



# **OPERATIONAL WASTE MANAGEMENT PLAN**

**October 2022**

## Contents

EXECUTIVE SUMMARY	2
PROFILE	3
BACKGROUND	7
PROCUREMENT	20
PROCEDURES	22
SUPPLIERS/CONTRACTORS	24
COMMUNICATIONS	26
CLEANING WASTE	27
WASTE MANAGEMENT	28
DEFINITIONS	31
CONTACT INFORMATION	32

## EXECUTIVE SUMMARY

The University of the Sunshine Coast (UniSC) is a regional university committed to sustainability. As part of UniSC's commitment to reducing its carbon footprint, the University has adopted measures to manage and minimise waste.

In 2013, UniSC became the first University in Australia to adopt a total waste streaming system that includes processing of green/organic waste using an on-site composting apparatus (OSCA). UniSC was recognised for these efforts, earning full EnviroDevelopment accreditation from the Urban Development Institute of Australia for achieving elements of sustainability across six categories, including waste.

The University generates multiple waste streams. The four (4) main waste streams, as applicable to both UniSC staff and students, are: general or non-recyclable waste; co-mingled recyclables; compostable organics; and recyclable cardboard and paper. Additional waste streams are generated through operational and teaching operations, including: eWaste, timber, metal, batteries and soft plastics/polystyrene. Where feasible, these materials are recycled, yet options to expand recycling should continue to be pursued. Most recently the University has commenced a Container Refund Scheme (CRS) in line with the QLD Government commencing their program.

The UniSC Operational Waste Management Plan covers an extended range of waste streams across the following UniSC campuses and study nodes:

- Sunshine Coast Campus (90 Sippy Downs Drive; Sippy Downs, QLD 4556)
- Moreton Bay Campus (1 Moreton Parade; Petrie, QLD 4502)
- Fraser Coast Campus (161 Old Maryborough Road; Hervey Bay, QLD 4655)
- Gympie Campus (71 Cartwright Road; Gympie, QLD 4570)
- Caboolture Campus (80-106 Tallon Street; Caboolture, QLD 4510)
- SouthBank Campus (Building A1, SW1 Complex; 32 Cordelia Street; South Brisbane, QLD 4101)
- K'gari Research and Learning Centre (Dilli Village) (Dilli Village, Eastern Beach; Fraser Island, QLD)
- Queensland Mind and Neuroscience Thompson Institute (12 Innovation Parkway; Birtinya, QLD 4575)
- Sunshine Coast Health Institute (SCHI) (6 Doherty Street; Birtinya, QLD 4575)
- Ochre Health Hub (Level 1, 9 Ochre Way; Sippy Downs, QLD 4556)
- Morayfield Health (Level 1, 19-31 Dickson Road; Morayfield, QLD 4506)
- Maroochydore Law Clinic (170 Horton Parade; Maroochydore, QLD 4558)

## PROFILE

### COMMITMENT

UniSC is committed to sustainable management of its waste. This commitment involves a focus on both reducing overall waste and diverting as much waste as possible from landfill.

In 2013, UniSC became the first university in Australia to adopt a total waste streaming system that includes onsite processing of green/organic waste. The sustainable waste management program engages staff and students, encouraging them to dispose of waste into a colour-coded bin collection system that separates waste into four (4) streams: compost (**green**); comingled recycling (**yellow**); paper and cardboard (**blue**); and landfill (**red**). Every staff member is provided a 'mini wheelie bin' (1 litre) on their desk, which replaces a traditional under the desk bin, encouraging them to sort their rubbish into the centrally-located colour-coded bins. Bins are provided in offices and meeting spaces, as well as scattered around campus near teaching spaces and eateries. Educational posters accompany each bin displaying the types of waste that belong in each bin. These posters are updated to reflect changes in what can be recycled and to counteract the most common types of contamination as identified by the cleaning company.

UniSC's Sunshine Coast campus is home to OSCA, the on-site composting apparatus. OSCA can process up to 50 tonnes of food scraps, BioPak containers (cornstarch-based plates, cups and cutlery), paper hand towels and cardboard per year. This represents 60 tonnes of CO<sub>2</sub>-e entering the atmosphere each year. The system produces odourless compost which reduces the amount of waste entering landfill, as well as the transport costs of the waste being sent to landfill. In order to support this initiative, campus food retailers use compostable catering supplies, including coffee cups and lids. OSCA has traditionally been the drawcard in terms of UniSC's sustainability initiative, generating regular interest from local and regional schools, community groups and businesses that are looking to implement sustainable waste management strategies. It is a key stop in sustainability tours for students and visitors.

This innovative waste program has won prestigious awards, including:

- Highly Commended Award in the Premier's Sustainability Awards 2015
- Australasian Campuses Toward Sustainability Green Gown Award for Carbon Reduction 2014
- Sunshine Coast Council Good Recycling Award 2013

Additional initiatives have contributed to these efforts. UniSC is a water refill campus, meaning no single-use water bottles are sold on campus, thus reducing the amount of water bottles that make their way into the waste stream. The University also uses eWater for a majority of its cleaning needs, which uses refillable bottles, significantly reducing the cleaning solution containers that need to be purchased and disposed of annually. Although these initiatives fall within our water management initiatives, they have an impact on the level of waste generated on campus. Most recently the University has entered into arrangements for: the management of the QLD State Government containers for change scheme to generate funding for charities; an online circular economy platform to turn UniSC's waste into resources for local businesses; and expansion of recycling streams.

## AIMS AND OBJECTIVES

UniSC has committed to carbon neutrality by 2025 with a focus on preventing or minimising emissions first and offsetting emissions as a last resort. This commitment carries into the University's approach to waste management, with a focus on prevention first, followed by minimisation, reuse, composting/recycling/energy recovery and using disposal to landfill as a last option. This commitment to circular economy has been incorporated into UniSC's revised Sustainability Governing Policy and Procedures to build support across the organisation for rethinking waste.

The University also seeks the opportunity to use our sustainability commitment as a teaching tool for our students and staff. The Operational Waste Management Plan incorporates opportunities to educate staff, students and the wider community as an integral aspect of the Plan. Therefore, the University will seek to increase knowledge amongst these stakeholders in terms of the waste management actions the University is undertaking and the behaviours they can adopt to be more sustainable and generate less waste.

## CIRCULAR ECONOMY AND SUSTAINABLE DEVELOPMENT GOALS

UniSC has aligned its Sustainability Operating Policy and Sustainability Procedures to the United Nations Sustainable Development Goals (SDGs) and circular economy principles. Comprehensive and sustainable management of waste is essential to create a circular economy and achieve the SDGs, in particular (6) Clean Water and Sanitation, (12) Responsible Consumption and Procedures, (14) Life below Water and (15) Life on Land.

