WASTE AND RECYCLING
BUSINESS ESSENTIALS

Government of South Australia
Green Industries SA

This guide is an introduction to managing waste and recycling across your business. Recycling has many potential benefits including:

- Reducing costs
- Diverting resources from landfill to benefit the environment, reducing greenhouse gas emissions and reducing the need for virgin materials
- Meeting customer and staff expectations for businesses to be environmentally responsible
- Ensuring you comply with legislation (South Australia (SA) landfill bans).

Understand your waste

Before making any changes, it is helpful to understand what systems and services you already have in place. Make sure to review and understand the following:

- Current waste and recycling services and whether they match what is needed (such as not collecting empty bins)
- What happens to waste and recyclable material collected from your business: Who collects it; is it recycled; is it sent to landfill?
- Types of waste and where they are generated in your business
- What waste and recycling data is available? Do invoices or reports provide information about waste generation and recycling performance?
- What formal arrangements are in place for waste collection; is there a contract for collection or does it 'just happen'?
- What equipment and materials are used to manage waste (e.g. bins, trolleys, bin liners)?

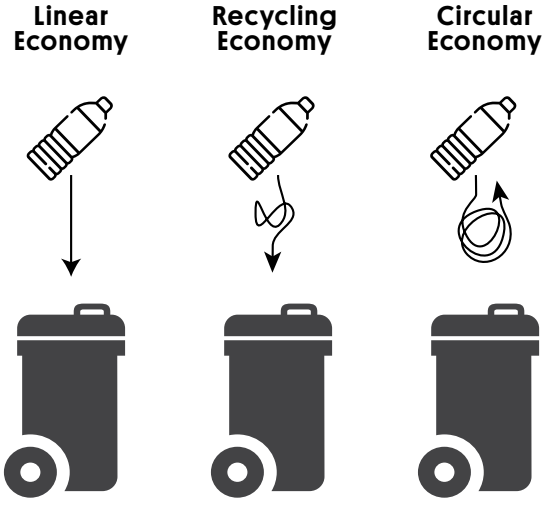
Principles

Once you understand your waste, you can follow some key principles to guide improvements.

Circular economy

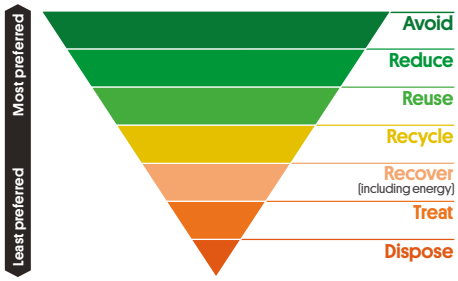
The circular economy is different from a 'take, make, dispose' economy, which is unsustainable due to limited resources. The circular economy involves redesigning systems and products so they can be easily repaired, disassembled and recycled to keep materials circulating indefinitely.

Designing out waste is important to get the most value out of materials.



Waste management hierarchy

Any changes to a waste and recycling system should be based on the waste management hierarchy. This is the internationally accepted preferred order of waste and recycling management practices.



Avoiding and Reducing waste is the best option. This reduces the need for purchasing items and paying for disposal.

Reuse materials for as long as possible to reduce purchasing and disposing new/single-use items. Reuse can be internally or by another organisation.

Recycling or composting turn valuable resources (e.g. food scraps, drink containers) into new valuable products and reduce use of virgin materials.

Recover captures and uses the energy value from materials that are difficult to recycle or cannot be recycled.

Treat/dispose should be a last resort. Resources and energy used to produce items are wasted when sent to landfill and have no more value.

Landfill bans

In South Australia, some items are banned from landfill including:

- electronic waste
- fluorescent lights
- whitegoods
- oil
- hazardous waste
- lead acid batteries.

For the full list of banned items and more information see the **Environmental Protection Authority SA website.** www.epa.sa.gov.au

Breakdown of your service costs

Costs for managing waste and recycling can be considered an unavoidable business expense. This means potential cost savings can be overlooked. Waste service charges should be clearly outlined in waste contracts and include the following cost components.

Waste Service Charges

COLLECTION COSTS
Costs for wages, trucks, bins etc.

+

PROCESSING/RECYCING AND DISPOSAL COSTS
Costs for sorting materials, processing into new items, treating to be safe, or disposal to landfill.

+

SA WASTE LEVY COSTS
Only applies to waste disposed of into landfill.

