

# Waste guide for offices: Shifting to a circular economy



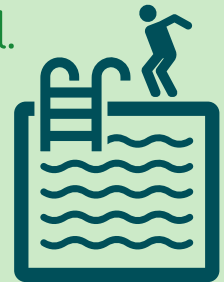
## How this guide can help your business

This guide aims to help your business reduce waste, optimise waste management and recycling systems, and foster a culture of environmental responsibility in your office.

The guide also covers economic benefits for your business and addresses recent shifts in waste management, including:

- circular economy approaches to resource management
- single use plastic bans and law changes for biodegradable and compostable packaging
- food organics and garden organics recycling option
- sustainable procurement
- how your waste contributes to your carbon emissions.

On average, the waste **each person** in Australia produces each year\* would fill **more than** one Olympic sized swimming pool. (\*3 tonnes)



78% of Australian employees value recycling facilities at work, research found during National Recycling Week. Workers see it as a hallmark of a responsible employer.<sup>1</sup>

<sup>1</sup> PlanetArk, <https://businessrecycling.com.au/documents/doc-1383-what-s-the-deal-br-report-final.pdf>

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## Cheatsheet: 9 key steps to good practice

The steps you take will depend on the current state of waste management practice within your office.

Step		Key actions
1.	Build your waste knowledge	<ul style="list-style-type: none"> <li>Learn the principles of the circular economy. Gauge whether your office incorporates circular economy principles into waste management and procurement.</li> </ul>
2.	Know your waste	<ul style="list-style-type: none"> <li>Use the <b>visual waste assessment tool</b> to see the breakdown of your office waste.</li> <li>Brainstorm ways to minimise the main causes of your waste.</li> <li>Determine the impact remote work and one-off events have on your office's waste composition.</li> </ul>
3.	Survey your colleagues	<ul style="list-style-type: none"> <li>Engage colleagues through discussions and surveys to gain insight on their current waste knowledge.</li> <li>Brainstorm ways to improve.</li> </ul>
4.	Engage key stakeholders	<ul style="list-style-type: none"> <li>Reach out to your building and facility managers to understand how waste is currently managed in your office or building.</li> <li>Speak with waste and cleaning contractors about proposed changes, ideas for improvement and reporting.</li> <li>Make sure your cleaners use clear bin bags to make it easier to identify contaminants and detect hazardous items.</li> <li>Build incentives and key performance indicators into your contracts with cleaners and waste contractors.</li> </ul>
5.	Bin systems	<ul style="list-style-type: none"> <li>Remove personal bins.</li> <li>Create well-designed bin stations that are simple to use.</li> <li>Ensure your signs are simple to understand, up-to-date, and relevant to your office.</li> </ul>
6.	Develop a waste plan	<ul style="list-style-type: none"> <li>Set achievable and realistic targets.</li> <li>Design a comprehensive waste plan.</li> <li>Secure support from senior management and relevant authorities to ensure the changes are implemented effectively.</li> </ul>
7.	Educate employees	<ul style="list-style-type: none"> <li>Create clear channels of communication to educate and engage employees on updates and changes to waste management.</li> <li>Nominate waste champions for each floor or a team to promote your waste management initiatives.</li> <li>Lead by example to foster a culture of sustainability.</li> </ul>
8.	Monitor and report	<ul style="list-style-type: none"> <li>Regularly review the performance of your new waste systems to gauge their effectiveness.</li> <li>Use the <b>CitySwitch waste assessment tool</b> to track your waste on a regular basis.</li> <li>Share your progress with employees.</li> </ul>
9.	Identify further opportunities	<ul style="list-style-type: none"> <li>Identify if there are any additional recycling opportunities in your area – such as coffee grounds, soft plastics, pens, textiles and cosmetics packaging.</li> <li>Practice sustainable procurement to reduce your waste output.</li> <li>Learn how your waste management affects your overall emissions.</li> </ul>

We'll outline more about each of these nine steps throughout this guide.

# Build your waste knowledge

Transitioning from the linear economy to the circular economy will reduce waste and increase the value and longevity of the resources in your organisation.

Most of our current economy operates in a linear 'take-make-waste' system.

Increasingly, offices adopting circular economy principles are reducing their environmental impact, avoiding unnecessary costs and gaining the most value from their resources.

A circular economy works to keep resources at their highest value for the longest period by creating a 'closed-loop' system, where materials and products are reused, refurbished, remanufactured and recycled.

Wherever possible, your organisation should aim to track both the positive and negative impacts it has on the environment. It should contribute to the restoration of areas that provide your organisation with necessary resources. For example, forest restoration or renewable energy projects.

## The circular economy

### 1. Eliminate waste and pollution

Waste is a misplaced resource, which incurs a monetary cost for people, and cost to the environment in the form of pollution. Items we consider to be waste should be reduced, reused, and recycled. Identifying and eliminating waste from your processes is a key stage to closing the loop in your office waste management plan.

### 2. Circulate products and materials at their highest value

To be most effective, resources should be used for the full value they can create. For example, the value of a second-hand car is highest when it is sold as a car, slightly lower when sold for parts, and lowest when sold for scrap metal. Designing products that are durable, repairable and recyclable is an important step to avoid waste and conserve resources.

### 3. Regenerate nature

Regenerating nature not only helps to provide life-sustaining environmental systems and new resources but is also a fundamental responsibility that we all share.



The circular economy

These questions will help you introduce a circular economy in your office.

### Stay up to date

Many councils, state government and federal governments have resources on circular economy and waste management practices that are relevant to your local government area, state, or national context. If in doubt, reach out to the [CitySwitch team](#), and we can point you in the right direction.

### Eliminating waste and pollution

- Where are we consuming resources we simply don't need?
- What pollution are we creating and how can we avoid it?
- What is the environmental impact of the products and services we buy?
- Are we managing and disposing our waste sustainably?
- What are our current behaviours and attitudes towards waste and resource use?

