



FLINDERS  
COUNCIL

# Waste Management Strategy 2024–2028

## Version History

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## Abbreviations and glossary

ABS	Australian Bureau of Statistics
Composting	A controlled, aerobic (oxygen-required) process that converts organic materials into a nutrient-rich soil amendment or mulch through natural decomposition. The end product is compost – a dark, crumbly, earthy-smelling material.
CRS	Container refund scheme: the initiative whereby drink containers can be returned at a value of 10c per item.
DCCEEW	Department of Climate Change, Energy, the Environment and Water
Disposal	Processes through which wastes are placed in an approved facility without deriving significant productive use. Includes deposit in landfill and incineration.
EPA	Environment Protection Authority
E-waste	Electrical or electronic waste, comprising any equipment, device or thing that is no longer wanted or working and was in some way dependent on an electric current.
NRE	Department of Natural Resources and Environment Tasmania
Organic waste	Waste that is derived from biotic processes, includes food, garden organics, wood and biosolids. Typically excludes paper and cardboard, textiles, natural latex-based rubber, leather, and nappies.
Product stewardship	A policy approach recognising that manufacturers, importers, governments, and consumers have a shared responsibility for the environmental impacts of a product throughout its full life cycle.
Recoverable waste	Material which can result in a certain product with a potential economic or ecological benefit.
Recycling	Operations by which materials are reprocessed into products, materials, or substances whether for the original or other purposes.
Residual waste	Waste determined to be unsuitable for recovery.
Resource recovery	Activities through which recoverable wastes are collected, sorted, processed, and/or converted into materials for use. This includes re-use, recycling, and composting.
Resource recovery rate	The weight of materials allocated to re-use, recycling or recoverable divided by the total weight of waste generated.
Re-use	Reallocation of products or materials to a new purpose or owner without reprocessing or remanufacture, but potentially with some repair.
Solid waste	Waste that can have an angle of repose of greater than 5 degrees above horizontal, or does not become free flowing at or below 60 degrees Celsius, or is generally capable of being picked up by a spade or shovel.
Waste	Materials or products that are unwanted, surplus, discarded, rejected, abandoned, or left over, including those materials or products intended for or managed by re-use, recycling, energy recovery, treatment, storage, and disposal.
Waste generation	The process of producing waste, for data reporting purposes, the quantity of waste generated is the sum of the quantities of materials allocated to waste reuse, recycling, energy recovery, disposal, stockpiles, and treatment.
Waste hierarchy	A preferential order of waste management options based on environmental benefit, often framed to include, in descending order of preference: avoid, re-use, recycle, energy recovery, then disposal.
Waste stockpile	An accumulation of waste, whether or not reprocessed and whether or not in infrastructure approved for this purpose.

Waste treatment	The physical, thermal, chemical, or biological processes, which change the characteristics of the waste in order to reduce its volume or hazardous nature, to facilitate its handling or to enhance recovery.
Waste prevention	Waste prevention includes any deliberate action taken that stops an item, component or material from entering a waste management facility or system.
WTS	Waste transfer station

The above definitions were adapted from the National Waste Report by Department of Climate Change, Energy, the Environment and Water (2022).

*Discarded rubbish contains valuable resources*



## 1. Executive Summary

The Flinders Municipality, located in Tasmania, faces unique waste management challenges due to its remote location and limited resources. To address these challenges, the Flinders Council Waste Management Strategy 2024–2028 has been developed as a roadmap for establishing an effective solid waste management system. The strategy is driven by the need to improve environmental compliance, resource recovery rates and align with the Federal and State strategic direction in waste management. Furthermore, the strategy aligns with the Flinders Council Strategic Plan 2021–2031 and builds upon the previous Flinders Council Waste Management Strategy 2014–2019.