UniSC is committed to expanding the streaming of its waste to first, reduce the amount of waste the University generates; second, reuse, repurpose or recycle as much waste as possible; and third, dispose of all non-reusable/non-recyclable waste in a responsible manner. These priorities are aimed at reducing the University's emissions in alignment with its 2025 carbon neutrality goal and maintaining biodiversity of flora and fauna by preventing pollution from entering the environment (land, freshwater, marine and air). This commitment applies to all UniSC campuses and facilities and any University related activities, such as excursions in natural environments.

## TARGETS

In keeping with its waste aims and objectives, UniSC has established a series of waste management targets.

### Short Term (1-5 years)

- Increase rate of waste diverted from landfill to over 50% by EOY 2022.
- Generate electricity from waste processing by EOY 2023.
- Start Containers for Change Scheme (CfC) recycling program at multiple campuses by EOY 2020.
- Develop Smalls Recycling Hub on the Sunshine Coast Campus by EOY 2023.
- Establish Green Labs program or expanded streams to reduce lab waste by EOY 2023.
- Improve score on SDGs 6, 12, 14 and 15 in relation to waste management components of the Times Higher Education Impact Rankings year-on-year.

### Medium Term (5-10 years)

- Expand energy production from waste processing and/or on-site composting to multiple campuses by EOY 2027.
- Increase rate of waste diverted from landfill to over 65% by EOY 2027.
- Expand Smalls Recycling to additional campuses (i.e., Moreton Bay, Fraser Coast, Gympie, Caboolture) by EOY 2026.

### Long Term (10+ years)

- Reduce total waste volume per EFTSL by 30% by 2032.
- Increase rate of waste diverted from landfill to over 75% by 2031.
- Continue to pursue new initiatives and remain as a best practice organisation.

## MEASUREMENT

### Waste Diverted from Landfill

- 2020: 41.88% waste diverted from landfill (Sunshine Coast specific)
- 2021: 54.01% waste diverted from landfill (54.63% Sunshine Coast specific; 42.27% Moreton Bay specific)

### Waste from Electricity

- 2022: This will possibly be a component of a larger Energy Net Zero approach for the Sunshine Coast campus. The ENZ project is being investigated in 2022 as part of a consulting project.

### Containers for Change Scheme

- 2019/2020: Started at the Sunshine Coast campus (put on hold in 2020 due to COVID-19).
- 2020/2021: Recommenced at Sunshine Coast campus and expanded to the Moreton Bay campus.

Smalls Recycling Hub

- 2019-2022: Not yet enacted. Other campus development likely to take precedence. Some smalls have been added and located around the Facilities Management Shed area, including batteries, soft plastics and polystyrene. Mobile phone recycling occurs at the library.

Green Labs

- 2022: Sustainable clinical waste capture methods being examined.

SDG Rankings

Sustainable Development Goals	2020		2021	
	Score	Ranking	Score	Ranking
Overall	92.1	26 out of 1,115 institutions	93.6	=31 out of 1,406 institutions
SDG 6 Clean Water and Sanitation - Water usage and care - Water reuse	N/A	N/A	100.0 87.5	5 out of 634 institutions
SDG 12 Responsible Consumption and Production - Operational measures - Proportion of recycled waste	N/A	N/A	97.8 76.2	48 out of 604 institutions
SDG 14 Life below Water - Water-sensitive waste disposal - Local ecosystem maintenance	95.9 100.00	3 out of 379 institutions	94.4 100.0	19 out of 452 institutions
SDG 15 Life on Land - Land-sensitive waste disposal	91.7	5 out of 402 institutions	100.0	=18 out of 521 institutions

## BACKGROUND

The majority of waste produced by UniSC is generated at the Sunshine Coast campus, but there is an ongoing effort to expand the number and breadth of waste streams that are diverted from landfill across all UniSC campuses and study nodes.

This Plan covers every UniSC site in Queensland. However, there are three different levels of coverage:

- General coverage – This applies to all campuses, institutes and study nodes that are fully owned and operated by UniSC. Sunshine Coast, Thompson Institute and Moreton Bay fit in this category.
- Shared coverage – This applies to all campuses, institutes and study nodes that are shared in terms of operational control with other organisations. Gympie, Caboolture (move to limited??) and Fraser Coast fit in this category.
- Limited coverage – This applies to campuses, institutes and study nodes where UniSC is a tenant only and relies on the lessor to manage waste. SCHI, SouthBank, Morayfield, Ochre Health and Maroochydore Law fit in this category.
- Special coverage – This applies to all campuses, institutes and study nodes where effective waste management is critical. The one site that fits in this category is K’gari Research and Learning Centre at Dilli Village.

Waste is captured and reported on for general coverage campuses. Shared coverage campuses do not have their waste data collected. Basic waste streams are controlled by the lessor at limited coverage campuses, but efforts will be made to expand those waste streams where UniSC has some control. Waste streams are limited, but essential to capture and report on, at special coverage campuses.

The aim of this best practice Operational Waste Management Plan is to demonstrate that:

- Recovery of materials is maximised and waste quantities going to landfill are minimised;
- A coordinated and managed system for storing and collecting waste from the site is in place; and,
- The management of operational waste on site is healthy, efficient, minimises disruption to amenity, and is conducive to the overall minimisation of waste generated.

## WHAT IS INCLUDED?

The Operational Waste Management Plan covers physical waste generated at UniSC’s campuses that is captured and sent to landfill, recycled, reused or donated. It does not cover any waste generated as gases or wastewater that is fed into sewerage. Note that this Plan also excludes construction waste generated by contractors, as that waste is covered under individual contractor agreements.

The waste streams generated at each campus are related to the facilities at each campus. Table 1 lists which types of facilities are present at each campus/centre.



Table 1: Facilities by Campus

Site	Facilities								
	Offices	Labs / Research	Landscape	Food & Beverage	Educational Facilities	Medical / Clinical Facilities	Tenants (no F&B)	Accom.	Gym / End of Trip
Sunshine Coast	√	√	√	√	√	X	√	X	√
Fraser Coast	√	√	√	√	√	X	X	X	X
Gympie	√	√	√	X	√	X	X	X	X
Caboolture	√	√	X	X	√	X	X	X	X
Southbank	√	X	X	X	√	√	X	X	X
Moreton Bay	√	√	√	√	√	X	√	X	√
Thompson Institute	√	√	√	X	√	√	√	X	X
SCHI	√	√	X	X	√	√	X	X	X
Ochre Health Hub	√	X	X	X	X	√	X	X	X
K'gari-Fraser Island	√	outdoor	√	X	√	X	X	√	X
Morayfield SuperClinic	√	X	X	X	X	√	X	X	X
Maroochydore Law	√	X	X	X	√	X	X	X	X

The following streams of waste are generated by each type of facility:

Table 2: Waste Streams by Facility Type

Facilities	Waste Type(s)	Note(s)
Offices	General Landfill Co-mingled Recyclables Paper & Cardboard eWaste Batteries Metal Sanitary Waste Confidential/Secure Waste	N/A
Laboratory (wet)	General Landfill Co-mingled Recyclables Hazardous Waste Soft Plastics	Metal waste may be generated through disposal of old equipment. Clinical waste may be generated