### Circulating products and materials at their highest value

- How could we buy products that are more durable, reusable, repairable or multi-use?
- Do we currently dispose of resources that are of low-value to us, but could be of high-value to someone else?
- How well do we factor the total financial and environmental lifecycle of the resources we use to guide our consumption and choices?
- How well do we understand the landscape of suppliers that can effectively provide and dispose of resources?

### Regenerating nature

- Where can your office better connect the consumption of resources with their regeneration or impact in nature. For example, planting trees for paper use or supporting plastic removal from oceans for plastic use?
- How would greater connection to nature and the environment help motivate your office to adopt circular economy principles?
- What resources (including money, space, skills, time) could your office offer to help regenerate nature?

# Know your waste

- your waste composition
- the waste streams your office supports
- your largest sources of waste
- the impacts of one-off events

Ways to understand your waste composition			
Activity	Description	Pros	Cons
Visual waste assessment	The CitySwitch <b>visual waste assessment tool</b> will help you quickly assess how much waste you're generating and an approximate contamination rate.	<ul style="list-style-type: none"> <li>• Fast and easy to implement</li> <li>• Can be done internally</li> <li>• Can be done often, and on an ongoing basis</li> </ul>	<ul style="list-style-type: none"> <li>• Only captures what is visible</li> <li>• Doesn't support getting certified by NABERS</li> </ul>
BinTrim	The <b>BinTrim tool</b> developed by NSW Environment Protection Authority lets you view data and provides guidance on how to manage your waste.	<ul style="list-style-type: none"> <li>• No associated costs</li> <li>• Can be done internally</li> <li>• Provides clear guidance on how to improve your waste management</li> </ul>	<ul style="list-style-type: none"> <li>• Only available in NSW</li> <li>• Doesn't enforce accountability</li> <li>• Doesn't support getting certified by NABERS</li> <li>• Requires data from building management</li> </ul>
Waste audit	The examination, sorting and weighing/counting of waste streams to inform analysis, reporting, and recommendations. This can be done by your organisation or through a consultant.	<ul style="list-style-type: none"> <li>• Provides actual data on your waste generation and contamination rates</li> <li>• Can be used to get certified</li> </ul>	<ul style="list-style-type: none"> <li>• Can be resource intensive</li> <li>• Typically only covers a short time-period (one day's waste)</li> </ul>
NABERS waste rating	A star rating from 1 to 6 which rates the environmental impact of your current waste management and performance. The number is calculated through the NABERS Waste Management Platform.	<ul style="list-style-type: none"> <li>• Provides an official certification</li> <li>• Provides a comprehensive assessment of your waste management practice</li> <li>• Provides a benchmark of your waste management against neighbouring organisations and industry standards</li> <li>• Your office can decide whether to keep the rating private or publicise it</li> </ul>	<ul style="list-style-type: none"> <li>• Certification is only available for a whole building or base building, with a verification statement available for a tenancy</li> <li>• Can be resource intensive</li> <li>• Requires a certified NABERS waste assessor</li> <li>• Creates an ongoing commitment</li> </ul>

### An important note

What can and cannot be recycled will vary depending on your office location and your waste contractors. Your contractors take your waste to different recovery facilities, each with different capabilities. It is important to clarify these things with your building or facility manager and/or waste contractor, so you know exactly what your office will be able to achieve.

# Visual waste assessment

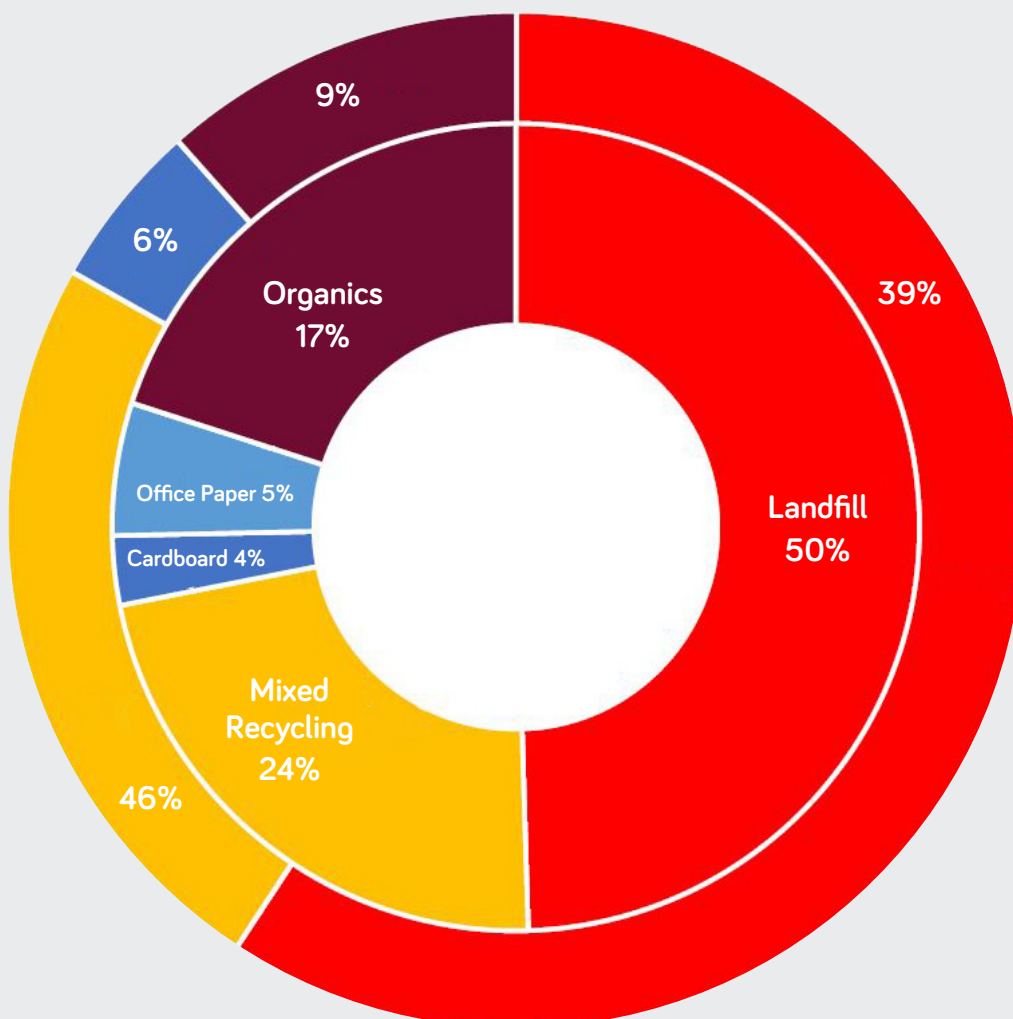
Our **simple tool** gives an overview of your office's waste production.

