

# CQUNIVERSITY SUSTAINABLE WASTE MANAGEMENT



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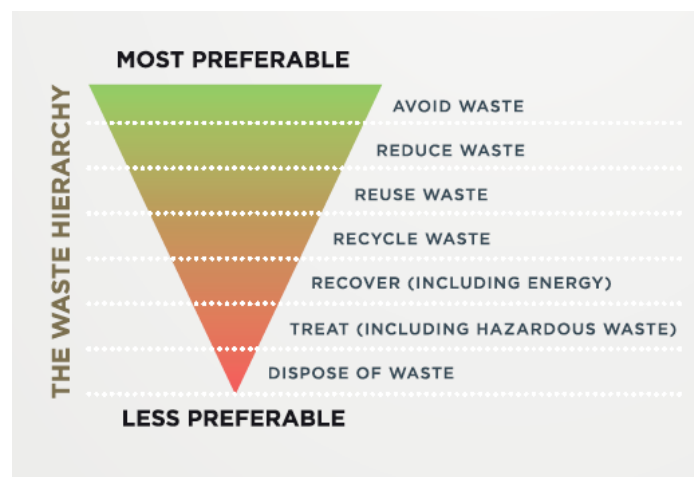
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# Waste Management at CQU

The Australian Government National Waste Policy 2018 provides a framework to reduce the amount of waste generated, the amount of landfill, and to increase the level of recycling with a view to developing a circular economy culture by reusing materials and products.

CQUniversity acknowledge our responsibility when it comes to effective waste management and promoting the principles of the circular economy. Our main focus will be to continue our efforts in diverting waste from landfill and increasing our level of recycling, in parallel with ways to reduce or overall initial waste.



Waste Hierarchy - 2018 National Waste Policy

## Plastic Waste Reduction

CQUniversity is committed to reducing plastic waste across our campuses and operations to promote environmental sustainability. We have many initiatives and practices aimed at minimizing single-use plastics, promoting reusable alternatives, and reducing the overall environmental footprint of the university community.

The University aims to phase out single-use plastics in all campus facilities through the following initiatives:

- **Reusable Cup Initiative** - This initiative partners with Plastic Free CQ and encourages all staff and students to use reusable cups when purchasing coffee on campus in a step towards a plastic-free future. The on-campus café at Rockhampton North 'Cups and Muffs' offers discounts to customers who bring their reusable cups and offers a cup library to borrow and return.
- **The Ditch the Disposables campaign** is an ongoing initiative that continues to educate staff and students throughout our national footprint about the harmful effects of single-use plastic and encourages them to ultimately 'ditch the disposables'. Their key message is small changes will have a big impact.

# General Waste Reduction

CQUniversity has taken significant steps to reduce general waste through various sustainability initiatives. These include comprehensive recycling programs, waste audits, and efforts to raise awareness among staff and students about waste reduction. The University encourages the proper segregation of recyclable materials, aiming to decrease landfill contributions while fostering a sustainable campus culture. Waste audits are regularly conducted to assess progress and identify areas for improvement in waste management practices. Additionally, the sustainable printing project promotes responsible printing by reducing paper use, encouraging digital alternatives, and implementing default double-sided and black-and-white printing to minimize resource consumption. These initiatives reflect CQUniversity's ongoing commitment to environmental sustainability and its efforts to integrate eco-friendly practices into everyday campus operations.

## Clean Up Australia Day

CQUniversity is a Platinum Business Supporter of Clean Up Australia Day with events held across our campuses. Every year since 2017, our staff and students step up and collect up to one ton of rubbish at simultaneous Clean Up Australia Day events across all mainland states. The 13 campus locations that participate in the annual event include Adelaide, Brisbane, Bundaberg, Cairns, Gladstone, Mackay Ooralea and City, Melbourne, Noosa, Perth, Rockhampton, Sydney, and Townsville.

Whilst undertaking the clean-up activities, waste is sorted into recyclable and non-recyclable. The process of separating waste as it is collected allows more recyclable materials to be transferred to the relevant recycling centres at each campus location, diverting more waste from entering landfill centres.



# Recycling on Campus

CQUniversity is committed to increasing the amount of waste diverted from landfill to recycling initiatives. This is demonstrated through a number of initiatives on campus including:

- CQUniversity is a signatory of the Lighting Council Australia's EXITCYCLE program. Under this program our focus will be to nullify impact of battery waste on the environment. EXITCYCLE aims to reduce the amount of toxic cadmium and lead entering the environment by increasing the recycling rate of end-of-life emergency and exit lighting batteries
- Individual business units across our institution have adopted a Containers for Change program. This program sees items such as plastic and glass drink bottles which are taken to the container refund point and donate the proceeds (10 cents per container) to a charity of choice.
- Recycling bins are located throughout our campuses in learning and teaching spaces, outside and commercial areas, and office spaces. The introduction of these bins allows the diversion of approximately 24% of waste from landfill to recycling centres.
- Confidential document destruction is done in conjunction with Grace Services. All confidential documents are placed in a locked bin. Once full, the bin is taken away to a secure facility where the contents are shredded, baled and sent to recycling plants to minimise environmental impact and promote ongoing sustainability.
- Other recyclable items such as cardboard boxes are collected across campuses in designated bins. Once full, the bins contents are taken away for recycling.



