



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

# Waste Management Action Plan 2022-2024

**University of Wollongong**

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## **ACKNOWLEDGEMENT OF COUNTRY**

We Acknowledge that Country for Aboriginal peoples is an interconnected set of ancient and sophisticated relationships.

The University of Wollongong spreads across many interrelated Aboriginal Countries that are bound by this sacred landscape, and intimate relationship with that landscape since creation.

From Sydney to the Southern Highlands, to the South Coast.

From fresh water to bitter water to salt. From City to Urban to Rural.

The University of Wollongong Acknowledges the Custodianship of the Aboriginal peoples of this place and space that has kept alive the relationships between all living things.

The University Acknowledges the devastating impact of colonisation on our campuses' footprint and commit ourselves to truth-telling, healing and education.



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## 1. INTRODUCTION

This Waste Management Action Plan has been developed to establish priorities and tasks to be actioned by the Environment Unit over 2022-2024 in order to avoid, reduce, reuse, recycle and efficiently manage the safe disposal of waste materials generated at UOW campuses.

The UOW Sustainable Futures Committee (SFC) oversees the pursuit and delivery of UOW sustainability objectives as well as the integration of Sustainable Development Goals and sustainability initiatives and targets across all aspects of University activities.

The Environment Unit's focus is on the environmental sustainability of UOW operations, implements initiatives and actions to reduce impacts and address relevant UN Sustainable Development Goals. The Environment Unit is working with the Sustainable Futures committee and associated working groups to achieve common objectives.

This Waste Management Action Plan is underpinned by a guiding principle to work towards achieving zero waste to landfill and to avoid, reduce, reuse and recycle and (where there is no other feasible option) disposal and drive behaviours that create a circular economy.

Managing and avoiding waste at our campuses is complex. A range of factors influence the waste generated, behaviours and practices and waste management options available such as consumer behaviours, contracts and lease agreements of the University and subsidiaries and access to and availability of waste infrastructure and services.

State and local government policies and requirements also influence the context and management priorities and options available. The State government has introduced a focus on transitioning to a circular economy (NSW EPA 2021 Waste and Sustainable Materials Strategy 2041). Using our resources efficiently, and making them as productive as possible, reducing waste, emissions and harm to the environment as well as improving the economy are necessary. A circular economy in waste management is to be achieved through designing out materials that end up in landfill or litter, reusing or repairing products and recycling materials and managing waste safely. Action is required by all stakeholders to make this a reality.

NSW government has also introduced the NSW Plastics Action Plan that involves the phasing out of single use plastic items (NSW Department of Planning, Industry and Environment 2021).

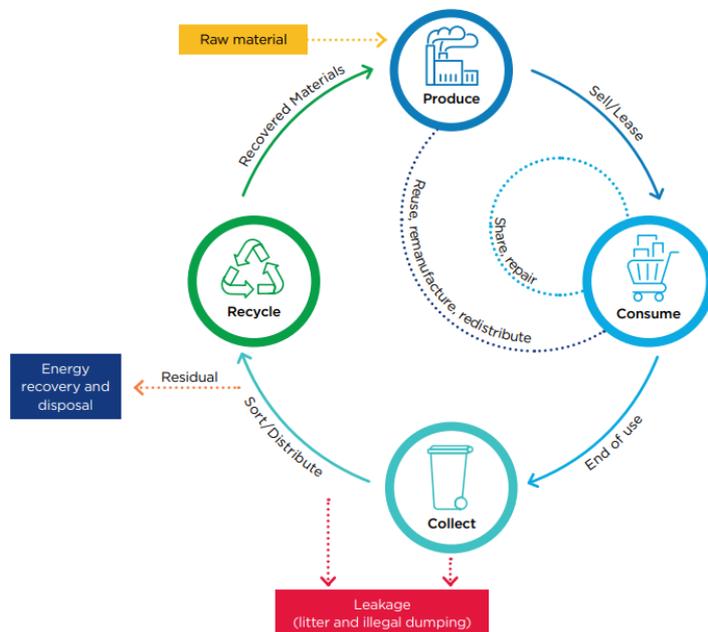
The objective of this Waste Management Action Plan is to achieve the following:

- Meet the targets established by UOW.
- Align with the priorities of the NSW Waste Strategy and Action plans.
- Measure the amount of waste sent to landfill, recycled and composted.
- Measure food waste generated from food served at UOW.
- Decrease the generation of waste by UOW and that of its suppliers and contractors.
- Avoid waste generation through consideration of end-of-life disposal of items and packaging as part of procurement decision making.
- Avoid and minimise plastic waste.
- Avoid and minimise the use of disposable items.
- Support and encourage share, repair and reuse initiatives.
- Maximise the efficiency of waste management processes and infrastructure.
- Implement waste management infrastructure that supports waste diversion.
- Divert organics and recyclables from landfill.
- Support the hazardous waste disposal process.
- Manage risks of problematic, harmful and unnecessary waste.
- Prevent litter and illegal dumping.