Facilities	Waste Type(s)	Note(s)
Laboratory (digital / electronic)	General Landfill Co-mingled Recyclables eWaste Soft Plastics	N/A
Landscape	Green Waste / Composting	Cleaning & Maintenance facilities may have Hazardous (Chemical) Waste
Food & Beverage	Green Waste / Composting General Landfill Co-mingled Recyclables	Other waste streams generated would be captured through existing offices and educational facilities
Educational	General Landfill Co-mingled Recyclables Paper & Cardboard eWaste Sanitary Waste	N/A
Medical / Clinical	Hazardous/Clinical Waste Confidential/Secure Waste eWaste Sanitary Waste	General waste streams will be captured through adjoining offices
Tenants (no F&B)	General Landfill Co-mingled Recyclables	Other waste streams generated will be captured through existing offices and educational facilities
Accommodation	General Landfill Co-mingled Recyclables Sanitary Waste	Metal and Timber waste may be generated through disposal of old furniture.
Gym / End-of-Trip	General Landfill Co-mingled Recyclables Sanitary Waste	eWaste and Metal Waste may be generated through disposal of old equipment.

The following items have been addressed in this Plan:

1. The current state-of-play for waste management at UniSC;
2. Details on the bins for relevant campuses; and,
3. The location, design and dimensions of relevant waste management aspects (i.e. bin storage areas; washdown area; signage; waste chutes; landscaping; bin pathways; and, collection points) for relevant campuses.

## CURRENT STATE-OF-PLAY

The University provides an annual benchmarking report through the Tertiary Education Facilities Management Association (TEFMA). This annual comprehensive benchmarking exercise includes waste management across Sunshine Coast, Gympie, Fraser Coast and Moreton Bay Campuses.

The University captures and reports on its four (4) general waste streams (landfill, comingled recycling, paper/cardboard recycling and green waste) annually. These waste figures are captured by the University's cleaning contractor, Biniris, and fed into software (Trellis) that monitors University operations that generate greenhouse gases. This information has been captured since 2014, as shown in Table 3, below.

An effort has been made starting in 2019 to fill in gaps in capturing additional waste streams. Clinical waste volumes are captured by the contractor (Daniels Health) and have been included starting in the 2021 half-year report. Metal is collected in a 10 m<sup>3</sup> bin and gets picked up as needed (several times/year). As of 2021 these volumes have been provided by the recycler, Action Metals, and reported alongside other UniSC waste streams. Confidential waste (office paper) figures have been captured from Endeavour and included in reporting starting with the 2019 reporting year. eWaste figures have been captured through ACT Logistics annual reports starting in 2019. Fluorescent Tube recycling volumes have been collected starting with the 2020 reporting year and is based on invoices from Lamp Recyclers Pty Ltd. Containers for Change, Soft Plastics and Battery recycling figures will be collected and reported on for the 2021 reporting year as these services have been rolled out starting with Semester 2 2021. Most of these additional streams are concentrated at the Sunshine Coast campus but Confidential Waste, Clinical Waste, Batteries and Fluorescent Tube recycling volumes include information from additional campuses.

Table 3: UniSC Waste Generation

	Tonnes Produced / Year				
	2017	2018	2019	2020	2021
Landfill	135	132	126.65	83.77	122.75
Comingled Recycling	27	29	26.60	5.47	27.62
Paper/Cardboard	53	35	29.33	17.95	34.34
Organic/Compost	43	50	16.45	4.05	32.47
Confidential (Paper) Recycling	NA	NA	16.68	20.32	26.74
eWaste	NA	NA	15.90	8.00	6.98
Metal	NA	NA	NA	NA	16.04
Clear Soft Plastics	NA	NA	NA	NA	0
Batteries	NA	NA	NA	0	0
Fluorescent Tubes	NA	NA	NA	0.20	0
<b>Total Waste</b>	<b>258</b>	<b>246</b>	<b>231.61</b>	<b>139.76</b>	<b>266.94</b>

	Tonnes Produced / Year				
	2017	2018	2019	2020	2021
% Diverted from Landfill	47.67%	46.34%	45.32%	40.06%	54.02%
Associated Emissions (t CO <sub>2</sub> -e)	182	185	177	112	196.39
Tonnes/EFTSL	0.0161	0.0155	0.0149	.0093	0.0161
Tonnes/EFTSL + FTE	0.0148	0.0142	0.0137	0.0086	0.0148

The monitoring shows that the University typically generates between 220 and 275 tonnes of waste per year, with upwards of 40% of that waste being recycled or composted. 2020 was an anomaly in terms of waste generation and recycling due to the Covid-19 pandemic which saw UniSC close campuses to staff and students for portions of the year. As a result, all waste streams dropped with particularly large reductions in compost due to the need to shut down the University's composter for over half of the year and comingled recycling due to the lack of people on campus to purchase food and beverages. Cardboard waste and landfill did not drop as significantly due to grounds works and maintenance being conducted while staff and students were off campus. 2021 rebounded to predictable levels with a return of students and staff to campus. Levels were slightly higher due to the Moreton Bay campus being in operation.

The emissions from waste have generally grown year-by-year, with an exception for 2020, although some of that growth is due to variability of data or the way emissions were measured and calculated. National Greenhouse Accounts (NGA) factors in Australia are updated on a financial year basis. That number also reflects the growth of the University in terms of both student and staff numbers, in particular with the opening of the Moreton Bay campus in 2020. This will remain a challenge as the University grows. The key to managing waste during this growth will be to expand what the University captures and recycles, as detailed in the General Waste Streams section.

Note that this information is not currently captured for other campuses but has been expanded to capture waste generated at Moreton Bay campus from 2020. Waste management is embedded in the leases at Caboolture, Gympie, SCHI, Morayfield and SouthBank as these are sites where UniSC does not retain operational control.

Additional streams of waste are generated at UniSC. These streams are measured (to varying extents) but are not included independently in current reporting. These streams include:

- Clinical Waste (captured through invoices for campuses and facilities with clinical and lab spaces; included in 2021 reporting and below)
- Sewerage (captured with water in annual emissions reporting)
- Gases (refrigerants and stationary fuels captured in annual emissions reporting)
- Water – Recycled (captured with water in annual emissions reporting)

Table 4: Clinical Waste Volumes

	Tonnes Produced / Year				
	2017	2018	2019	2020	2021
Sunshine Coast	8.4974	8.4287	8.9284	5.2692	5.6005
Ochre Health Hub	Unknown	Unknown	Unknown	Unknown	Unknown
Fraser Coast	0.1894	0.1991	0.2086	0.1341	0.4079
Gympie	0.0729	0.0711	0.2200	0.0259	0.0384
Caboolture	Not Recorded	0.0111	0.0134	0.0410	0.0401
Moreton Bay	Not Applicable	Not Applicable	Not Applicable	0.3744	0.6971
Southbank	Not Applicable	Not Applicable	Not Applicable	Not Applicable	0.0593
Morayfield Health Clinic	Not Applicable	Unknown	0.0547	0.1418	0.2710
<b>Total Waste</b>	<b>8.7597</b>	<b>8.7100</b>	<b>9.2271</b>	<b>5.9864</b>	<b>7.1143</b>

Beyond capturing and reporting on waste, the [UniSC Carbon Management Plan](#) promotes the following waste related actions:

- An expansion of existing on-site composting at UniSC Sunshine Coast and other suitable sites.
- Implement visual displays that show the current resource consumption in public spaces across the University to show real-time use and trends.