With a vision of "Council and the community working together for a sustainable future with resource recovery at its core," the strategy sets clear goals and objectives. These include operating waste facilities with minimal environmental and human health impact, maximising waste avoidance and resource recovery, ensuring accessible and resident-focused waste services, and promoting waste education and community responsibility. The implementation of the strategy is guided by three strategic outcome areas:

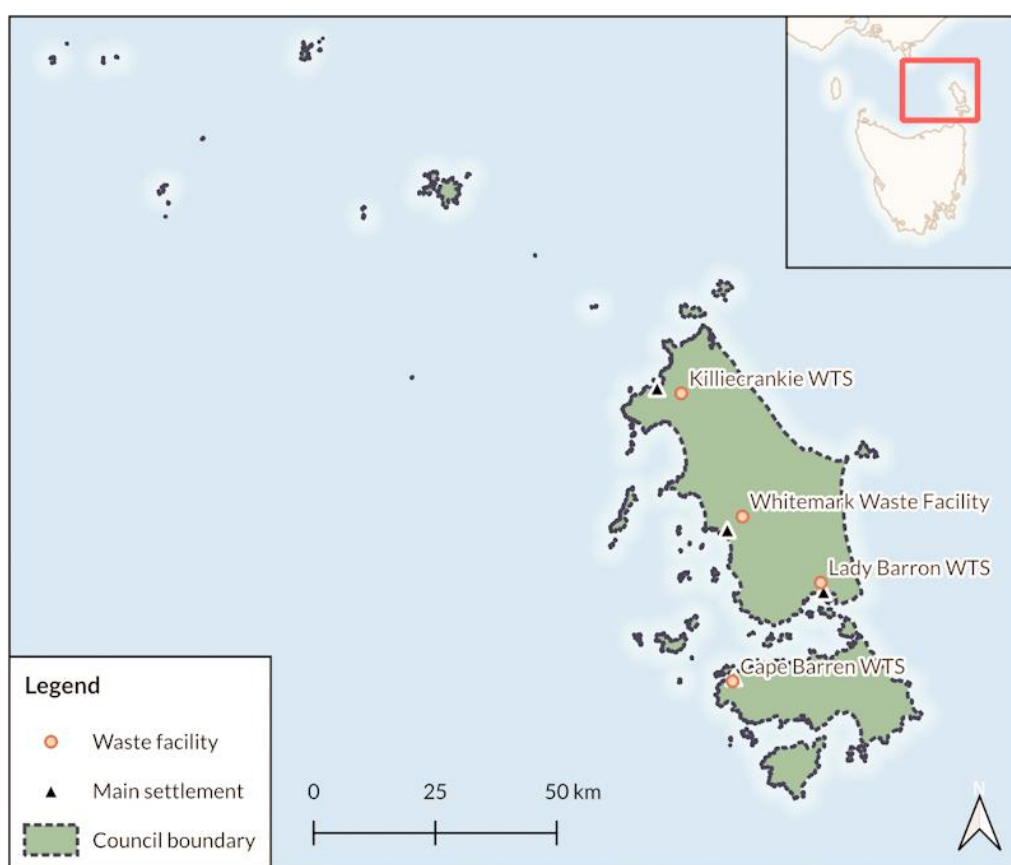
1. Planning Waste Infrastructure
2. Improving Resource Recovery
3. Waste Education

By implementing the Flinders Council Waste Management Strategy 2024–2028, the municipality aims to enhance waste management practices, reduce waste to landfill, and increase resource recovery. The strategy recognises the importance of strong leadership, community involvement, and advocacy to achieve these goals. Through careful planning, collaboration, and the adoption of innovative waste management solutions, the Flinders Municipality is committed to creating an environmentally sustainable future for its residents.

## 2. Introduction

### 2.1 Waste in the Flinders Municipality

The Flinders Municipality, situated in the Bass Strait, Tasmania, encompasses the Furneaux, Deal and Hogans Groups of Islands (Figure 1). With a local population of approximately 920 individuals (ABS 2021), it holds the distinction of being the least populated local government area in Tasmania. Flinders Island assumes a central administrative role and as the largest and most populous island, it serves as the commercial and governmental hub for the municipality. Cape Barren Island is the second largest in terms of both land area and population. The municipality also includes more than 50 outer islands, characterised by their sparse population and remote nature. While agriculture remains the primary industry in the region, the eco-tourism sector is gaining prominence, capitalising on the islands' unspoiled natural beauty.



**Figure 1.** Map of the Flinders Municipality. Local government boundary from LISTmap (NRE 2023).

Given the region's natural values, increased tourist visitation, and potential for residential growth, it is vital to enhance waste infrastructure and implement resource recovery measures in line with best available technology (BAT) and management practices. Recent data indicates that Flinders Island generated 1,915 tonnes of waste in a year, equivalent to 2.2 tonnes per person. The recovery rate for the same period stands at only 7.8 percent. By comparison, the Australian resource recovery rate was 63% in the 2020-2021 financial year (DCCEEW 2022). These figures emphasise the pressing need for improvements. For a detailed overview of waste disposal rates for Flinders Island, please refer to Appendix 1.

