotel's progress on implementing the WRAP and discuss other environmental issues at the hotel (e.g. energy, water).

Next, the hotel approached its recycling company to discuss implementing cardboard and paper recycling programs. Once these were set up the hotel was able to remove two of its landfill waste bins, resulting in large ongoing environmental and financial savings.

The hotel was awarded Waste Wise certification in December 2005 in recognition of its efforts to minimise waste in its operations.

Results Achieved

The most significant result of Holiday Inn on Flinders Melbourne's Waste Wise initiative was a reduction in its waste disposal costs of almost 50%, or \$9,000 per year, as a result of diverting its cardboard and paper from the landfill stream to the less expensive recycling stream.

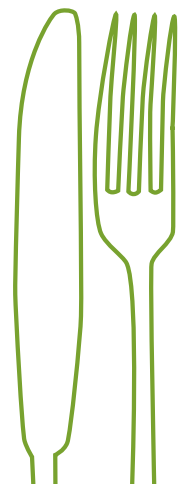
The hotel's financial outlay to achieve this result was minimal – a few hundred dollars for recycling containers and some time invested in staff training.

The savings achieved through following the Waste Wise process are being invested into an energy audit at the hotel, which is expected to enable the hotel to identify opportunities for realising further environmental and cost savings from reduced energy use.

Staff have been extremely enthusiastic and active participants in development of the hotel's Waste Wise programs. Importantly, the changes have been simple for staff to follow and have not resulted in any increases in labour costs.

An environmental committee has also been formed and has been the driving force behind many of the ideas that have already been implemented within the hotel, or are under consideration, including:

- Implementation of cardboard and paper recycling programs in all office, housekeeping, and back of house areas.
- Reusing scrap paper by cutting and binding for use as note pads.
- Reusing partially used toilet rolls from guest rooms in staff toilets.
- Sending plastic chemical containers (which the hotel's recycling service would not collect) back to chemical companies for reuse.
- Replacing plastic cups at water coolers with paper cups, which can be recycled.
- Recycling cooking oil, used light globes.
- Looking at donating partially used room amenities, left over food to charities.
- Investigating purchase of rechargeable AA batteries.
- Developing guidelines for suppliers to reduce packaging waste.



The Holiday Inn on Flinders Melbourne was able to achieve Waste Wise certification quickly by taking a number of key actions which got staff motivated and into action and paid big dividends both for the environment and the hotel's bottom line.

Keys to Success

Knowing the 'keys to success' may help you in the development of your own Waste Wise initiatives:

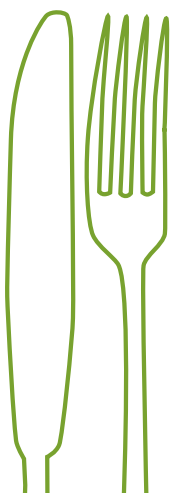
- *Teamwork* – forming the hotel environmental committee early on created a sense of ownership among staff that drove the project forward quickly.
- *Communication* – everyone knew their part in the process and what the program objectives were.
- *Strategic Approach* – implementing changes step by step, rather than trying to get everything accomplished at once.
- *Management Commitment* – the general manager was fully behind the programs from the start of the process.
- *Supplier Relationships* – good relationships with the hotel's contractors and service providers made the changes to waste management practices run smoothly.

The Savings in the City Program

The City of Melbourne's *Savings in the City* program, launched in July 2005, assists hotels within the municipality to develop environmentally beneficial and cost effective initiatives in the areas of waste, energy, water, purchasing, and transportation.

Savings in the City provides a 'one-stop shop' that supports hotels to:

- Benchmark their current level of environmental performance with international standards (linked to Green Globe 21).
- Save time and money by identifying priority actions.
- Reduce operational costs in terms of energy, water and waste.
- Make an educated choice on which environmental initiatives they would like to pursue through training, seminars and self-help kits.
- Develop comprehensive and effective environmental plans.
- Achieve certification in a range of environmental programs.
- Gain recognition for uptake of environmental activities, performance and leadership.
- Increase their potential to promote their environmental credentials.