## GENERAL WASTE STREAMS

Separation of waste streams at the source is essential to maximising recycling and recovery of resources effectively and maximising the amount of waste being diverted from landfill. A colour-coded bin collection system is used to separate waste into the appropriate streams and support responsible waste management. The four streams are:

- **Green Composting Bins:** Food and organics which are then fed into the On-site Composting Apparatus (in June 2020 only available at Sunshine Coast campus);
- **Blue Recycling Bins:** Paper and cardboard;
- **Yellow Recycling Bins:** Co-mingled recycling – glass, plastic and aluminium cans, bottles and containers; and,
- **Red Landfill Bins:** General waste that cannot be recycled or composted.
- **Orange Containers for Change Bins:** Plastic, aluminium and glass containers eligible for Queensland Government’s Containers for Change program. (In place at Moreton Bay and Sunshine Coast campuses)



These bins are placed at regular locations in public access areas, offices, food and beverage spaces and learning areas. Providing co-located bins makes it easier for facility users to separate waste at the source, improving recycling rates and reducing landfill waste volumes. The waste from each bin will be deposited in colour-coded source bins and transferred by cleaning staff to the waste storage area.

This system is supported by initiatives to educate and incentivise sustainable waste management. These initiatives include:

- No under desk rubbish bins are provided/permitted on UniSC campuses. This incentivises staff and students to sort waste into the appropriate streams.
- Signage is provided on and/or above each bin, both in office and public spaces, that illustrate what should be placed in each bin. This signage is updated as needed to better sign common contamination items and adjust when additional recycling streams become available.
- Waste is collected by stream in public view throughout the day as a means of reducing public scepticism that each stream is managed separately. Cleaning contractors are encouraged to respond to any question by students, staff or visitors regarding the waste management processes.

Since implementing the sustainable waste management program in 2013, the waste stream mix shows that over 40-55% of waste at the Sunshine Coast campus is being diverted from landfill through recycling or compost.

Effective separation of recyclable and compostable materials from landfill waste is key to an effective waste management strategy. If landfill waste volumes exceed the provisions in this Plan, the first response should be to monitor the contents of the general waste stream and, if found to contain significant recyclables, provide additional feedback and education to students and staff on stream separation so that more capacity is utilised in the recyclable bins provided.

## LANDFILL

Landfill waste is collected, at a minimum, on a twice weekly basis, to minimise odours and maintain amenity and hygiene. Local council regulations dictate how landfill waste is collected and disposed of at most campuses and study nodes. On behalf of Sunshine Coast Council, Remondis collects and disposes of landfill waste at the Sunshine Coast campus and Thompson Institute. JJ Richards collects and disposes of landfill at the Fraser Coast campus. Moreton Bay landfill waste is collected by Cleanaway Waste under a short-term agreement. Landfill waste management is embedded in the leases for Ochre Health Hub, SCHI, Gympie, Caboolture, SouthBank, Maroochydore Law and Morayfield Health Clinic. General waste from the campground and accommodation at Dilli Village is removed from the island by visitors and guests. General waste from the onsite caretakers' residence and office is taken to the Eurong tip by the caretakers.

## CO-MINGLED RECYCLING

Co-mingled recycling covers plastic, glass and aluminium containers that are accepted within Queensland Government recycling schemes. These containers are collected twice weekly.

Remondis is responsible for collecting and processing co-mingled recycling on the Sunshine Coast campus and at Thompson Institute. JJ Richards collects and processes co-mingled recycling at the Fraser Coast campus. Recycling collection and processing is embedded in lease arrangements at Ochre Health Hub, SCHI, Gympie, Caboolture, Southbank, Maroochydore Law and Morayfield Health Clinic. No recycling facilities are available at the Eurong tip on K'gari for Dilli Village. Therefore, the only waste that is potentially recycled from Dilli Village is the waste removed from the island by visitors and guests; any recyclable materials left behind are disposed of in the general waste stream.

UniSC has recently expanded its recycling efforts at the Sunshine Coast campus to align with the Queensland Government's Containers for Change (CfC). Containers for Change is a Queensland Government scheme that places a 10-cent deposit on drink containers (150ml to three litres), which are redeemable at container refund points and through accredited logistics providers. CfC bins were also extended to the Moreton Bay campus, in place by 2022, with proceeds being diverted to staff and student nominated charities. Change Exchange is the logistics provider at both campuses. CfC is also available on the Caboolture campus as a part of the services provided by Queensland TAFE.

## PAPER & CARDBOARD

Cardboard and paper waste is collected via a private contractor through a monthly rolling contract at Sunshine Coast, Fraser Coast and Moreton Bay campuses. This stream is currently collected by Cleanaway weekly at the Sunshine Coast campus and monthly at the Fraser Coast campus. Moreton Bay campus follows the Sunshine Coast campus schedule to ensure sufficient storage space within the Foundation Building for all waste streams generated by the building.

Paper and cardboard recycling is embedded in lease agreements at the Caboolture and SouthBank campuses, as well as at Noosa and the Morayfield Health Clinic. Minimal paper waste is produced at Dill Village, which is generally removed from the island by visitors and guests. Any paper waste left behind or produced in the caretakers' office and residence is disposed of in general waste.

## GREEN WASTE & COMPOSTING

At UniSC Sippy Downs campus, an on-site composting apparatus (OSCA) transforms organic waste into nutrient-rich compost. OSCA can process the following:

- All food scraps;
- The compostable plates, cups and cutlery sold at campus food outlets; and,
- Paper hand towels.

To ensure the organic waste stream is consistent with OSCA's requirements, compostable catering products (i.e., made of 100% corn starch) such as cutlery, plates and coffee cups (including lids) are used in all food outlets across the Sunshine Coast campus. As the University produces more dry organic waste than can be processed through OSCA, that surplus organic waste is collected by Cleanaway who delivers it to Earthborn for composting.

The caretakers at Dilli Village make use of a small composter for their food waste, but landscape-related green waste is either burnt in campground fire pits or disposed of at the Eurong tip.

At the Moreton Bay campus, green and Biopak waste are currently collected by Cleanaway and sent offsite to NuGrow for composting, but UniSC intends to implement composting measures at this campus as it expands to incorporate multiple buildings and food and drink venues.