- Support and encourage the purchase and use recycled materials.
- Embed waste objectives into our policies and procedures, contracts and supply agreements.

**Figure 1: Circular economy**



Source: NSW EPA (2021) Waste and Sustainable Materials Strategy 2041.

## 2. BACKGROUND

Previous Waste Action Plans and waste initiatives have focused primarily on Wollongong campus where the Environmental Unit had operational control of waste management activities. Waste data was collated and reported for Wollongong campus only. Despite waste being diverted from landfill, previous waste audits for these sites have indicated that general waste still contained more materials capable of being diverted and reprocessed such as organic materials (food and plant matter). The results of the previous waste audits and the monitoring of waste disposal composition data has informed actions that have been implemented to support improved diversion and correct disposal. These actions including the following:

- Provision of co-mingled recycling bins in outdoor public spaces.
- Provision of recycling disposal options for soft plastics, electronic waste, print cartridges, Nespresso coffee pods, mobile phones and polystyrene,
- Implementation of an office-based waste management model.
- Provision of food waste (organics) and recycling in all staff kitchens.
- Support and advice for event waste management.
- Campaigns focusing on reducing single use items such as coffee cups and water bottles.
- Improvements to waste collections and waste handling processes and infrastructure.
- Furniture recycling and reuse.

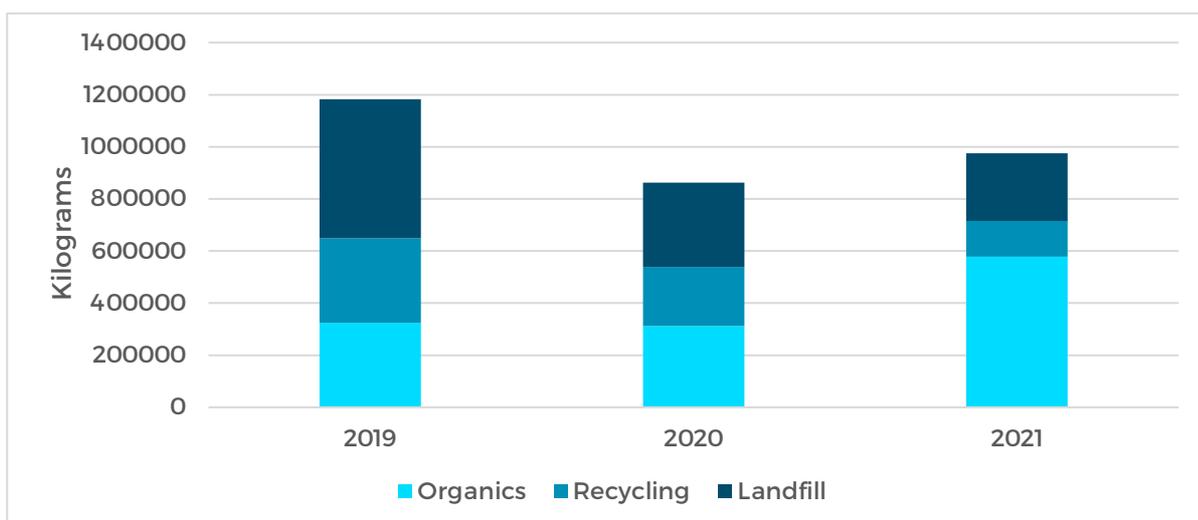


- Embedding waste management into procedures and contracts (e.g design standards and cleaning contracts).
- Promotion of waste and recycling services and how to guides and information.
- Signage and colour coding and standardisation of bins.
- Waste audits and data analysis.
- Capturing and improving waste data for improved waste monitoring.
- Monitoring efficiency of collection, availability of re-processors and emerging downstream markets.

Through the implementation of past actions, we have seen improved diversion of waste. However, over the last few years the COVID19 pandemic and remote teaching and learning and working arrangements have had an impact on on-campus attendance and associated waste generation and disposal. The start of 2022 has commenced with a mixed mode of teaching and learning arrangements and flexible work arrangements and the resulting impacts on waste generation and disposal is uncertain.