5 Waste wise hotel case study

Fifteen hotels, ranging from 3.5 to 5 stars, and from 60 rooms to 500 in size, participated in the Waste Wise component of *Savings in the City*, representing **8 percent of accommodation businesses and 16 percent of the available guest rooms within the Municipality of the City of Melbourne.**

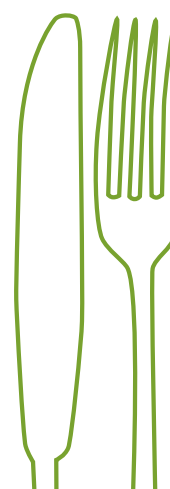
The overall environmental benefits of the program are summarised in the table below:

Hotel	Rooms	Star rating	Waste to landfill Annual reduction*	
Grand Hyatt	548	5	140 tonnes	23.3%
Hilton on the Park	403	5	148 tonnes	20.0%
Holiday Inn Melbourne	385	4.5	178 tonnes	32.6%
Travelodge Southbank	275	3.5	85 tonnes	44.4%
Hotel Ibis Melbourne	250	3.5	75 tonnes	35.5%
Holiday Inn on Flinders	204	4.5	104 tonnes	44.5%
Hotel Enterprize	190	3.5	57 tonnes	31.9%
Radisson on Flagstaff	184	4.5	100 tonnes	38.1%
Hotel Grand Chancellor	160	4	108 tonnes	38.2%
Medina Grand Hotel	154	4.5	73 tonnes	34.5%
Sofitel Grand Hotel	118	5	47 tonnes	22.0%
Quay West Hotel	115	5	91 tonnes	31.0%
The Sebel Melbourne	107	5	37 tonnes	29.0%
Hotel Miami	69	3.5	23 tonnes	44.7%
Quest on Bourke	63	4.5	25 tonnes	35.8%
Totals	3225		1290 tonnes	30.6%

* Expected annual reduction in waste to landfill following implementation of Waste Reduction Action Plans at each hotel

Once all hotels fully implement their Waste Reduction Action Plans, the following annual environmental and financial savings are expected:

- **\$10,000** average annual cost savings per hotel
- **31%** average annual reduction in waste to landfill per hotel
- **1,300 tonnes** combined annual reduction in waste to landfill (over 20,000 full wheelie bins!)





6 The waste wise program

The Waste Wise program offers hotels a practical and visible way to create a healthier environment.

By minimising waste, hotels can:

- Run their business more efficiently and profitably by reducing the 'hidden' costs of waste
- Make a worthwhile contribution to protecting the environment and recycling valuable resources
- Improve the hotel's environment for management and staff
- Meet health and safety obligations

With the Waste Wise program, hotels can take a step-by-step approach to reducing waste. Being part of the Waste Wise network provides your hotel with the opportunity to learn how others have reduced costs, enhanced their reputation, and contributed towards a healthier environment.

What is Waste Wise?

Waste Wise is an initiative of Sustainability Victoria that provides programs, resources and support for Victorian businesses, including hotels, to continuously improve their waste management practices and reduce their waste to landfill.

In addition to providing a structured approach to identifying waste and making improvements, being Waste Wise links hotels to a wide network of other businesses that have taken steps to reduce their waste and keeps them informed on the latest waste reduction approaches and to take environmental leadership, enhancing their image amongst staff, guests, suppliers and the wider community.

What does Waste Wise Certification Mean?

Hotels committed to developing in-house waste minimisation programs are encouraged to apply for Waste Wise certification with Sustainability Victoria. Waste Wise certification acknowledges your hotel's performance in implementing waste minimisation initiatives and is also a great way to demonstrate the standard of your achievements to clients and staff.

Certified businesses are eligible to use the Waste Wise logo on correspondence and advertising and invited to regular Sustainability Victoria events and forums. Certification is free and valid for two years.