=

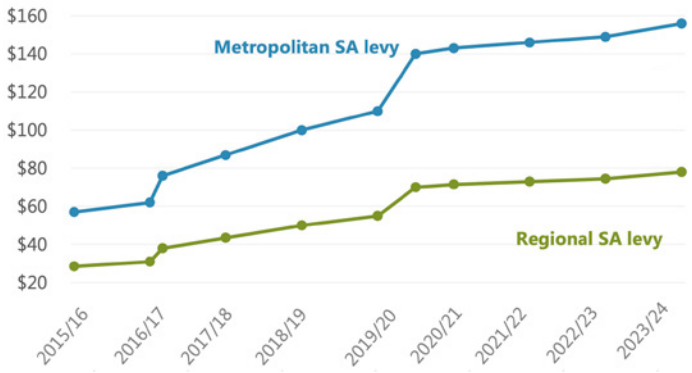
TOTAL SERVICE COST

These components are often combined into a single bin-lift rate. However, it should be clear as to how much each component is being charged.

South Australian waste levy

The SA solid waste levy is a charge on every tonne of waste sent to landfill. Recycled material does not attract the levy. This means it is often more cost effective to recycle.

The levy typically increases each financial year. Businesses can reduce current and future impacts of the levy by reducing waste generation and increasing recycling rates.



Measuring your performance

Measuring waste and recycling costs over time will help track your business's performance and identify any trends or unexplained increases in costs or waste generation.

Ask your waste and recycling service provider to supply reports and invoices that show what has been collected and what happened to the material.

Key measures to look for and consider are:

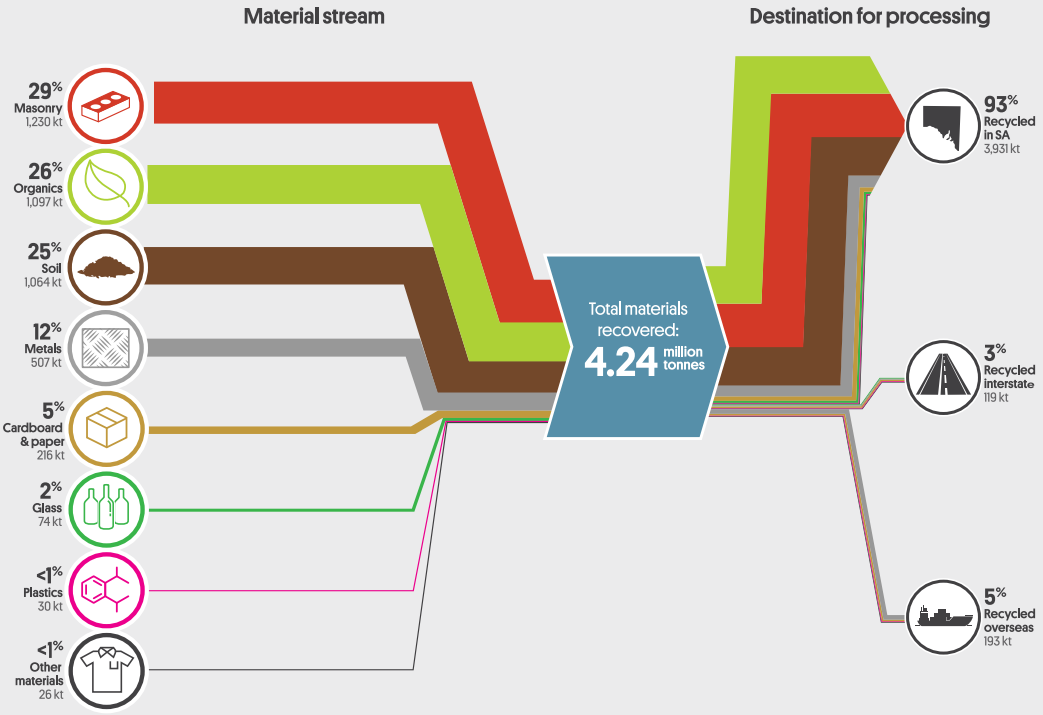
- total waste generated (measured in tonnes or kilograms)
- recycling and landfill diversion rates (measured by percentage of total waste generated)
- total cost of each cost component
- number of bins collected that are less than 50% full.