# Food Waste on Campus

In 2022 the university commenced a program to provide the chicken carcasses from the Rockhampton Student Residential kitchen to a local crocodile farm. It is extremely pleasing that the practice has continued throughout 2023 with approximately 7000 chicken carcasses (2800kg) provided to the crocodile farm.

This practice has a number of sustainable benefits such as;

- purchasing whole chickens as opposed to smaller cuts, saves a large amount of money,
- helps us keep our students happy within a lower price range of service and quality,
- maintains the Chef's knife skills,
- reduces potential organic waste to landfill from other sources, and
- benefits a local community business with a regular fresh source of feed.

The activity is managed by staff providing time to sort the carcasses and deliver them to the crocodile farm, and the farm owner coming to collect them. This is expected to continue as an ongoing practice.

## Fight Food Waste CRC

CQUniversity is committed to combating food waste through its involvement with the Fight Food Waste Cooperative Research Centre (FFW CRC). Their research provides insight into how households can reduce food waste, which costs Australians approximately \$19.3 billion annually. The study analysed behaviours from over 2,800 Australian households and identified practical strategies that can help consumers minimize food waste while saving up to \$2,500 per household each year.

While Australians waste significant amounts of food—equivalent to nearly \$1,000 per person annually—most people are willing to adopt strategies to mitigate this issue. The importance of timely interventions is underscored by rising costs of living, making it crucial to address food waste both financially and environmentally.

The FFW CRC has developed several resources to help reduce food wastage including face-to-face workshops, digital resources, and short educational videos which have proved effective with up to 45% of participants in trials in Sydney and Tasmania having reduced their food wastage.

Individuals can help fight food waste by adopting simple practices like proper food storage, planning meals, using leftovers creatively, and participating in local food waste reduction initiatives.



# Preventing Water System Pollution

CQUniversity is subject to regulatory requirements to ensure pollutants are not discharged into waterways.

- Stormwater drains are fitted with a range of grills, covers and mesh netting to collect debris, rubbish and potential contaminants.
- The Drain Buddies project, led by Dr Angela Capper at our Coastal Marine Ecosystems Research Centre (CMERC), installs microplastic traps across Rockhampton and Livingstone shires, with monitoring to determine where the littering is occurring.
- The Handling and Storage of Hazardous Chemical Policy outlines the appropriate procedures for the disposal of hazardous chemicals to prevent water pollution as well as land and water contamination.
- Grease traps are installed across our campuses to eliminate and minimise water contamination.
- Emergency spill kits at relevant locations such as out engineering and automotive teaching buildings to absorb contaminants such as motor oil quickly to minimise the risk of harm to the environment.



## Drain Buddies

Mismanaged plastic waste, particularly from land-based sources, accumulates in marine environments, causing significant harm to marine species. Roads act as conduits for plastic waste, especially microplastics (<5mm), to enter aquatic systems through several processes: road use, maintenance, and the addition of tyre-derived crumb in asphalt to increase durability. These materials are also found in infrastructure like parking bumpers and soft-fall coverings. However, the extent of microplastic shedding from road paint, artificial grass, and tyre-based infrastructure due to wear and tear remains poorly understood.

To address this issue, the Drain Buddies project, led by Dr. Angela Capper at CQUniversity's Coastal Marine Ecosystems Research Centre (CMERC), is modifying and installing microplastic traps in Rockhampton and Livingstone shires to monitor the origins of plastic litter. Previous interventions using stormwater drain traps like Drain Buddies have successfully captured larger road-based plastic debris. In ongoing trials, these traps are being adapted to capture finer microplastics. However, there is still limited understanding of the optimal timing, location, and duration of these interventions to effectively target road-associated pollution.

The project aims to use community-based "nudge" interventions, typically applied to individual behaviors (such as using bins or preventing littering), but now focusing on the corporate level. By collaborating with councils and the road industry, the initiative seeks to promote less wasteful practices in road infrastructure maintenance through easy, accessible solutions that minimize disruption.

This project is being carried out across selected sites in Rockhampton and Yeppoon, gathering valuable data and fostering community and industry engagement to reduce plastic waste at its source.