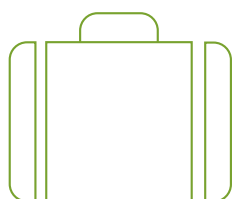
Becoming Waste Wise

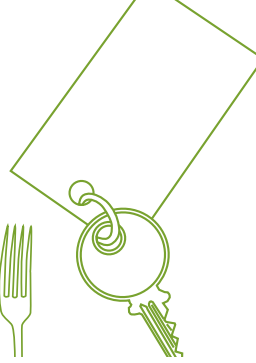
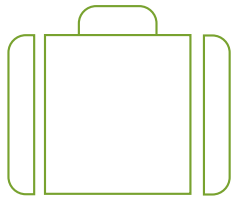
Waste Wise certification involves five steps:

- Step 1 Making a Commitment
- Step 2 Preparing a Waste Reduction Action Plan
- Step 3 Implementation
- Step 4 Reporting Outcomes
- Step 5 Continual Improvement

The resources in this Toolkit will help you to assess your hotel's waste streams and develop strategies to reduce it, and will form the basis of your accreditation. Once you have completed Steps 1 and 2, your business is eligible to be Waste Wise certified. You then have two years to complete all the steps.

For information on how to become Waste Wise certified, contact Sustainability Victoria on 1800 35 32 33 or visit their website www.sustainability.vic.gov.au.





7 Glossary

This section contains a range of facts, figures, and frequently asked questions to help you with your Waste Wise efforts.

Contamination

This refers to the wrong materials going into recycling containers. High levels of contamination – more than 5-10% – can lead to entire loads of recyclables being rejected when taken to the recycling plant and having to be sent to landfill, wasting effort and resources.

Types of contamination that frequently occur in recycling programs:

Commingled or glass recycling:

- Ceramics, window glass, and light globes
- Plastic straws
- Food waste

Food waste recycling:

- Glass
- Cutlery
- Plastic wrap

Cardboard recycling:

- Styrofoam
- Plastic wrap

Disposables

Plastic take-away containers and cutlery, paper and foam cups, and any items that are designed to be used once and then thrown away, are considered disposable.

Alternatives to disposables include:

- Paper plates and bowls – compost
- Steel and aluminium – recycle
- Corn starch cutlery – compost
- PET cups and carry trays – recycle

Food Waste

Around 25% of total waste generated by commercial kitchens and food retail outlets is food. Of this, 60% is plate scrapings and 40% is preparation waste, such as peelings etc. According to Planet Ark, around 3.28 million tonnes of food – worth more than \$5.2 billion – is thrown out by Australian homes and businesses each year.

If you have food that is left over and safe to consume, you can organise to give it to a charity (see *Section 8 - Resources* for contact details). Whenever possible, contact them well beforehand to let them know there will be leftover food to be collected, so they have adequate time to schedule a pickup.

Donors of leftover food are protected from legal action under Victoria's 'Good Samaritan Act', which gives donors immunity from common law liability for food donated in good condition and good faith. The Act is detailed in Appendix B.

A number of other recyclers also collect food waste and compost them off-site. Just remember that if a worm can eat it, you can recycle it! (meaning no bones or off-cuts from meat or fish).

Food items that can be recycled include the following (also check with your waste contractor)

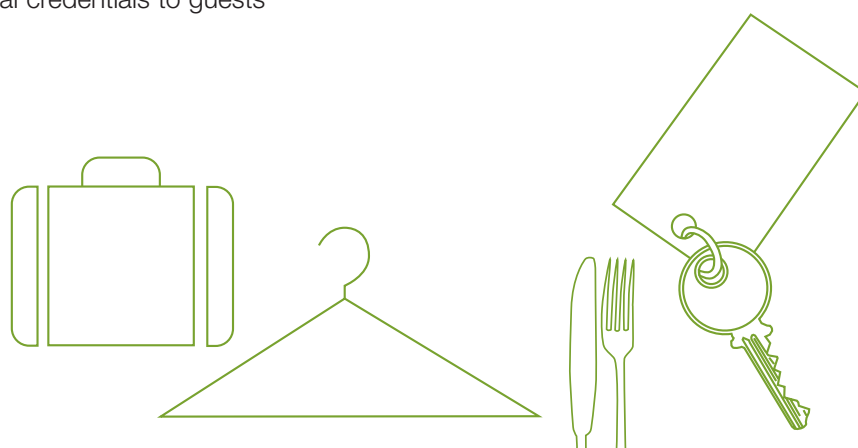
- Fruit and vegetables
- Rice and pasta
- Bread and cake
- Egg shells
- Paper towels
- Coffee grounds
- Tea bags
- Serviettes
- Plate scrapings

Green Purchasing

A green purchasing program gives preference to buying products that have a less detrimental effect on human health and the environment than competing products and services that serve the same purpose.