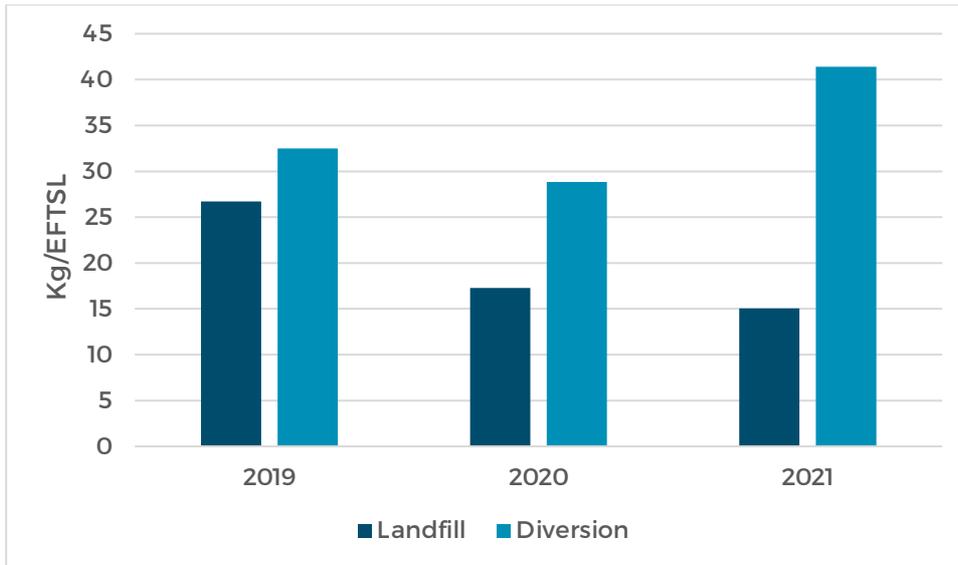
Since 2009 a range of actions have also been undertaken at other campus and accommodation locations to support improved waste avoidance and diversion. As these locations were outside the Environment Unit’s operational control these actions have primarily been about providing advice and support with regards to waste management infrastructure, contracts and waste education at accommodation, innovation campus and regional campus locations.

In 2021 additional campuses (e.g Innovation, Shoalhaven, Liverpool) and accommodation residences are now under the operational control of the Environment Unit with regards to the management of waste and as such this Waste Management Action Plan has been expanded to account for this greater scope. However, waste data is not currently available for all the sites. Figure 2 shows the waste data available since 2019.



**Figure 2: Waste data for Wollongong, Innovation and Sydney CBD campuses**





**Figure 3: Waste per Equivalent Fulltime Student at Wollongong, Innovation and Sydney CBD campuses**

### 3. STRATEGIC AREAS

This action plan focuses on the following areas:

- **Planning** – continue to integrate waste avoidance and management into various operational functions, policies and procedures (including cleaning, event management, capital works, logistics, landscaping, administration, teaching and research).
- **Practices, systems and education** – implementing systems, programs and initiatives to support waste avoidance and diversion, communicate, educate and develop and implement behavioural change and awareness programs.
- **Data analysis and reporting** – waste audits, data collection, analysis and reporting.
- **Monitoring systems and service actions**- waste contracts, services and utilisation.

### 4. WASTE MANAGEMENT ACTIONS

The actions listed in the following tables have been identified as projects/initiatives to address the waste management and avoidance objectives.

**Table 1: Waste planning actions**

ACTION	PRIORITY	INDICATIVE DATE
Work with the Sustainable Futures Committee to review waste management targets to reflect the UOW Strategic Plan and the State and Federal Government policies and guidelines.	High	2022
Review UOW’s waste needs and infrastructure at the various campuses and facilities and adjust services and infrastructure accordingly to maximise resource recovery opportunities.	High	Ongoing (monthly)



<b>ACTION</b>	<b>PRIORITY</b>	<b>INDICATIVE DATE</b>
Consolidate waste management contracts and services in order to support the achievement of our waste management goals and objectives across all FMD managed sites.	High	
Identify emerging opportunities to address problem wastes e.g. polystyrene, paint, e-waste, bulky waste etc.	High	Ongoing (Annually)
Work with FMD assets and maintenance and IMTS to ensure appropriate waste disposal facilities and processes are provided for contracted services.		
Plan a staged approach to implement improved recycling as well as organics diversion (food and garden waste) at student accommodation sites and regional and metropolitan campuses (where local organics collection services exist).	High	2022
Work with UOW Pulse, Sustainable Futures Committee, Policy Working Group to support the development of an organisation wide waste-wise event policy and support the preparation of associated guidelines.	Medium	2023
Work with UOW Finance and Sustainable Futures Committee, Policy Working Group to embed circular economy principles in organisation wide procurement processes, and other relevant procedures and policies.	High	2022
Develop uniform data sets needed to monitor compare and review waste practices at all university campuses and accommodation sites.	High	2022
Integrate waste management and circular economy principles and objectives into Campus Master plans and design guidelines.	High	2022