Using your results, you can get an idea of:

- your current waste generation and recycling rates
- your current contamination rates
- your potential recycling rates
- what contamination is in your landfill and recycling streams
- where your waste is generated
- potential cost savings for the building owner.

Once you have completed your waste assessment, return it to your CitySwitch program manager, who will produce a report detailing your results. The report will give you an action plan to include in your waste plan.

**Best practice is to work towards achieving and maintain a recycling target of 70% for commercial waste.**



The outer circle represents current practices while the inner circle represents our sites potential for recovery.



## Understanding your main causes of waste

### Do you know the most common waste items produced in your office?

Knowing this lets you tailor your approach to designing out waste, resource recovery and diversion from landfill.

### Coffee cups

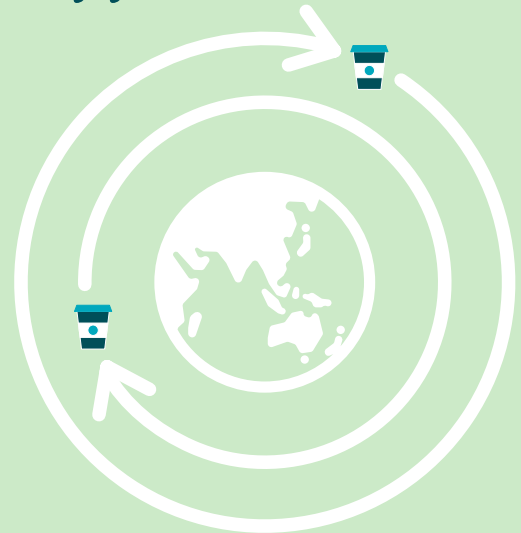
Most take-away coffee cups are lined with low density polyethylene (LDPE) – a non-recyclable plastic material to stop them from leaking. This means they cannot go into your mixed recycling bins. Plastic lids are often too light for recycling machinery, too.

There are few services that pick up and recycle disposable coffee cups, but they operate in limited areas.

The best way to reduce waste is through prevention.

- Encourage employees to use reusable cups.
- Email weekly updates and reminders about waste generation.
- Install reminder posters and stickers around offices to use reusable cups.
- Supply good coffee in the workplace to encourage employees to make their own rather than purchasing.

**Around 1 billion coffee cups go into landfill every year.**



**If you placed them end to end they'd go around Earth more than twice.**



## Food waste

There are many processes your office can put in place to reduce food waste.

- Ensure catering numbers for meetings and events are accurate.
- Redistribute leftover food to employees or donate it.
- Review any existing automated orders, such as milk. Does it regularly pass the use-by date in the fridge?
- Educate staff about reducing their own food waste. Consider cost and climate motivations. **OzHarvest's Fight Food Waste** has a lot of great facts and information on the issue.

Some food scraps are unavoidable (banana peels, coffee grounds and so on). Investigate food scraps (also called organics) collection services for these items. Organic waste is a valuable resource that can be repurposed by composting or other waste-to-energy processes. It also tends to be the heaviest component in the landfill stream. Since costs are often calculated by weight, **removing food waste items from landfill can significantly reduce your expenses.**

It is important to note that most organisations have strict low-contamination policies for food organics waste. You'll also need to verify what items are accepted by your organics collection or on-site solution.

For example, the NSW EPA does not allow compostable packaging in composting facilities. [Compost Connect](#) provides a comprehensive breakdown on what is accepted for each area in Australia.

The way your office disposes of organics will depend on several factors, including your location, service availability, and the type and volume of organics waste you produce.



Food scraps (organics) service options		
Option	Best suited for	Service details
Pick-up services	Medium-to-large offices	<ul style="list-style-type: none"> <li>Some waste removal organisations offer food scraps (organics) pick-up services</li> <li>After pickup, the scraps are transported to processing plants, where they are used for creating renewable energy, mulch and/or compost products</li> <li>Speak to your waste contractor, or look into other locally operating organisations, to find out if this service is available to you</li> </ul>
Onsite solutions	Medium-to-large offices	<ul style="list-style-type: none"> <li>You could install a food-waste pulping machine in your loading dock area. These machines break down food waste into a recyclable pulp, which is then used to produce organic fertiliser</li> <li>Another option is a food waste bioconversion unit that uses insects to consume food waste and convert it into sustainable protein and fertiliser</li> <li>A dehydrator removes the moisture from food waste and produces a soil conditioner</li> <li>Speak to your property manager and do research to find out if these solutions are available in your area</li> </ul>
Community programs	Small offices	<ul style="list-style-type: none"> <li>There are some organisations that can connect local communities to compost food waste</li> <li>Look into whether there are any community composting locations near you</li> </ul>



SOILCO processing FOGO waste at their facility in Kembla Grange, NSW

## Paper

- Set your machines to print double-sided in black ink by default.
- Introduce 'follow me' or pull printing to avoid documents being printed and never collected. 'Follow me' printing requires employees to log on to the printer with a PIN or by swiping their ID card before they can print.

Your IT department can advise on these print options.



### Cost savings through reducing paper

Use this simple calculation to determine your potential cost savings.

#### Quick case study

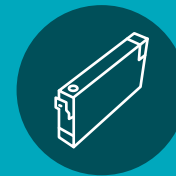
The average 240L bin full of paper will hold approximately 5,500 sheets of paper.

If each sheet of black and white printing costs approximately 2.5 cents to buy and print, each bin of paper holds \$138 of printing costs, and 27kg of waste.