As well as being environmentally beneficial, buying green can have other significant advantages, e.g:

- Reducing costs for some products
- Saving money through re-using materials and products
- Helping to 'close the loop' to make recycling more viable
- Expanding the market for green and recycled products, as well as for products with reduced packaging, and decreasing pressure to create new landfills
- Enabling hotels to promote their environmental credentials to guests



Plastics

Crude oil, gas, coal and waste from petroleum – all non-renewable resources – go into making plastics.

Australians consume more than 1.3 million tonnes of plastic annually, more than 71 kg for every person. Visy Recycling processes over 100 million plastic milk containers and close to 250 million soft drink bottles each year.

You may have noticed that some plastic containers have numbers on them that look like this:



These numbers indicate types of plastic that can currently be recycled. This varies across the Australian states and territories; however, a few simple principles apply:

Code 1: PET (e.g. Soft drink bottles and fruit juice bottles, cups + carry trays)

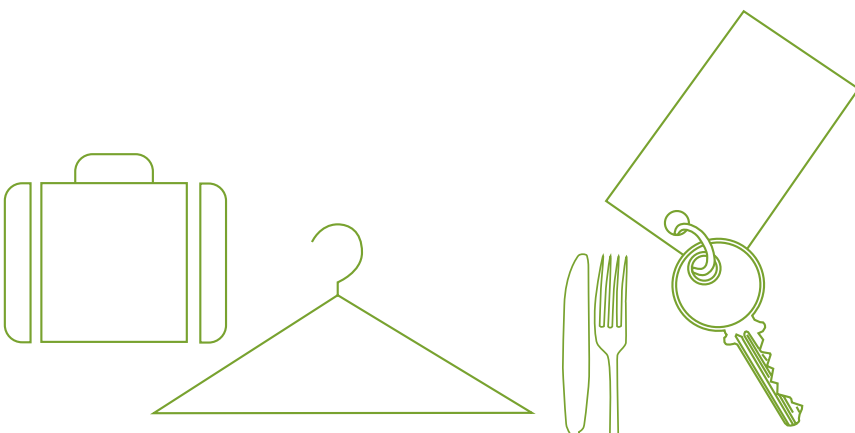
Code 2: HDPE (e.g. Milk, cream and juice bottles)

Code 3: V (e.g. Juice and cordial bottles)

Currently, it generally only economically viable to recycle these three types of plastics, but this may change in the future, so ask your recycling contractor to keep you informed of any changes.

The following types of plastic are not generally recyclable:

- Plastics 4, 5, 6, 7 or not numbered
- Polystyrene boxes
- Polystyrene cups
- Plastic straws
- Plastic bags



Recycling

The following are common uses for some of the materials commonly collected for recycling:

Aluminium Cans

Recycling aluminium saves huge amounts of energy because making aluminium cans from recycled material requires less than 5% of the energy used to make aluminium cans from raw materials. Once an aluminium can is recycled it appears back on the grocery shelf as another can within 60 days.

Bottle Twist Tops

Bottle tops are separated and processed into a variety of products: plastics are recycled into bollards and signs, aluminium and steel are used in many applications.

Cardboard and Paper

Most paper and cardboard collected in recycling is used in packaging materials, with smaller amounts of paper used in making newspapers, magazines and writing paper, and toilet paper.

Cooking Oil

Once the truck has collected the oil, it is taken to a special refinery, processed and then either sold to the stockfeed industry for chicken and pig feed or converted to biodiesel, a low-emission fuel.