## EWASTE

UniSC engages ACT Logistics to process the University's eWaste. General computing equipment (i.e. computers, laptops, monitors, keyboards) are scrubbed to a military grade before being refurbished and resold or donated. More specialised computing equipment (i.e. servers, wireless access/application points, out-of-band equipment) is also decommissioned through ACT Logistics.

Security devices (i.e. cameras, sensors, PCB/circuit boards, card readers) are reused where possible, often in non-vital areas. However, security devices that are deemed too old or non-operational are currently disposed of in the landfill waste stream.

Contractors are encouraged to minimise cabling and wiring waste during construction and fit-outs. However, the small amounts of this waste are currently disposed of through the landfill waste stream.

## HAZARDOUS / CLINICAL WASTE

UniSC has policies and procedures in place to minimise the generation of, and properly dispose of, hazardous waste. These procedures cover pharmaceutical waste, regulated waste, clinical and biological waste, anatomical waste and chemicals. The procedures also cover how to dispose of waste, including non-hazardous anatomical waste, that may be generated in the same locations (i.e., labs) as hazardous waste. The procedures establish



what controls must be in place when working with hazardous materials, what qualifies as each type of hazardous waste, how to dispose of each type of hazardous waste, what to do in case of spills and other accidents, where responsibility rests for the disposal and clean-up and the records that must be kept complying with health and safety policy and regulations. These procedures and related operational plans must comply with Australian Standards, including:

- Safety in Laboratories: Planning & Operational Aspects AS/NZ 2243.1 2005.
- Safety in Laboratories: Microbiological Safety & Containment, AS/NZ 2243.3:2010.
- Safety in Laboratories: Chemical aspects AS/NZ 2243.2:2006.
- Safety in laboratories: Storage of Chemicals AS/NZ 2243.10:2004.
- Medicines and Poisons Act 2019.
- Gene Technology Act 2001.
- Biosecurity Act 2014.
- Radiation Safety Act 1999.

Consideration should be given to whether the waste material can be used in another process or treated for re-use. The Paramedicine and Nursing and Midwifery programs at UniSC reuse materials wherever possible, providing the dual benefits of reducing costs and increasing the access of students to practice materials. These efforts extend to a wide range of medical resources, such as 'medicines', bandages and IV lines. This is possible at UniSC as the students work on mannequins at campus, rather than on actual patients. The only interaction that students would have with actual patients occurs offsite while on their placements. However, there are some items that are single-use only due to regulations or the difficulty of reuse. A specialised contractor, currently Cleanaway Daniel's Health, is used for the collection of regulated or contaminated waste associated with wet labs. This includes the removal and disposal of sharps and the collection and disposal of genetically modified organisms (GMOs).

Food and beverage locations at UniSC Sunshine Coast generate waste, such as cooking oil, that falls within the hazardous waste category. A specialised contractor, Cleanaway Daniel's Health, is responsible for the clearing and disposal of grease traps at these venues.

## SECURE WASTE

UniSC, through its routine operations, generates documents that have sensitive or confidential information such as proprietary financial statements, medical records and job candidate evaluations. These documents must be disposed of through secure waste channels.

Endeavour Foundation is currently contracted to destroy confidential documents at UniSC campuses and study nodes where relevant documents are generated, except for Southbank where ShredX provides this service. The collected documents are shredded and turned into kitty litter or similar products. The use of Endeavour Foundation aligns with the University's commitment to social issues as the Foundation was formed, and continues to provide, opportunities for people with intellectual disabilities.

## SANITARY WASTE

UniSC's cleaning contractor is currently responsible for sanitary waste management at the following campuses and study nodes:

- Sunshine Coast;
- Fraser Coast;
- Gympie;
- Thompson Institute;
- Ochre Health; and
- Moreton Bay.

The contractor disposes of the sanitary waste within the landfill stream. The SouthBank campus uses a separate contractor for disposal of sanitary waste. The caretakers at Dilli Village dispose of sanitary waste at the Eurong tip. Sanitary waste disposal is embedded in the leases at other UniSC campuses and study nodes and, therefore, the University does not manage or handle this waste stream at these sites.

## METAL

Scrap metal is currently captured on the Sunshine Coast campus and will be captured on the Moreton Bay campus. This waste is recycled as the need arises rather than through a regularly scheduled service. Much of the metal waste produced at the University originates from old furniture and construction.

## BATTERIES

Batteries from UniSC-related devices and equipment, primarily emergency and exit lighting signs, are collected by contractors and maintenance staff and disposed of in a battery collection bin at Building Q on the Sunshine Coast campus. Once the bin is full, UniSC contacts Cleanaway to pick up the bin for recycling. The use of batteries on the UniSC campus is minimal and, as such, collections occur approximately once a year.

UniSC is investigating becoming a signatory to the ExitCycle program run by the Queensland Department of Environment and Heritage Protection and the Lighting Council of Australia. In this program, commercial users commit to recycle at least 95% of their end-of-life emergency and exit lighting batteries. It is anticipated to commence in 2023.

## MEDICAL EQUIPMENT

Medical equipment is examined for usability when it is no longer needed or newer equipment is available. If the equipment no longer works, it is decontaminated and disposed of through the bins at Facilities Management. If the equipment is usable, it is decontaminated and donated or sold, pending approval.

## CLEAR SOFT PLASTICS

Clear soft plastic materials are used for packaging of lab samples, IT equipment and white goods. These materials are delivered primarily to the Sunshine Coast campus. The clear soft plastics are collected and disposed of by Cleanaway every 8 weeks. No options currently exist to establish a RedCycle collection on any of the UniSC campuses, so this collection is limited to clear soft plastics.

## POLYSTYRENE

Polystyrene is used primarily for packings of white goods and electronics that UniSC purchases and, more commonly, to insulate research samples for the University's labs. UniSC has contracted with eCycle and QLS logistics to collect and recycle the polystyrene from its Sunshine Coast campus. This service is arranged by ordering bulk bags for collection and scheduling a collection once at least three (3) bags are full. This collection came into effect in 2022 and it has taken roughly three months to fill four bags with polystyrene.

## ADDITIONAL STREAMS

There are some waste streams that hold the potential for recycling which UniSC does not fully capture at the moment. The primary streams for this are soft plastics, polystyrene, timber and furniture.

- All Soft Plastics: Soft plastic bags are received daily in the labs as packaging for lab samples and weekly as packaging for IT equipment. Clear soft plastics can be recycled at the Sunshine Coast campus. Other soft plastics can be recycled off-site through the RedCycle program which is not currently open to universities. UniSC will monitor this program and incorporate it should the program be expanded to educational institutions.
- Timber: UniSC receives large deliveries that include timber pallets, which are not currently recycled. UniSC is investigating listing these pallets on the Aspire circular economy platform.