If each week you disposed of 1 bin of paper, you would be wasting more than \$7,000 and 1.4 tonnes of paper each year.

And that's before you factor in the added costs of disposal, cleaning time, printer maintenance and coloured printing.

**Reducing printing waste is a smart move for both the planet and your business expenses.**



### Printer cartridges

Australians dispose of **more than 18 million printer cartridges every year**, equating to more than 5,000 tonnes of material, Planet Ark research found.

When printer cartridges break apart in landfill, they can contaminate groundwater and the environment. Cartridge recycling allows plastics, metals and inks to be recovered.

'**Cartridges 4 Planet Ark**' is a national program that collects and recycles printer cartridges.



## Staff kitchens

Consider buying cutlery, cups, plates, glasses and equipment from charity stores or other second hand marketplaces.

## Impacts of one-off events

One-off or occasional events can have significant impacts on waste generation from your business. These include events such as infrequent or annual festivals and celebrations, refurbishments or tenancy moves.

It is essential to include these types of events in your waste management plan. They often result in large volumes of waste and can also generate unusual waste items that may need to be disposed of differently to your usual waste streams.

Office relocations or refurbishments can be particularly problematic. When leaving an office space, fittings or furniture are often needlessly discarded into landfill. People love to just dump things in a skip.

Donate unwanted furniture, electronics and stationery to a charity or other organisation, or resell it through second-hand marketplaces. Including these types of waste into your waste management plan will ensure a more sustainable approach in future.



# Survey your colleagues

**Everyone plays a role in generating office waste. By talking to your colleagues, you will learn about their current practices and knowledge while also getting their input into any future solution.**

- Create surveys and feedback templates to get direct input from employees. The survey results will help inform your waste plan and employee education program.
- Organise a working group to help address waste and engage directly with employees across the organisation.
- Look at waste generation volumes, particularly if you can make comparisons across sites, teams or time periods. There may be lessons about specific sites or periods of time in your analysis.
- Review waste stream contamination rates, starting with simple tools like the visual waste assessment.

**It is often easier to get 10 people to reduce their waste by 10% than it is for one person to reduce their waste by 100%**

## Example survey questions

1. What items do you recycle at home?  
If you compost or have food scraps collected (well done!), let us know this too.
2. Are the recycling bins at work conveniently located?
3. What types of items do you recycle at work?
4. Are our bin signs easy to understand?
5. How do you think the bin signs could be improved?
6. Which of these items needs to go in the landfill bin. Select all that apply.
  - a. paper towel
  - b. tissues
  - c. juice cartons
  - d. take away coffee cups
  - e. pizza boxes
  - f. takeaway soy sauce containers (fish shape)
  - g. cling wrap
  - h. alfoil
  - i. window faced envelopes
  - j. electronics
  - k. batteries
  - l. hard plastic take away containers
  - m. plastic bags
7. Which items are you not sure about - you're not confident about which bin they go in?
8. Is your printer set to print black and white by default?
9. Is your printer set to print double-sided by default?
10. What do you do at work to reduce waste?  
For example, use reusable cups regularly, take your own containers to cafes and eateries when getting food, organise a recycling service for batteries, pens, or electronics.
11. What kinds of things do you think we can do to reduce waste in our office?
12. What could we do in our office to reduce waste contamination in our bins - to stop people putting the wrong items in the recycling bins?
13. Please list any reasons why you think our recycling systems are ineffective or why waste reduction initiatives may not work in the future.

## Engaging key stakeholders

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There are numerous stakeholders and management areas you will need to engage to develop a best practice waste plan. Success with any waste reduction or recycling improvement program must involve your cleaners and/or waste contractors.

**Dedicated coordinator:** Assign a staff member the role of dedicated coordinator to keep track of the back-and-forth discussions. This ensures a smoother collaboration, as parts of the discussion are not getting lost between a chain of people.

**Clear objectives:** Approach waste management and other key stakeholders with clear objectives. Establish clear goals prior to conversations, and provide perspective on how this can be achieved, and the benefits it will have in your office. This shows that your goals are achievable and the direct benefits they will have.

**Incentives:** Incentivise your employees as well as your waste and cleaning contractors. Set targets or key performance indicators (KPIs).

**Reporting:** Make sure your cleaners and/or waste contractors can provide you with regular reporting so you can see how you are progressing against your targets. Ask them how they will be able to calculate these reports – if weight or volume-based measurements are not possible, see if you are able to come up with another metric such as visual inspections, feedback from the cleaners or an assessment in 6 months. Choose a reporting method that is easy for everyone to follow and simple to update. If possible, pick a reporting method that allows for changes and is transferrable to other platforms.

**Independent audits:** It is a good idea to get an independent waste audit on an annual basis, as a minimum, to verify reporting from the cleaners and/or waste contractors.



## Working with your building or facility manager

Your building or facility manager can be a real ally when it comes to improving your waste and recycling practices. They can offer good, practical advice on the various solutions available for your office. They can put you in touch with a waste contractor if you don't already have this relationship, who may be available to discuss new and improved systems. This may include facilities for new types of waste such as printer cartridges, battery recycling or soft plastics.



## Questions to ask your building or facility manager

- Which waste streams are supported in the building, and are there any that my floor/ team/organisation are not using?
- Can I see the central waste area?
- Which waste management company currently services the building, and where does this waste ultimately end up? (This can help you better understand what recovery facilities are used and what level of material recovery each facility achieves.)
- What are the current waste generation, recycling and contamination rates for the building? (Ask to see a report for the building.)
- What are the current waste management costs, ideally broken down by waste stream?
- Has the building ever undertaken a waste audit or NABERS Waste rating?
- Who is the building owner?
- If you're in a building with other occupants, what are other tenants doing in terms of waste and recycling?
- Does your lease include any clauses about waste management programs in the building?
- Do other tenants want to improve waste management?
- Can additional waste streams, like food waste, be collected?
- Are there any waste management and recycling provisions within the cleaning contract – for example, if eliminating bins at each desk saves time, could cleaners undertake ongoing simple assessments as they collect waste?