Corks

The cork is processed into products such as gaskets, cricket ball inners, self expanding cork jointing in concrete, noise control boards, and cork flooring.

Food Waste

50% of the recycled organics that were processed during 2003-04 ended up used as mulch in vineyards, home gardens, and commercial landscaping.

Glass

Over 40% of recycled glass is used in the manufacture of new glass containers. Recycled glass is not only being reused to form glass containers. Crushed glass is increasingly being used for functional and decorative features in building gardens and landscaping.

Printer Cartridges

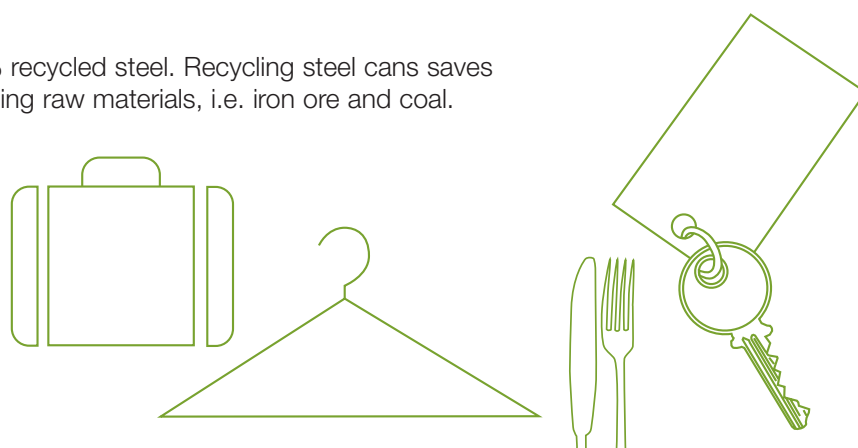
Almost 60% of laser cartridges are sent back to the original equipment manufacturers for their remanufacturing or component recovery programs. All inkjet cartridges, toner bottles and laser drums are processed to recycle their component materials – aluminium, steel, plastic, toner, ink and foam – into new products.

Plastic

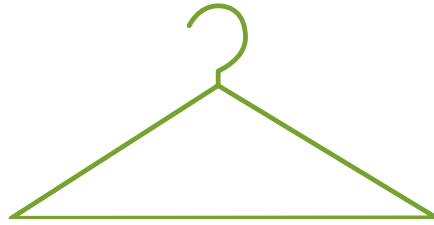
Some of the uses of recycled plastics include clothing, strapping, pallets, fence posts, wheelie bins and outdoor furniture.

Steel Cans

All steel cans made in Australia contain 25-40% recycled steel. Recycling steel cans saves 87% of the energy it takes to make the cans using raw materials, i.e. iron ore and coal.



8 Resources



waste wise

Sustainability Victoria

Sustainability Victoria was formed in October 2005 by the merging of EcoRecycle Victoria and the Sustainable Energy Authority of Victoria. Its mission is to deliver environmentally sustainable outcomes across all sectors of the Victorian economy and community. Waste Wise is a core behaviour change program of Sustainability Victoria and this program is supported by a number of resources, information, networks, case studies and toolkits for organisations to reduce their environmental impacts.

All of these can be downloaded from their website or by calling 1800 35 32 33 (free call in Victoria only).

www.sustainability.vic.gov.au

Waste Wise resources currently available that may be of use to hotels include the *Waste Wise Catering Toolkit*, *Waste Wise Events Toolkit*, *Waste Wise Office Toolkit*, and *Waste Wise Resources Kit*.

The companies and organisations listed in this section all contributed towards development of the Waste Wise Hotels Toolkit. Their mention does not constitute endorsement of their products or services, and are provided for guidance purposes only. Users of this toolkit are encouraged to contact Sustainability Victoria for further information on potential service providers.