The focus for the municipality in addressing waste management primarily centres around the key population areas of Flinders and Cape Barren Islands. Current waste facilities include the main landfill site in Whitemark and three waste transfer stations (WTS) servicing smaller townships of Lady Barron, Killiecrankie, and Cape Barren Island (Figure 1). The existing waste services provided by the municipality include general waste disposal, servicing of transfer stations, stockpiling of some recoverable materials, collation and freight of limited recyclables for off-island processing, the provision of a Giving Shed to promote the reuse of clothes and bric-a-brac, and the maintenance of public bins throughout Flinders Island. See Appendix 2 for details on all recoverable streams.

## 2.2 The Importance of a Waste Strategy

The community's perception of waste is evolving—it is shifting from being merely discarded rubbish to a potentially valuable resource. This shift in perspective offers opportunities for innovative solutions that prioritise diverting waste from landfill and promoting local initiatives with economic potential. The region needs a comprehensive waste strategy that addresses the unique challenges faced, meets the increasing community expectations for improved resource recovery, and adapts to changing regulatory requirements.

The Flinders Council Waste Management Strategy 2024–2028 (hereafter, the Strategy) outlines a roadmap for managing solid waste in the Flinders Municipality. The strategy builds upon the previous Waste Management Strategy 2014–2019, where many of the actions identified were implemented (see Appendix 3). The new strategy will replace the previous plan and will emphasise compliance, waste reduction, and resource recovery to maximise the benefits to the local community.

In a broader context, the Tasmanian State Government is embarking on a new direction in waste management, with the introduction of a statewide legislated landfill levy (NRE 2022) as the cornerstone of the State's waste strategy. This levy serves the purpose of discouraging landfilling while functioning as a funding mechanism for the waste and resource recovery sectors in Tasmania.



## 2.3 Waste Streams Addressed in this Strategy

This Strategy summarises the proposed management of solid waste generated from households, commercial and industrial premises and the construction and demolition sector. It considers the current and future management of solid waste by Council, while excluding liquid waste and biosolids.

The waste streams that are managed by Council and broadly addressed within this plan include:

- Household rubbish
- Food waste
- Recyclables: paper, cardboard, plastic, steel, aluminium, and glass
- Green waste: garden clippings, tree branches
- Reusables: clothing and other cloth items, books, toys, and bric-a-brac
- White goods
- Electronics (e-waste)
- Old furniture and mattresses
- Cooking and motor oil
- Tyres
- Vehicle batteries
- End-of-life vehicles and farm machinery
- Building materials
- Wood and timber
- Scrap metal
- Clean soil, rocks, and rubble
- Mixed hard-to-recycle items: selected streams recycled through product stewardship programs.

Details on current and future management strategies for individual recoverable waste streams are available in Appendix 2.

*End-of-life tyres*



## 2.4 Strategic Alignment—Local Government Strategic Plan

The Flinders Council Strategic Plan 2021–2031 is the key document that provides a framework and guides Council in decision making to prioritise and deliver services, programs, and facilities to the community. The key themes identified in Council’s Strategic Plan, and considered in the development of the Strategy, are liveability, accessibility/infrastructure, economy/business, and good governance. The Strategy will align with and complement Council’s strategic plan and be implemented through a consistent program of planning, decision-making, delivery, and performance management.

Key Themes Strategic Plan 2021–2031	Alignment Waste Strategy 2024–2028
<p><b>Liveability</b> To protect and build upon our islands’ way of life.</p>	<p>Deliver efficient and sustainable waste management services to minimise the impact on our pristine environment.</p>
<p><b>Accessibility / Infrastructure</b> Quality infrastructure and services for community benefit.</p>	<p>Deliver waste management infrastructure that is fit-for-purpose and easy for the communities to use, understand and accept.</p>
<p><b>Economy / Business</b> An environment where a variety of businesses can thrive and integrate.</p>	<p>Actively support community-based waste initiatives and promote on-island resource recovery projects. These initiatives can create new business opportunities, promote entrepreneurship, and foster a sustainable local economy.</p>
<p><b>Good Governance</b> Effective, efficient, and transparent management and operations.</p>	<p>Establish clear goals, objectives, and actions to improve waste management practices, ensuring efficient and sustainable operations within the municipality that meet regulatory compliance.</p>

## 2.5 Strategic Alignment—State Government Waste Strategy

The direction and management of waste in Tasmania is changing. In October 2023, the Tasmanian Government released the final Tasmanian Waste and Resource Recovery Strategy 2023–2026. Recognising the limitations of historical waste data, one of the key priorities in the State's waste strategy is improving the quality and accuracy of data collection. The government will develop Tasmanian-based targets as it gains a better understanding of waste and resource recovery rates through the improved data reporting system.