## Working with your cleaning contractor

Working with your cleaning provider is paramount for the success of any recycling program. Get them involved from the outset, discuss any proposed changes with them and understand what may or may not work within their current scope of work.

All your hard work can be easily undone if cleaners remove the recycling from your office and place it in the incorrect bins in the loading dock.

Translucent bin bags should always be used to collect waste. These bags allow you to quickly identify any contaminants and detect potentially hazardous items like sharps or dangerous waste that might otherwise remain concealed in opaque bags.

Ensure you have clear and ongoing communication with the cleaning services manager and that all cleaners are trained to properly remove and sort waste. Consider using visual demonstrations.

Your cleaners can also inform you when your waste management system is working well and when it is not. This can help you fix problems as soon as they arise.

Include waste reporting as part of the cleaning and waste collection contract.

### Questions to ask your cleaning contractor

- Are they able to start using translucent bags, if not already?
- How can contamination issues be brought to your attention quickly – for example, can they provide feedback using a simple ongoing visual waste assessment as they collect waste on each floor? (Images sent via Whatsapp or similar can be a simple first step.)
- Do they monitor and report on waste, especially any contamination issues? Could you also get these reports for your office?
- What training do the cleaners receive regarding waste management?

## Working with your waste contractor

A good waste contractor can help you implement a best practice waste management system that suits your organisation and your office set-up.

Often your building or facility manager facilitates your relationship with the waste contractor, so you may need to engage both these stakeholders when improving your own waste management processes.

If your waste contractor can't provide the solution you want, consider dealing directly with another contractor who can provide your office with specific bins that can be picked up on an ad hoc basis when full. You will need to inform the building manager and cleaners.

**Good Environmental Choice Australia (GECA) certify waste collection services. This trusted third party provides a transparent and independent assessment to support you make good purchasing decisions for the environment.**

### Questions to ask your waste contractor

- Where does the waste go? Which recovery facilities are used?
- What are the acceptance criteria of those facilities, and what happens if the waste is contaminated?
- What percentage of the waste that goes to the facility comes out recycled? What is the grade of recycling?
- What improvements would the waste contractor suggest you make?
- Can additional waste collection streams, such as food (organic) waste, be added?
- How can you, as a tenant, get reports about your own waste production?

## Bin systems

Placing bins in a centralised system often achieves higher levels of recycling and minimal contamination in your office.

The system involves:

- placing a paper recycling bin in a central location, usually in a print room
- removing personal bin collection – employees need to dispose of their waste in central locations only
- placing landfill waste and recycling bins in the kitchen.

### Design

The design of your bins matters. Good waste management uses design to encourage behaviour change.

Figure 1 and 2 show recycling stations manufactured by 2 different organisations. Of these two options, consider which you would be more likely to use, and why.

Figure 1 does not have any signs. The only difference between the bins is the colour, which can be confusing for anybody who doesn't have extensive understanding of what items can go into each waste stream. They are also low to the ground, which makes them difficult to notice. It also only divides into three streams, which often results in higher levels of contamination.

Figure 2 displays clear and simple signs, which includes wording and pictures to be easily understood by a wide range of audiences. It is at eye-height, which makes it easier to read, and more noticeable. The style of cabinetry lends itself well as a recycling hub, as it doesn't look like a typical garbage bin. This design encourages people to stop thinking about items as **waste** and start thinking of them as **resources**.



Figure 1: MES Ireland stainless steel recycling station



Figure 2: Source separation systems recycling wall hub

**Line of sight:** Recycling rates improve when everyone can see a bin hub from their desk.

**Point of contact:** Ensure everyone knows who the point of contact is for any questions, problems or suggestions about waste.

**Waste levels:** If bins are overflowing, recycling rates will suffer. Waste can be measured using metrics such as kilograms per full time employee (kg/FTE) data, which you can obtain from the CitySwitch Waste Assessment Tool. This will help you calculate the number and size of bins you need.

**Accountability:** Studies show bin hubs used by large numbers of people have higher contamination rates than those shared by a smaller team (between 20 and 25 people).



## Clear signs

All waste and recycling streams should be shown with clear signs on all bins and on walls in the centralised waste areas. Floor areas could also be coloured to differentiate each waste stream. The diagram below gives an example of clear signs.

It is important to speak to your waste management team and check local guidelines, to make sure the signs you are displaying are correct.

Signs should be clear and readable from a few metres away. Bold colours and easy-to-understand photos are the best way to help guide people. There are standard colours used for different recycling streams, as shown in the table below.

	NSW	VIC	SA	WA
Paper/cardboard	Blue	Blue	Blue	Blue
Mixed recycling	Yellow	Yellow	Yellow	Yellow
Landfill	Red	Red	Red	Red
Organics (food)	Burgundy	Green	Dark red	Burgundy

Colours vary slightly between states and territories. If your state or territory is not listed above, your relevant government website will provide further details.

Ask your building management for signs or you may wish to create branded signs using templates available on the [CitySwitch website](#).

### Best practice design principles

- Use visuals and short descriptions to convey information. Use photos instead of icons to avoid misinterpretation.
- Use colour-coded backgrounds to indicate recycling streams.
- Include 2 clearly defined sections on each sign to outline what can and can't go in each bin. Ideally keep it to less than 7 examples for each.
- Text should be large enough to read clearly at 3m (on approach to bin). Content should be printable on A3 paper.
- Hang at head height, above each bin. If your workplace has any employees who would struggle to read a sign at average head height, print and display signs on the front of each bin.

Ask your building management for signs or use the templates on the [CitySwitch website](#).



# Develop your waste plan

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## Establish targets

Targets will give you and your stakeholders something to aim for and to measure success.

A waste assessment establishes your baseline waste and recycling rates. From these you can set targets to reduce waste and increase recycling.

Your targets should be SMART (specific, measurable, achievable, realistic and time-bound). If you're unsure what metrics to use, speak to your waste contractor, your building or facility manager, or your CitySwitch program manager.