The City of Melbourne

The City of Melbourne 2005 Waste Management Strategy supports the state-wide municipal target established in the Victorian government's "Towards Zero Waste" Strategy. The Victorian Government has set a target for the municipal sector to recover 65% of solid waste for reuse or recycling by 2014. The City is also Waste Wise accredited and working hard to improve public space and special events recycling.

www.melbourne.vic.gov.au

Close the Loop

Close the Loop offers a free collection and recycling service for all inkjet and laser cartridges, toner bottles, drum kits, fuser kits, etc. of any brand from any fax, photocopier or printer with zero waste to landfill from the recycling process.

www.closestheLoop.com.au

ECO-Buy

ECO-Buy, Australia's leading environmental purchasing organisation, assists hotels and other businesses to integrate environmental considerations into their purchasing decisions. ECO-Buy for Business was a key initiative supported by the Victorian Government's Commonwealth Games Environment Program.

www.mav.asn.au/ecobuy and

www.gamesopportunities.com.au/uploads/Enviro%20Tips%20&%20Hints.pdf

Great Forest Australia

Great Forest Australia is a for-profit environmental consultancy based in Melbourne that specialises in performing waste audits and assessments and developing of waste minimisation strategies, training programs, and resources – such as this Waste Wise Hotels Toolkit – for hotels across Australasia.

www.greatforest.com.au

Green Collect

Green Collect is a non-profit group that offers collection services for corks, aluminium, bottle tops, printer cartridges, mobile phones and accessories, batteries, and DVDs and CDs to businesses within the Melbourne CBD. As a social enterprise, Green Collect provides new work and training opportunities to people who have experienced barriers to employment.

www.greencollect.org

Green Globe 21

Green Globe 21 is a global benchmarking, certification, and continuous improvement program for environmentally sustainable tourism. It provides a variety of services and resources and Green Globe accreditation is the world's most widely recognised environmental standard for hotels.

www.greenglobe21.com

KS Environmental

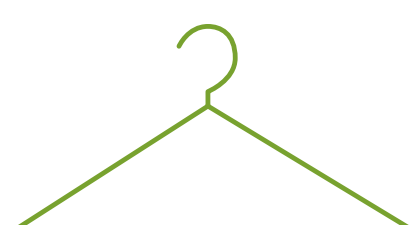
Provides a range of waste and recycling services for businesses, including organics, used mattresses, and electronic waste such as used computers etc.

www.ksenvironmental.com.au

MobileMuster

MobileMuster is the official recycling program for mobile phones in Australia. Initiated in 1999 to minimise the environmental impact of mobile phones, this free program collects mobile phone handsets, batteries and accessories to recover the plastics and metals for use in manufacturing new products.

www.mobilemuster.com.au



One Umbrella

One Umbrella collects food that cannot be used in serving and turns it into nutritious meals for the homeless and hungry of Melbourne. In 2004, One Umbrella provided over 200,000 meals at no cost to people in disadvantaged circumstances, 'rescuing' almost 50 tonnes of food that would otherwise have been sent to landfill.

www.oneumbrella.org.au

Victorian Litter Action Alliance

The Victorian Litter Action Alliance is the peak body for litter management and prevention in Victoria and provides a coordinated approach to preventing litter in Victoria across state and local government, industry and community sectors.

www.litter.vic.gov.au

Visy Recycling

Visy offers a range of recycling services including a 'fully commingled' program where paper, cardboard, glass, metal, and plastic can be recycled in the one bin (for businesses in the Melbourne CBD only).

www.visy.com.au

Other Resources

The following resources are also available through the internet:

Recycling and Waste Facts for Hospitality Managers

www.biec.com.au/projects.html

Eco-Efficient Food

A self assessment guide developed by EPA Queensland for hotels, restaurants, and cafes how businesses can save money by reducing consumption of water and energy and minimising waste.