Key waste and recycling services and where the materials go

	Stream	Facility and Process	End Product
	RECYCLING		
	**Organics recycling** Food waste, coffee grounds tissues/paper towels, compostable packaging and garden waste.	Organics are taken to a composting facility, processed and matured.	Compost, potting mix and soil conditioners for home or agriculture.
	**Comingled recycling** Bottle, jars and cans [glass, hard plastic and metal containers, and paper/cardboard] .	Materials are sorted at a Material Recovery Facility [MRF] and sent to be reprocessed into new products. Some service providers offer a 'comingled' or 'dry waste' service where materials are processed for energy recovery.	Materials for manufacturing recycled-content products or processed engineered fuel.
	**Container Deposit Scheme (CDS) containers** 10 cent bottles and cans	Sorted by a commercial collector who will then send materials to a facility for reprocessing into new containers.	Glass, plastic and metals become new containers.
	**Paper and cardboard recycling** Separate or mixed streams and confidential paper.	Sent to a recycler who sorts and then transports it to a paper mill.	New paper and cardboard products and packaging.
	**Printer/toner cartridge recycling**	Your cartridge supplier may collect used cartridges, otherwise organise a free collection through 'Cartridges 4 Planet Ark'. Inks, plastics and metals are separated at a specialist facility.	Flooring/decking, garden beds, fencing, roads, pens and ink.
	**Lighting recycling** All lighting types Fluorescent lights are banned from landfill in SA.	Lights for recycling can be dropped off or collection organised. Businesses can become a Fluorocycle Signatory to recycle mercury containing lamps. At a specialist facility, lights are separated into glass, metals, mercury and phosphor powder.	Materials for manufacturing new recycled-content products.
	**E-waste recycling** Electronics such as computers, laptops, phones. E-waste is banned from landfill in SA.	Items are manually taken apart and valuable metals and plastics are recovered and used in making new items. Find your local drop-off point. MobileMuster offers drop off or post back services for mobile phones.	Materials for manufacturing new recycled-content products.
	**Battery recycling** All battery sizes.	Batteries for recycling can be dropped off or collection organised. Metals are recycled and chemicals captured and safely treated at a specialist facility.	Materials for manufacturing new recycled-content products and metals reused in new batteries.
	**Hard waste recycling** Good quality items can be donated/sold. Damaged items can be taken apart and components recycled [e.g. metals].	Damaged items may be suitable for energy recovery. Metals collected and sent for recycling.	Processed engineered fuel or materials for manufacturing new products.
	**Soft plastics recycling** Pallet/shrink/bubble wrap [Clean and clear].	Can be processed, washed and recycled into new products. It can also be used for energy recovery.	Indoor and outdoor furniture, bollards, signage and roads or processed engineered fuel.
	RECOVERY		
	**Dry waste for energy recovery** Suitable for difficult or non-recyclable [dry] items. Sometimes referred as Dry Recycling.	Processed at a local facility into a fuel source to replace natural gas in local industries.	Processed engineered fuel.
	LANDFILL		
	**Landfill** Non-recyclable items. This should be avoided.	Waste is buried in a special pit that stops toxic materials entering the environment.	No further value from the materials.

Recycling in South Australia (2022/23)

South Australia is known for its recycling industry. The Sankey diagram shows the material streams collected and where they are recycled.
The thickness of the line represents the relative amount of each material.
Most of the materials that are recovered are recycling in SA.



Working with building managers and cleaners

In leased buildings, the building/facility managers are responsible for cleaning and waste/recycling services. Any questions or changes to services will likely need to be organised through them.

Understanding the key roles and responsibilities can help the waste and recycling system work effectively.

Building/facility managers are generally responsible for:

- contracting and managing waste and recycling services, including responses to any issues raised by tenants
- providing information and education about waste and recycling systems
- service standards of cleaners and waste and recycling providers
- providing reports from the service provider (may only be for the whole building, not single tenancies).

Cleaners are largely responsible for:

- supplying appropriate bin liners (e.g., certified compostable liners for organics recycling bins)
- emptying bins and placing waste and recycling into the correct bulk bins
- managing and reporting contamination in the recycling bins.

Tenants are responsible for:

- ensuring staff use the waste and recycling system correctly and not contaminating recycling
- reporting any issues.

Improving services in leased buildings

Sometimes it can be challenging to get additional waste and recycling services during the term of a lease. When requesting new services, it is important to have a detailed understanding of what you need, including:

- costs
- environmental benefits
- bin and collection requirements
- who will be responsible for the service.

Once you understand this, meet with the building/facility manager to discuss any new services. It can also help to talk to other tenants in the building/complex to determine whether they want any changes.

If you are still having difficulty getting a new waste or recycling service within the lease, consider if it is possible to:

- trial the service to understand if the service is feasible for the site
- take on the costs and responsibility for organising and managing the service.

The best time to arrange new services is before signing or renewing a lease.

Other resources and support

Green Industries SA provides more resources and support for businesses to improve their waste and recycling practices. To find out more visit http://www.greenindustries.sa.gov.au/BSP-overview

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