**Specific:** Ensure your targets are clear. Rather than something vague like 'improve levels of recycling', set specific targets such as:

- reduce the amount of waste generated by 10% by (date).
- achieve 60% diversion from landfill by (date).
- start a successful mixed/organics/soft plastics recycling bin system with no contamination by (date).
- achieve a 5-star NABERS waste rating by (date).

**Measurable:** Your options include measuring your success by volume (litres, square metres, kilograms or tonnes) or percentage diverted from landfill. Make sure you set targets that can be measured by your cleaners or waste contractors.

**Achievable:** Use your baseline data to set reasonable targets.

**Realistic:** Consider the potential opportunities and restrictions of your office and building.

**Time-bound:** Ensure you have timeframes in place.

When setting each of your targets, you should always consider the people in your office who will be using the system and whose behaviours you might wish to modify.

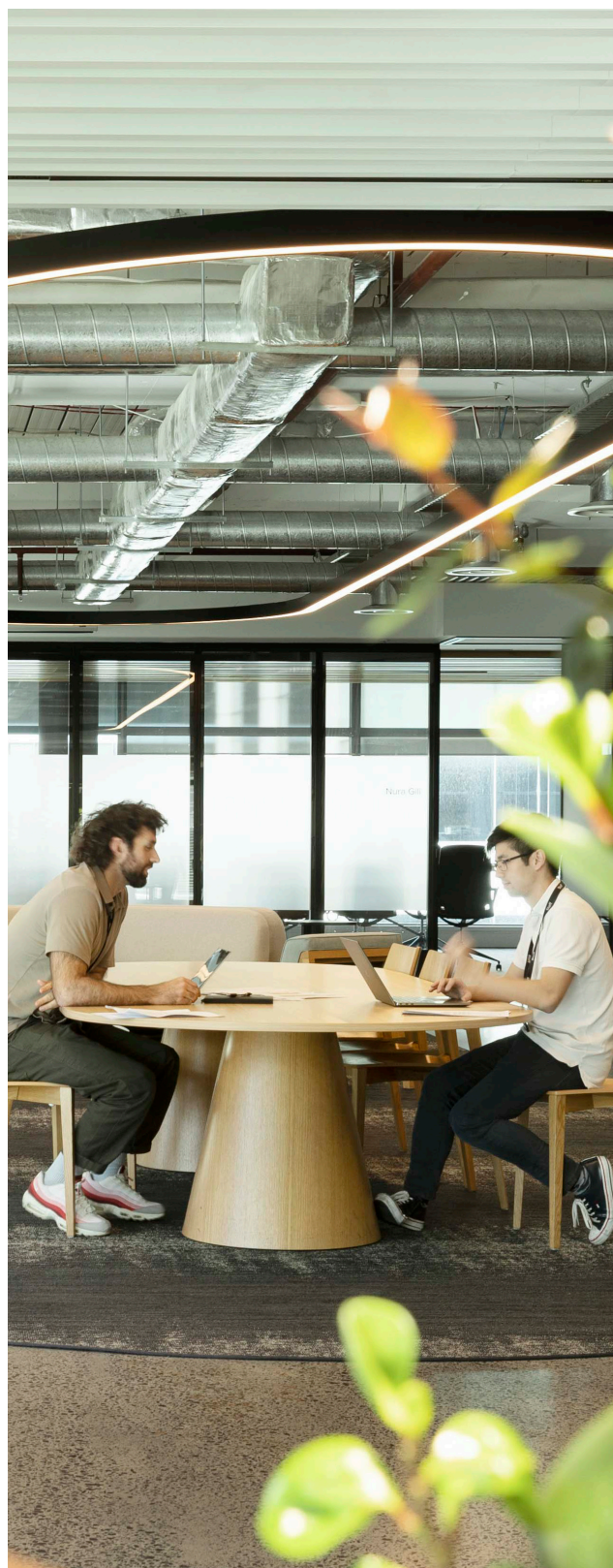
## Set up an action plan

- Begin with the action plan in your visual waste assessment report. This identifies key action items from your waste assessment results.
- Add findings from your other research and develop a plan to meet the targets you have set.
- If you have an existing environmental strategy that includes waste, you can use your findings to inform your planning. Waste falls under scope 3 emissions and should be part of your organisation's net zero strategy.
- Select the most appropriate bin system for your office (see page 18)
- Develop clear signage (see page 19)
- Educate employees (see page 24)
- Establish metrics for monitoring and reporting (see page 26).
- Identify the potential to expand your waste plan to include more difficult waste streams, as discussed on page 28.

Area	Action	KPI	Responsible	Progress/Outcome
Paper	Purchase 100% recycled content paper	All paper purchased over next 6 month (trial)	Purchasing	
	Implement follow your printing	Train staff in new printing procedure	HR	
	Collect one sided paper for reuse as notepads	Collect data on number	Green Team	
	Recycle paper in correct recycling bins	100% recycled paper	All staff	

For each of the materials in your waste plan, the following list can help prioritise ways to stop waste as soon as possible.

1. **Regenerate:** Collaborate with key stakeholders and employees to identify an achievable way for your office to regenerate nature. For example, schedule donations to environmental regeneration programs, engage in corporate volunteering days, consider nature-friendly infrastructure in remodelling or construction, or set up a carbon offset program.
2. **Avoid:** Avoiding the consumption of resources is a great way to reduce costs and waste. This may mean reviewing your current practices, investigating opportunities to automate or digitise processes, or negotiating with your procurement department and supply chain.
3. **Reduce:** For areas you cannot avoid, reducing the volume of resource consumption is a critical step.
4. **Re-use:** Buying standardised, modular, configurable or widely used resources is likely to increase the likelihood they will be able to reused in some form.
5. **Recycle:** The key to high-quality recycling is separating at the source. This means sorting waste into specific waste streams at the point of generation (your office floor), and ensuring these waste streams are not contaminated.
6. **Recover:** Depending on the available suppliers and the type of waste you generate, there may be value that can be recovered from waste that would otherwise go to landfill. For example, thinking about food scraps, this generally involves recovering the energy that would otherwise be lost from waste, by using it to generate combustible fuel or fertiliser.
7. **Landfill:** For where the alternatives above are not achievable, correct disposal is critical to avoid unnecessary impact. Landfill refers to disposing of waste through a hole in the ground. You must ensure this is done safely and that your landfill waste is sent to a licensed facility.