Flinders Council is already fulfilling the requirements for local government to collect and report waste disposal data accurately, as mandated by the *Waste and Resource Recovery Act 2022*. A digital waste data collection system and improved weight estimation methods were introduced in July 2023 at the Whitemark Waste Facility.

In order to stay current, the Flinders Council's Waste Strategy will need to be adaptable to align with the evolving targets and principles of the Tasmanian Governments.

The key principles and actions articulated by Tasmanian Government include:

- Alignment of State, regional and local strategic planning.
- Introduction of a landfill levy to discourage landfilling and fund the resource recovery sector.
- Circular economy focus—increasing re-use, recycling, and re-manufacturing of resources.
- Reducing waste production.
- Investment for waste management infrastructure, skills, and new systems for resource recovery.
- Improved community and business education and engagement.

## 2.6 Waste Challenges

Flinders Council, being a remote municipality, faces various challenges in waste management. The key waste challenges that this strategy aims to address are detailed below.

Compliance	Legacy landfill	Limited financial resources
<p>The Whitemark Waste Facility has grappled with environmental compliance challenges, stemming from historical management practices and limited financial resources. These issues necessitate a critical reassessment of operational strategies and infrastructure development to align with stringent environmental regulations.</p>	<p>The current landfill cell has been in use since 1987. Remediation and rehabilitation works are required for continued use until other waste management options are available. The existing cell will then be decommissioned, capped, and rehabilitated.</p>	<p>The ten-year strategic plan has identified that Flinders Council has too small a rate-payer base and limited income opportunities to sustain major infrastructure works. Funding assistance via grants for local government is required for waste infrastructure developments.</p>
Packaging waste	Insufficient resource recovery	Limited local capacity
<p>The transportation of goods to the islands results in significant amounts of packaging waste (plastic and cardboard). It is estimated that Flinders Island receives approximately 6000 bulk bags, for the importation of fertiliser, per year (L. Rainbow, personal communication, 24 October 2023).</p>	<p>The 2021 waste audit highlighted that 71% of the waste currently being landfilled could be diverted through recycling (37%) and composting (34%). Limited resource recovery infrastructure, services and practices exacerbate landfill usage.</p>	<p>Local capacity for recycling is limited. The establishment of on-island recycling solutions will require both public and private investment.</p>
Accessing recycling markets	Illegal dumping & burning	Visitation increase
<p>Limited volumes of recyclables and high freight costs hinder access to existing and emerging recycling markets and product stewardship schemes.</p>	<p>Some residents are resorting to undesirable disposal methods such as dumping and burning of their waste. This may be in part due to insufficient resource recovery options, and/or limited awareness of the impacts of these activities, or lack of control/penalty system in place.</p>	<p>Flinders Island experiences significant increases in visitation, especially during the summer period. The rise in tourist numbers directly contributes to a surge in waste generation.</p>



### 3. Strategic Direction

A clear and comprehensive strategic direction is needed to address the waste management challenges faced by the Flinders Municipality. To guide the strategic direction of the Strategy, vision and mission statements were developed. This section also provides the Strategy's goals and objectives, targets, and an overview of the key outcome areas.

#### 3.1 Vision

Council and the community working together for a sustainable future with resource recovery at its core.

#### 3.2 Mission

To implement a waste management system that prioritises waste reduction and resource recovery in a sustainable manner, considering cost-effectiveness, environmental impact, and community well-being.