- Furniture: UniSC currently stores the used furniture that is acceptable for reuse and strips some of the furniture that is not acceptable for spare parts (i.e., metal) that can be recycled. However, that old furniture is just being stored, rather than being sold or donated. BizFurn, who supplies much of the campus furniture (i.e., desks, chairs), offers the option of collection and recycling of furniture for a fee. Some pieces of furniture have been recycled through this process. UniSC is also investigating listing some of the furniture on the Aspire circular economy platform.

Some plastics will be phased out through Queensland and Australian legislation around single-use plastics, which will limit the amount of materials that will flow into the recycling stream.

## LIMITATIONS

This report is current as of October 2022. The 2020 numbers were impacted significantly by the campus closures, working from home and online course delivery brought about by the COVID-19 pandemic and, therefore, should not be used to assume any trends in waste volumes or percent of waste diverted from landfill.

## PROCUREMENT

Minimising the production of waste is the preferred waste management option at UniSC. Sustainability principles have been applied to procurement procedures in an effort to change behavior and reduce the amount of waste generated. Guidance documents have been created to accompany the tender and procurement processes, including Sustainability Contract Provisions and Sustainable Purchasing Guidelines.

### SUSTAINABILITY CONTRACT PROVISIONS

- Establishes six (6) overarching concepts to consider when selecting a contractor: materiality and completeness; timeliness; reliability and comparability; clarity; accuracy and balance; and stakeholders.
- Provides a series of recommended sustainability actions for contractors based on the Triple Bottom Line pillars (environmental, social and economic).
  - Environmental factors focus on the contractor's behavior, steps they take to verify their actions and commitments and how they address or manage biodiversity, chemicals, efficiency, recycling and waste.
  - Social factors focus on the contractor's behavior, how they engage key stakeholders and the community, their level of transparency, how they address or manage human and labour rights and the steps they take to verify these actions.
  - Economic factors focus on their partnerships, how they identify and address risks and whether they measure cost using whole of life/lifecycle costings.

### SUSTAINABLE PURCHASING GUIDELINES

This form can be used by staff when they are preparing to purchase a product or service. The form includes a section examining why and whether the product/service is needed, a chart that allows staff to compare three (3) models across a range of criteria (i.e. Star Ratings, Life Expectancy, Price, Maintenance, Risks) and guidance on how to evaluate the sustainability of products/services based on what the products use (i.e. fuel, energy, water, packaging), the human resources necessary (i.e. delivery, installation, training, maintenance), relevant certifications, risks (i.e. biodiversity, staff) and issues that affect the life and cost of the product.

## SUSTAINABILITY ONBOARDING

In addition to procurement efforts, training and clear communication of expectations offer UniSC the potential to minimise the amount of waste generated on site. UniSC currently uses a sustainability onboarding session and a Sustainable Employee Checklist to provide staff with information on how to produce less waste.

The Sustainability Onboarding session is a presentation that outlines UniSC sustainability achievements and initiatives in the areas of energy, buildings, waste, transport, environment, water and the core focus of teaching, learning and research. The presentation outlines actions and activities that staff can use to help the University reach its sustainability goals and the steps that UniSC is taking to support staff to achieve those actions and activities. The steps cover paper, energy and water use, waste management, transportation, purchasing, kitchens and leadership and scholarship. The onboarding session directs the staff member to a checklist with actions they can take on a regular basis to become a sustainable employee. The next step in this process is to design a Sustainable Student session for incoming students.

## PROCEDURES

### WASTE MEASUREMENT

The volume of each stream of waste is captured through various processes, depending on the type of waste and the campus at which that waste is generated.

- Sunshine Coast: The cleaning contractor measures the volume of waste for the four main streams as a requirement of their contract. The cleaning contractor provides the volume of the four main streams in their regular reporting. Metal waste figures are provided by the metal recyclers (Action Metals). Soft Plastics, Batteries, Paper/Cardboard and extra Compost volumes are captured and reported by the contractor (Cleanaway). Change Exchange provides the number of containers recycled through the Containers for Change program. Currently there is no formalised method of measuring e-waste apart from ICT asset disposal records.
- Moreton Bay: The Facilities Management team weighs each 660lt bin with a forklift when placed for collection and records the numbers weekly. Waste volumes are also captured regularly by Cleanaway as they collect each stream.
- All other sites are calculated through number of bin lifts, rather than by weight measurements.
- Note: UniSC strives to include a requirement to capture volume for all managed streams in Waste Management tenders for sites where UniSC has operational control.

### WASTE CONTAMINATION

Auditing waste streams is a useful process to undertake on an annual basis to examine contamination. Audits capture the total volume and/or weight of waste or recyclables. These audits identify which streams are the most contaminated and which items end up in the wrong stream most often. The audits also capture the waste and contamination hotspots, where the highest amounts of rubbish are found outside of waste bins. It is important to identify these hotspots, which often exist in areas that are used both by UniSC staff and students, as well as community members from local schools and sporting event attendees. The information on contamination is fed into decision-making around:

- The quantity and placement of bins;
- The signage accompanying bins;
- UniSC-wide messaging;
- The scope of cleaning contracts;
- Expansion of waste management services; and
- The focus of waste displays at UniSC events.

Where the UniSC Cleaning Contractor, Biniris, is involved, a cursory level of contamination is identified through daily waste disposal operations. The contractor also conducts annual waste audits at Sunshine Coast campus

which includes going through the various waste streams at each building. This takes place over the course of multiple weeks.

## WASTE AUDIT

A formal waste audit of all buildings at the Sunshine Coast campus is conducted to determine waste disposal performance for three waste streams including landfill, recyclable and organic. (All buildings include waste collected for B, C, D, E, K, H1, H2, H, I, IC, J, T, R Brasserie, Q, Library, K Demountables and Village Demountables.) A similar, though condensed, waste audit is conducted at all campuses and sites where the University has operational control.

The audits are conducted over teaching weeks during the routine daily campus waste collection where each waste bin is given an estimated volume (litres) based on the observation of each bin bag's contents. Each waste station is audited for multiple days per week and, where public holidays occur, an extra day is made up to even out the audit scoring.

The most significant volume of contamination is found in the landfill stream, with over half of the rubbish disposed of in that stream being either recyclable or compostable. The level of contamination across the recycling streams are generally less than 10% and generally less than 5% for the compost stream. Given much of the contamination is related to food and food containers a majority is found in the external bins outside of the food and drink venues on the Sunshine Coast campus. This information has fed into displays for the sustainability stall at events including Orientation Weeks and Sustainability Week Market Day stalls.

## RISK MANAGEMENT

Safe Work Method Statements (SWMS) are required to be completed in relation to waste removal and recycling operations at UniSC. The Statements require risks and hazards to be identified and rated. The risks are aligned with various steps in the waste management process, from transporting and cutting up waste to storage of that waste. Identified hazards have included loads falling in transportation (i.e. buggies, forklifts) to entanglements during the processing stage to spills and personal injuries during the transport and storage stages. The SWMS also require identification of control measures for each risk to minimise the overall risk. These measures often include use of appropriate equipment, securing materials carefully and exercising due care.