# Educating employees

If people do not understand why a process is being changed, or are confused about what to do, the program will likely fail. Ensure you engage your colleagues every step of the way, so they feel part of the process and understand why your organisation is changing its approach to waste.

Consider making waste reduction targets part of employee KPIs, or creating an internal competition to keep people engaged and committed to doing the right thing.

## Behaviour change tips

Educating your employees can take time and may involve more than one step. Here are some key points to remember:

- make the waste and recycling system simple
- use clear and consistent communication
- communicate on a regular basis
- use positive reinforcement
- work with other business units (for example, procurement, IT and HR) to spread the message.

Emails from management reminding employees about the process, and providing progress updates, help reinforce the new process and its outcomes.

**Include photographs of good practice and common contamination problems** to reiterate what can and can't be recycled.

And include waste and recycling tips or pointers from our top 10 office recycling questions listed on page 31 to pre-empt any questions employees may have.



## Appoint waste champions

Nominate waste champions at the floor, tenant, or building level within offices to increase the effectiveness of waste management initiatives.

Adaptability is a key as waste champions need to tailor their approaches to suit the unique needs of different sections, floors, tenants, or buildings.

With their direction and leadership, these champions drive sustainable practices, reduce waste generation, and support broader organisational sustainability goals. Through continuous improvement and a sense of ownership, waste champions instil a culture of environmental consciousness and promote positive change.





## Communication tips

- Avoid an authoritative tone. No one likes being told what to do. Be friendly and consider humour.
- Loss aversion - people hate losing something more than they like winning something. So rather than offering people with reusable coffee cups a discount, it's actually more effective to charge people without a reusable cup more (make the reusable cup price the standard).
- Sequence your requests - start by asking people to do a small thing, then follow-up with a bigger commitment request.
- Consider what behavioural **nudge tactics** you could use.



## Monitoring

After installing new systems, it can take time to make sure they're being used properly.

Contamination of new waste streams will likely be the key issue. It's important to regularly review how your new system is performing.

In the initial stages, you'll need to tackle issues as they arise, and monitor bins daily.

There are various ways to do this.

**Visual inspections of each bin:** A quick glance in each bin will quickly determine if your new system is working effectively. The best times to inspect are after lunch and at the end of the day. Take photographs of any contaminated bins to provide feedback to employees. A picture can say a thousand words.

**Feedback from cleaners:** Ensure your cleaners are reporting issues to you as they arise. And try to pinpoint issues to exact locations so you can identify problem areas. Ask them to take photographs as evidence.

**Feedback from the waste contractor:** Ensure the waste contractor is briefed on your new system and ask them for regular contamination reports and feedback on whether you're improving.

The key to making your waste plan successful is sharing results with your colleagues, management, the building or facility manager, cleaners, and the waste contractor – and tackling any issues early on.

Highlight what is and isn't working. Discuss solutions to any problems.



### Waste audits

If you're in the process of procuring a new waste contract, your new contractor may be able to provide waste audits free of charge. Speak to them about the opportunities available to get the most from your waste service provider.

## Reporting

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Reporting lets you share good results with employees and ensure you're on the right track to meet your targets.

### Getting a rough guide

- Conduct another waste assessment using the CitySwitch waste assessment tool and compare the results to your baseline. This should show how you're performing.
- Ask your building or facility manager, or the waste contractor, for copies of the monthly waste report for your building. Ensure the report breaks down waste by the various streams and shows either total weight or volumes of waste produced. Be aware that you may not see much evidence of change in these reports, unless the whole building is involved. It may be difficult to get a breakdown of your own office's achievements as the report is often for the whole building.

### Getting a formal report

A formal waste audit, conducted by a qualified waste consultant, will give you a more thorough understanding of your waste. This will include a breakdown of the amounts and types of materials being sent to landfill or recycling, levels of contamination, and how much could be recovered by implementing additional recycling or composting projects. It can also help you identify inefficiencies in your current strategy – for example, underused bins – or the potential to introduce new bins or new waste streams. Waste consultants can also suggest ways to save money on your current services.



A NABERS waste audit is a more in-depth audit that involves collecting and weighing the material from your waste and recycling bins over a period of time. This can be done for a base building or a whole building. You will receive a star rating based on how well your system is diverting waste from landfill - 5 stars represents market-leading performance. You can estimate your NABERS waste results on the NABERS website.

For tenancies only looking to measure their own waste output, a NABERS verification report is available. This lets your organisation enter data into the NABERS waste platform and once it's verified by a NABERS waste accredited assessor, the information will generate a report on your waste and its current environmental footprint.

## Identifying further opportunities

There are many items that cannot be disposed of through regular recycling facilities, that can be recycled when separated and picked up by specialist companies. For example:

- coffee cups
- coffee pods
- clean paper towels
- soft plastics.

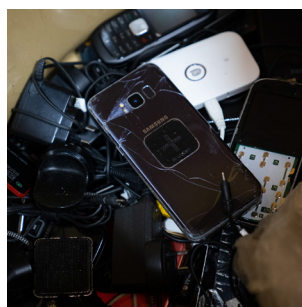
Drink containers should ideally have their own stream. While they can be recycled in regular yellow bins, introducing a specific stream for container deposit scheme (CDS) items will reduce the amount of drink containers sent to landfill, and bring money back into your organisation.

You may find pickup services for CDS items or you could organise drop offs at a bulk-processing facility nearby.

It's also important to consider waste that may not be generated daily, but is still significant, such as:

- electrical goods
- printer cartridges
- batteries
- textiles
- polystyrene

**When discussing further recycling possibilities with your building or facility manager, or waste contractor, remember to ask what the minimum amount of waste is to make the service viable.**



### The impact of the Container Deposit Scheme

Across Australia, Container Deposit Schemes (CDS) have had a huge impact on the amount of single-use drinks containers going to landfill.