**Table 2: Waste practices, systems and education actions**

ACTION	PRIORITY	INDICATIVE DATE
Implement improved recycling and organics diversion (food and garden waste) at student accommodation sites and regional and metropolitan campuses (where local organics collection services exist).	Medium	2023
Work with UOW Pulse and retail tenants to implement a trial for expanding collection of organics in public place settings at Wollongong Campus.	Medium	2023
Work with UOW Pulse and tenants to support the phase out of single use plastics (especially those that are to be banned as part of the NSW Plastics Action Plan).	High	2022
Across all UOW campuses and facilities create consistent waste disposal points that are easily identifiable and develop waste guides for the disposal of all types of waste.	High	As required
Remove under desk bins from open plan offices to support improved diversion and waste management at all UOW campuses and facilities.	Medium	2023
<p>Through the UOW Procurement Policy prioritise the purchase of assets and products that:</p> <ul style="list-style-type: none"> <li>• are made from recycled materials</li> <li>• or that can be reused or recycled end-of-life</li> <li>• avoid purchase of single use (disposable) items</li> <li>• avoid plastic</li> </ul> <p>and work with UOW Finance to provide tools to support awareness and implementation by UOW staff.</p>	High	2022
Investigate options to streamline the reuse of UOW furniture and other materials (e.g. stationary and office supplies).	Medium	2023
Investigate options to divert reusable items from end of year clean outs at student accommodation.	High	2022
Provide waste management information to staff and students and contractors at orientation and inductions.	Medium	Annually (As required)
Create and provide information and promotions about correct disposal (e.g. compostable waste, and coffee cups and other problem wastes) and waste avoidance and reuse opportunities to minimise use of disposables.	Medium	2023
Support and encourage share, repair and reuse initiatives.	Medium	2023



<b>ACTION</b>	<b>PRIORITY</b>	<b>INDICATIVE DATE</b>
Provide event support for waste disposal – advice for event waste management planning, provision of bins, educational displays, signage, auditing and monitoring to assess contamination levels.	Low	Ongoing (as required)
Produce tools and information, behavioural change and awareness programs to support correct bin use and waste reduction, avoidance and diversion and other circular economy principles.	Medium	Ongoing (as required)
Work with UOW Work Health and Safety to provide safe and environmentally responsible hazardous waste disposal facilities and procedures as well as associated training and educational materials.	High	Ongoing (fortnightly)
Work with UOW Pulse and Student Accommodation to measure and track food waste generated and disposed from food served at the University and explore options for reducing the food waste generated.	Medium	2023
Work with UOW Pulse to measure and quantify the food reuse initiatives across its operations (retail outlets, catering services) that support food to be reused rather than disposed.	Medium	2023

**Table 3: Data analysis and reporting actions**

<b>ACTION</b>	<b>PRIORITY</b>	<b>INDICATIVE DATE</b>
Undertake comprehensive waste audits at UOW facilities and campuses and analyse data to understand current waste composition, contamination and diversion levels to inform waste management planning.	Medium	2023
Collect, collate and review waste data from various sources including direct contracted services and outsourced/ third party service providers (construction and maintenance contracts, outsourced facility management providers).	High	Ongoing (Quarterly)
Analysis of data for ongoing performance and emerging trends and report and track against University KPIs and targets.	Medium	Ongoing (Quarterly)
Use data for benchmarking (such as TEFMA comparisons, site comparison and bill verification processes).	High	Ongoing (Quarterly)
Provide data and reports as required for enquiries and business needs.	High	Ongoing (As required)
Continue to record collection services, action requests, contractor service records and weights.	High	Ongoing (monthly)



**Table 4: Monitoring systems and services**

<b>ACTION</b>	<b>PRIORITY</b>	<b>INDICATIVE DATE</b>
Analyse the efficiency of waste services and collections, availability of re-processors and emerging downstream markets.	High	Ongoing (Annually)
Undertake ongoing waste auditing – Analysis of the composition of waste and recycling bins presented for collection on any given day informs areas where either more education, or additional disposal options may be required.	High	Ongoing (Annually)
Monitor and respond to feedback, enquiries and complaints.	High	As required
Review existing waste management systems operation, infrastructure, and contracts. Prepare tender for consolidation of waste services contract and undertake tender review and selection process.	High	2022/23

## **5. DELIVERY**

The prioritisation and implementation of tasks and actions defined in this Plan depends on feasibility, priorities, and the availability of resources. A structured approach will be taken to assess, develop and implement actions in consultation with relevant stakeholders and following UOW processes.

## **6. REFERENCES**

Department of Environment and Energy (2018) National Waste Report 2018, Accessed Online, <https://www.environment.gov.au/system/files/resources/7381c1de-31d0-429b-912c-91a6dbc83af7/files/national-waste-report-2018.pdf>.

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# Waste Management Action Plan 2022 - 2024

Final Audit Report

2022-10-24

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