## SUPPLIERS/CONTRACTORS

Private contractors can be engaged to collect various waste streams, with the exception of Landfill and Recycling (Co-mingled and Paper/Cardboard) in the Sunshine Coast Council area. Private collection services must be implemented in line with council regulations. A list of the existing contractors for each campus are listed in Table 4.

Table 5: UniSC Waste Management Contractors

Site	Contractors								
	General Waste	Recycling – Comingled	Recycling – Paper	Green Waste	eWaste	Sanitary Waste	Confidential / Sensitive Materials	Hazardous / Clinical Waste	Other
Sunshine Coast (Sunshine Coast Regional Council)	Sunshine Coast Council – Remondis <sup>1</sup>	Change Exchange (Containers for Change Scheme) Remondis (SCRC) <sup>1</sup>	Cardboard – Cleanaway	On-site (OSCA in conjunction with cleaning contractor, Biniris) Surplus dry organic waste is collected by Cleanaway and processed locally by Earthborn	ACT Logistics <sup>2</sup> (military-grade scrubbing, auction/resale – computer equipment)	Biniris	Endeavour – Check with tony anderson or sue or kat	Daniel’s Health/Cleanaway	Mobile Muster bin (old phones); Nespresso (branded coffee capsules); Cleanaway for soft plastics and batteries Polystyrene: eCycle / QLS Logistics
Thompson Institute (Sunshine Coast Regional Council)	SCC – Remondis <sup>1</sup>	SCC-Remondis <sup>1</sup>	N/A	N/A	ACT Logistics	Biniris	Endeavour	DH/C	Medical Equipment, Refrigerant gases
Ochre Health Hub	Embedded in lease	Embedded in lease	Embedded in lease	N/A	ACT Logistics	Biniris	Endeavour	DH/C	Medical Equipment
Fraser Coast (Fraser Coast Regional Council area)	Fraser Coast Council – Cleanaway	Fraser Coast Council – Cleanaway	Fraser Coast Council – Cleanaway	N/A	ACT Logistics	Biniris	Iron Mountain	DH/C	

UniSC Operational Waste Management Plan

Site	Contractors								
	General Waste	Recycling – Comingled	Recycling – Paper	Green Waste	eWaste	Sanitary Waste	Confidential / Sensitive Materials	Hazardous / Clinical Waste	Other
Gympie (Gympie Regional Council)	Gympie Regional Council – embedded in lease	Gympie Regional Council – embedded in lease	Gympie Regional Council – embedded in lease	N/A	ACT Logistics	Biniris	Endeavour	DH/C	
Caboolture (Moreton Bay Regional Council)	Embedded in lease (Cleanaway)	N/A	Embedded in lease	N/A	ACT Logistics	N/A	Endeavour	DH/C	
Moreton Bay (Moreton Bay Regional Council)	Cleanaway	Cleanaway	Cleanaway	Cleanaway	ACT Logistics	Biniris	Endeavour	Cleanaway	Medical Equipment; Refrigerant gases
Southbank (Brisbane City Council)	Embedded in lease	Embedded in lease	Embedded in lease	N/A	ACT Logistics	Broadlex (engages Ozifresh of Australia)	Shred-X Secure Destruction	N/A	N/A
K’gari-Fraser Island	Caretakers	Removed by visitors	Removed by visitors	Small on-site composter in use	ACT Logistics	Caretakers	N/A	N/A	N/A
Morayfield Health Clinic	Embedded in lease	N/A	Embedded in lease	N/A	ACT Logistics	Embedded in lease	Endeavour	DH/C	N/A
SCHI	Embedded in agreement	N/A	Embedded in agreement	N/A	ACT Logistics	Embedded in agreement	N/A	Embedded in agreement	N/A
Maroochydore Law	Embedded in lease	Embedded in lease	Embedded in lease	N/A	ACT Logistics	Embedded in lease	N/A – Taken care of by Lessor	N/A	N/A

Bound to using Remondis through Sunshine Coast Council.

All relevant IT/ICT equipment purchased through the university gets sent back to Sippy Downs at the end of its use cycle, at which point ACT logistics scrubs it and readies it for resale/auction/donation.

## COMMUNICATIONS

FM is responsible for communicating with UniSC staff and students regarding waste efforts and expectations across campuses. This includes:

- Printing posters (see image below) to accompany waste bins;
- Notification of where/how to recycle or dispose of waste;
- Sustainability tours which focus on waste issues;
- Waste, recycling and composting displays at campus events;
- Promotion of new initiatives on internal staff and student intranets; and
- Updating the Sustainable UniSC Waste page.



Additional UniSC staff across operational (i.e., Marketing and External Engagement, Student Services and Engagement, Human Resources, Procurement) and educational (i.e., School of Science and Engineering) departments may engage in communications about waste.

## CLEANING WASTE

The cleaning contractor for campuses and study nodes where UniSC maintains operational control (Sunshine Coast, Thompson Institute, Moreton Bay, Fraser Coast, Maroochydore Law) has an important role in waste management.

The cleaning contractor performs a range of waste recovery and desktop recycling operations for UniSC, including:

- Emptying bins around campus, using an electric cart (as seen below, Sunshine Coast Campus only);
- Picking up, measuring and disposing of litter found around campus;
- Cleaning educational, office and bathroom facilities; and,
- Servicing sanitary bins.

Beyond these operations, the contractor has a vital role in working closely with UniSC to promote sustainability, from conducting waste audits to identify contamination of waste streams, to providing information that can be used to communicate with staff and students about sustainable waste management.



## WASTE MANAGEMENT

### WASTE GENERATION RATES

The total waste generation by waste type is defined in the table below. This assumes that all general waste will be collected by a private contractor on a twice weekly basis for general waste, and a weekly basis for recycling. A more frequent recycling service may be adopted, based on negotiations with a private contractor. Bin and waste store provisions are summarised in Table 5, below.