South Australia was a pioneer. It introduced the first CDS stream in 1977. Each year, South Australians return approximately 660 million drink containers – or 40,000 tonnes, for refund and recycling.<sup>2</sup>

Over the past 2 years in Western Australia, Containers for Change has seen 1.67 billion items diverted from landfill. Imagine \$167 million in 10c refunds!<sup>3</sup>

<sup>2</sup> Container Deposits, South Australia, [https://www.epa.sa.gov.au/environmental\\_info/waste\\_recycling/container\\_deposit](https://www.epa.sa.gov.au/environmental_info/waste_recycling/container_deposit)

<sup>3</sup> Containers for Change WA, 2023, <https://www.containersforchange.com.au/wa/impact>

## Sustainable procurement

Sustainable procurement refers to considering the environmental and social impacts of the goods and services you purchase, not just the direct financial cost to your business.

As well as reducing your office waste, you should also consider the broader environmental impact associated with the goods and services you buy. This includes the amount of waste generated, the number of natural resources used, which chemicals have been used and whether eco-friendly or biodegradable materials were used in the manufacturing process.

You can buy items such as:

- 100% recycled paper, and paper certified by the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC)
- recycled printer cartridges, and ink cartridges that use eco-friendly dyes
- products made from recycled materials
- environmentally friendly cleaning products with recycled or recyclable packaging
- recycled paper hand towels
- products with less packaging.



## Key questions to ask before purchasing an item:

- Do I need to purchase this good or service at all?
- Instead of purchasing an item that will eventually become waste, can I procure a service? (For example, using a cloud data storage service instead of buying your own physical servers.)
- How long will the product last?
- Is there a way to reduce the packaging or return the packaging to the manufacturer for reuse?
- Can the product be returned to the manufacturer at the end of its life?
- How much waste will the product generate during use and at the end of its life? Can this waste be recovered or recycled?



## Carbon and waste management

### How does your waste contribute to carbon emissions and climate change?

There are 3 major greenhouse gases (GHGs) – carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). CO<sub>2</sub> accounts for about three-quarters of Australia's emissions, with methane contributing around 21%.

To make measuring GHGs easier, all GHGs are converted to a common unit called CO<sub>2</sub> equivalent or CO<sub>2</sub>-e.

According to the methane tracker developed by the International Energy Agency (IEA), waste accounts for 619kt – approximately 11% - of Australia's methane emissions.<sup>4</sup> Methane may not be as abundant as CO<sub>2</sub>, but it traps more heat in the atmosphere per molecule over a 20-year period, **making it 80 times more harmful than CO<sub>2</sub>.**<sup>5</sup>

Methane is generated when waste decomposes in landfill. The huge amounts of waste in landfill sites mean that methane may be produced for years after a site is closed due to the waste continuing to slowly decay.

The table below shows how many kilograms of CO<sub>2</sub>-e is released when 1 kilogram of waste is left to decay in landfill. Paper produces the most GHG emissions if sent to landfill, which emphasises the importance of reducing paper use.

It's important to understand how waste contributes to emissions. Include waste reduction targets in your net zero plan.

Waste type	Carbon impact
Paper	3.3 kg CO <sub>2</sub> -e/1 kg of paper (Ream of A4 paper weighs approx 2.5kg)
Food waste	2.1 kg CO <sub>2</sub> -e/1 kg of food waste
Mixed commercial waste	1.3 Kg Co <sub>2</sub> -e/1 kg of commercial mixed waste

<sup>4</sup> IEA Methane Tracker, <https://www.iea.org/data-and-statistics/data-tools/methane-tracker>

<sup>5</sup> UNEP, Methane <https://www.unep.org/news-and-stories/video/whats-deal-methane#:~:text=Due%20to%20its%20structure%2C%20methane,warming%20to%201.5%C2%BC>.

# Top 10 office recycling questions answered

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## Can I recycle takeaway cardboard coffee cups?

No. The plastic lining in the cup prevents it from being recycled with other cardboard containers. They can be processed through specific collection or waste-to-energy programs, but otherwise must go into your landfill bin.

## Can I recycle takeaway coffee cup lids?

No. Some plastics can't be recycled and generally the lids are too light and fly off the recycling machinery.

## Can I recycle paper towels, tissues, and serviettes?

No. Unfortunately, these paper items are not high enough in quality to be recycled with other paper products like newspaper and general office paper. Clean paper towels can be processed through specific recycling or waste-to-energy programs, but otherwise these must go into your landfill bin.

## Can I recycle pizza boxes?

It depends. Some recycling facilities will accept pizza boxes if they are relatively clean and free from food waste, but some won't accept them at all. Check with your waste contractor to see what they will and won't accept.

## Can I put compostable containers in the organics bin?

It depends. There are currently no national guidelines for what is allowed in food and garden organics bins. The NSW EPA does not allow compostable packaging, however in South Australia these items are permitted. Please check with your building manager to understand where your waste is going. Some on-site solutions may allow compostable containers.

## Can I recycle paper or cardboard that has sticky tape on it, such as packaging?

Yes, the tape is removed during the recycling process so the paper or cardboard can still be recycled.

## Can I recycle plastic takeaway food containers and yogurt pots?

Again, this depends. Check what types of plastic your waste contractor will accept and use the recycling numbers on containers (in the triangle symbol) to check what can be recycled. Rinse containers before putting them in the recycling bin.

## Can I recycle plastic cutlery?

No, in fact many single use plastics are now banned. This handy guide from the Australian Marine Conservation Society provides a guide to single use plastic bans in each state and territory.

## Can I recycle envelopes with plastic windows?

Yes, they can be placed in the paper or cardboard recycling bin.

## Does waste in the recycling bin actually get recycled?

Yes! There are many urban myths about waste 'all ending up in the same place'. If you put your waste into a supported recycling waste stream, that waste will go to a recycling facility for further processing.

Thanks for caring about our environment, climate action and our community.  
If you have any questions, get in touch with us by emailing [info@cityswitch.net.au](mailto:info@cityswitch.net.au)