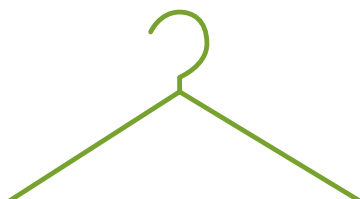
www.epa.qld.gov.au/publications?id=426

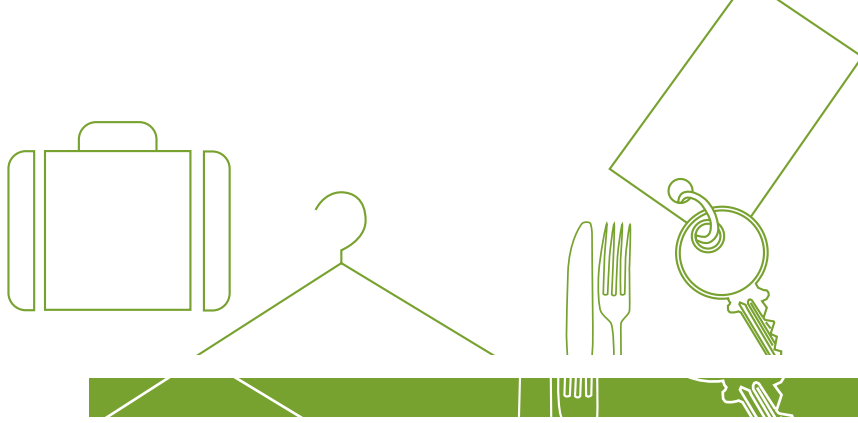
Recycling Signage

Social Change Media provides free downloads of recycling signage:

www.media.socialchange.net.au/recycling

Public place and event signage guidelines can be downloaded from Sustainability Victoria's website. These guidelines are based on the Australian Standards Guidelines for mobile waste container signage.





waste wise

Appendix A : References

OECD Report 2005

Information for the Hospitality Industry, Resource NSW

Eating into Waste, Tourism Training NSW

Visy Recycling

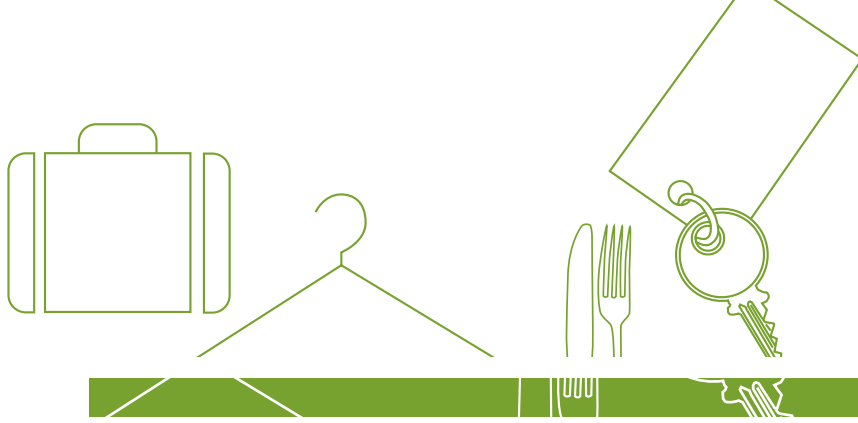
Sustainability Victoria, Information Sheets, Steel Can Recycling.

Sustainability Victoria, Information Sheets, Glass Recycling.

Sustainability Victoria, Information Sheets, Milk and juice carton recycling.

Beverage Industry Environment Council (BIEC) Waste Facts

KS Environmental



Appendix B : The Good Samaritan Act

WRONGS AND OTHER ACTS (PUBLIC LIABILITY INSURANCE REFORM) ACT 2002
'PART VIB - FOOD DONOR PROTECTION'

31F. Protection of food donors

(1) A person who donates food (the food donor) in the circumstances listed in sub-section (2) is not liable in any civil proceeding for any death or injury that results from the consumption of the food.

(2) The circumstances are:

(a) that the food donor donated the food -

(i) in good faith for a charitable or benevolent purpose; and

(ii) with the intention that the consumer of the food would not have to pay for the food; and

(b) that the food was safe to consume at the time it left the possession or control of the food donor; and

(c) if the food was of a nature that required it to be handled in a particular way to ensure that it remained safe to consume after it left the possession or control of the food donor, that the food donor informed the person to whom the food donor gave the food of those handling requirements; and

(d) if the food only remained safe to consume for a particular period of time after it left the possession or control of the food donor, that the food donor informed the person to whom the food donor gave the food of that time limit.

(3) For the purposes of this section, food is safe to consume if it is not unsafe food.