Table 6: Waste Generation at UniSC-Owned Sites

Campus	Landfill		Organics		Comingled Recycling		Paper/Cardboard		Other Bins
	Volume (kg/month)	Bins Req'd	Volume (kg/month)	Bins Req'd	Volume (kg/month)	Bins Req'd	Volume (kg/month)	Bins Req'd	
Sunshine Coast	10,554 (2019)	11 x 2m <sup>3</sup>	1,370 (2019)	OSCA	2,217 (2019)	5 x 2m <sup>3</sup>	2,444 (2019)	3 x 4.5m <sup>3</sup>	2 x 240L Soft Plastics 2 x 120L battery bins 5 x 5L battery buckets 16 x 240L CfC bins
	6,174 (2020)		313 (2020)	4 x 240L bins (extra)	398 (2020)		1,364 (2020)	1 x 3m <sup>3</sup>	
Moreton Bay	807 (2020)	6x660lt	25 (2020)	2x660lt	58 (2020)	6x660lt	131 (2020)	2x660lt	3x240lt clinical waste @25"x 60/90lt + 3x240lt CfC
Fraser Coast	Volume not measured	1 x 2m <sup>3</sup>	N/A	N/A	Volume not measured	8 x 240L	Volume not measured	1 x 3m <sup>3</sup>	6 x 120L
Gympie	Volume not measured	1 x 2m <sup>3</sup>	N/A	N/A	Volume not measured	1 x 2m <sup>3</sup>	Volume not measured	N/A	2 x 120L
Dilli Village	Low volume - most waste carried out	Small bins for Care-takers office	Low volume - most waste carried out	N/A	Low volume - most waste carried out	N/A	Low volume - most waste carried out	N/A	N/A

In addition to the bins listed in Table 5, above, for collection by the University's waste contractors, the following bins are located across each campus for collection of the four streams of waste directly from students, staff and visitors:

- Sunshine Coast: 60+ x 120L; 20+ x 240L; 20+ x 360L
- Moreton Bay: 45 x 90L; 79 x 60L; 4 x 40L
- Fraser Coast: 6 x 120L
- Gympie: 2 x 120L

The accessibility of waste generation volume is limited to general waste for leased or tenancy sites. These will be updated as information becomes available

Table 7: Waste Generation at Leased Sites & Tenancies

Campus	General		Co-mingled Recycled		Paper / Cardboard		Smaller Bins
	Volume (L)	Bins Req'd	Volume (L)	Bins Req'd	Volume (L)	Bins Req'd	
Caboolture	No distinction between UniSC and TAFE as present						
Southbank	No distinction between UniSC and other building occupants						
Thompson Institute	No reliable data available at present due to the rapid evolving operations						6 x 240 L
Ochre Health Hub	Variable data due to varying usage patterns						
Noosa	Volume not measured	3 (1.5 for UniSC) @ 140 / 240L (Note: no distinction between streams)	Volume not measured	No distinction between streams	Volume not measured	No distinction between streams	
Morayfield Health Clinic	Data not yet available						
Maroochydore Law	Data not available						

## WASTE STORAGE AREAS

### Sunshine Coast

There are multiple waste storage areas on the Sunshine Coast Campus:

1. OSCA (on-site composting apparatus) is located in the cleaning compound at Buildings W and FMSTORE. This is the site where the waste collection buggy is housed and charged. Re-usable furniture, used batteries and paint/compound storage is also found in Building W.
2. The large skip bins for general waste, comingled recycling and organics (1) are located in Carpark 5. Building Q1 (Maintenance Shed) houses paper/cardboard recycling bins, a spill kit and unclaimed bicycles. Skip bins are also located at the Stadium, Building R, behind the Brasserie, outside of the Library and in the Innovation Centre parking lot alongside the storage shed.
3. The metal, landscape (i.e., mulch, rocks/gravel, dirt), timber and timber storage areas are located in the waste storage area adjacent to the tennis courts, parking lot 5 and Building Q1 Maintenance Shed. This area houses a skip bin containing broken furniture and paint canisters and a recycling centre skip bin. This area also contains a 38.1 m<sup>3</sup> storage container.

### Moreton Bay

The bin storage area is located on the ground floor of the Foundation Building, adjacent to the loading dock and Carpark 1 located on the southern side of the building. Entry into the compound is via a gate adjacent to Stradbroke Place. The bin storage area has a total floor area of 58m<sup>2</sup>, with all 660lt bins requiring a total space (including circulation access) of 35.9m<sup>2</sup>.

The bins are serviced onsite at the carpark. The collection point is located away from public view within the property where a waste collection vehicle will access the bins and leave the site in a forward gear. Waste chutes and compaction equipment will not be used for this development. All bulk bins are cleaned by external contractor with onboard water recycling system.

### Fraser Coast

There is currently no set waste compound at Fraser Coast campus. There is a fenced area for general waste, cardboard waste and comingled recycling bulk bins. This area is accessed by UniSC staff and contractors. This area is set to be expanded in late 2022/early 2023 to create a proper, though small, waste compound where we will have our skip bins and a bin lifter.

### Other Campuses

As UniSC does not maintain full operational control over other sites, any waste management/storage compounds are maintained or run by the organisations with operational control. UniSC staff and contractors do not access any of these storage areas, where they exist.

## DEFINITIONS

Circular Economy:	A system that is designed to eliminate waste by keeping materials in use as long as they have some function. This involves reusing materials where possible and repairing, refurbishing or recycling those materials where reuse is not an option. Benefits include improved productivity of resources, the reduced need for disposal as materials are recovered in whole or partially and the preservation of flora and fauna through prevention of pollution entering the environment.
Clinical Waste:	Waste resulting from medical, nursing, dental, pharmaceutical, skin penetration or other related clinical activity. It has the potential to cause injury, infection or offence, and includes waste containing any of the following: human tissue (other than hair, teeth and nails); bulk body fluids or blood; visibly blood-stained body fluids, materials or equipment; laboratory specimens or cultures; and, animal tissue, carcasses or other waste from animals used for medical research.
eWaste:	Waste of an electronic nature. This includes, but is not limited to, computer equipment, tv screens, mobile phones, servers, security devices (cameras, card readers, access points), wiring and sensors. Many of these items have recyclable components or are capable of being refurbished and reused.
General Waste:	Any waste that is sent to landfill. Note that this may include materials that could otherwise be composted, reused or recycled.
Operational Waste:	Waste that is generated once the site is at practical completion and has commenced occupation and operation.
Organic Waste:	There are two main types of organic waste. These are wet waste and dry waste. Wet waste is generally food and landscape waste (i.e. grass clippings). The dry waste are materials that are suitable for composting, such as corn-starch-based cutlery, cups and serving platters. Some towels and cardboards are deemed dry organic waste, suitable for composting. Dry landscape materials are also deemed to be organic waste. Note that the suitability of particular dry organic waste will vary by composting method.
Trade Waste:	All non-human liquid waste generated on commercial properties that is discharged to the sewerage system. It includes liquid waste such as grease, oils and chemicals.
UN SDGs: <i>(United Nations Sustainable Development Goals)</i>	The UN SDGs are a set of 17 integrated goals set out by the United Nations that serve as a call to action to end poverty, protect the planet and drive peace and prosperity. The goals are: (1) No Poverty; (2) Zero Hunger; (3) Good Health and Wellbeing; (4) Quality Education; (5) Gender Equality; (6) Clean Water and Sanitation; (7) Affordable and Clean Energy; (8) Decent Work and Economic Growth; (9) Industry, Innovation and Infrastructure; (10) Reduced Inequalities; (11) Sustainable Cities and Communities; (12) Responsible Consumption and Production; (13) Climate Action; (14) Life below Water; (15) Life on Land; (16) Peace, Justice and Strong Institutions; and, (17) Partnerships for the Goals.



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