#### 3.3 Goals and Objectives

The key objectives that Council will seek to address throughout the duration of the Strategy include:

- Waste facilities and activities are operated in a manner that minimises the impact on environmental and human health and maintains a high level of public amenity.
- Waste avoidance, re-use, and resource recovery are maximised prior to landfill disposal, based on consideration of the environmental, social, and economic benefits.
- Waste facilities are accessible and operate with a community focus that prioritises resource recovery.
- Accurate waste data collection methods are utilised to enable progress tracking.
- Waste services reflect the community's desire for improved resource recovery, balanced with affordability.
- Council, the community, and individuals take responsibility for their own waste with strong leadership and advocacy from Council to promote resource conservation.
- Waste education and assistance is provided to the community to meet compliance goals and expectations.

#### 3.4 Targets

While Tasmanian-based waste reduction resource recovery targets are yet to be developed, the Strategy is driven by the following key targets established by the Australian Government (DCCEEW 2019):

- Reduce waste generated in Australia by 5% per person by 2025.  
This target aims to promote waste avoidance among individuals, both in households and businesses. To achieve this target, Council will develop and distribute waste avoidance information and serve as a role model to inspire the community to modify their consumption and waste generation behaviours.

- Reduce the volume of organic waste sent to landfill by 25% by 2025.

This target aims to reduce the amount of organic waste that is being disposed to landfill. To progress towards this target, Council will encourage the community to improve waste avoidance and conduct home composting. At a larger scale, Council will investigate alternative waste treatment methods for organic waste.

- Achieve a 50% recovery rate from all waste streams by 2025.

This target aims to increase the recovery of usable materials (hereafter, resource recovery) from all waste streams including household recyclables and building materials. This is achievable through the introduction of resource recovery processes at all waste facilities. Council plans to progressively introduce infrastructure for the segregation, collation, and sorting of usable materials.

The Strategy recognises the need for, and importance of, establishing an accurate baseline for measuring progress. Due to changes introduced in July 2023, to improve waste classifications and weight estimations, the baseline figures used to track the municipalities' progress will be from the 2021 waste audit and data collected between July 2023 and June 2024. The waste data collected between October 2022 and September 2023 is presented in Appendix 1 as estimations of current waste disposal rates.

By setting targets and utilising appropriate data, Council can track and evaluate its performance in waste reduction and resource recovery efforts.

### 3.5 Outcome Areas

Three strategic outcome areas have been identified to guide the Strategy:

1. Planning Waste Infrastructure
2. Improving Resource Recovery
3. Waste Education

Within each outcome area, broad actions have been developed, serving as a foundation for the Strategy's objectives. Detailed action plans, including individual tasks, will be developed over the course of the Strategy's implementation.

## 4. Planning Waste Infrastructure

### 4.1 Overview

Flinders Council is dedicated to planning and implementing waste management infrastructure that effectively handles solid waste generated within the municipality and adheres to industry best practices. Upgrades to waste facilities will be required to ensure environmental compliance, while maximising resource recovery capabilities and reducing landfill reliance. Council will investigate integrated solutions to provide the best possible waste service, while being cost aware and effective.

In pursuit of sustainability and environmental stewardship, Council will consider alternative waste treatment methods, with a focus on organic waste. Various methods may become accessible to Flinders Council through improvements in alternative waste treatment technologies and the State Government's increasing focus on reducing avoidable waste to landfill. Investigations will encompass several alternative waste treatment technologies, including enclosed composting, anaerobic digestion, incineration, waste-to-energy processes, and process-engineered fuel manufacture. These methods can divert waste from landfills and generate valuable resources. Furthermore, the Federal Government's Emissions Reduction Fund could provide a viable income stream from avoided carbon dioxide emissions achieved through some alternative waste treatment methods.

Ensuring legislative environmental compliance will be the focus of all waste infrastructure upgrades and redevelopments.

### 4.2 Targets

Council will have:

- Conducted a cost-benefit analysis of waste management options for putrescible and recoverable waste streams by the end of 2024.
- Developed an infrastructure and operational masterplan for Council's waste facilities by the end of 2024.
- Implemented a resource recovery system that meets the community's expectations for waste diversion from landfill by the end of 2025.
- Achieved full compliance with EPA regulations and permit requirements for waste management by the beginning of 2026.
- Investigated processes for Cape Barren Island to incorporate resource recovery by the end of 2026.
- Developed a rehabilitation plan for the legacy landfill areas at the Whitemark Waste Facility by the end of 2026.
- Collaborated with the State Government, and relevant stakeholders, to assess and implement alternate waste treatment infrastructure that diverts avoidable waste from landfill by the end of 2027.

### 4.3 Actions

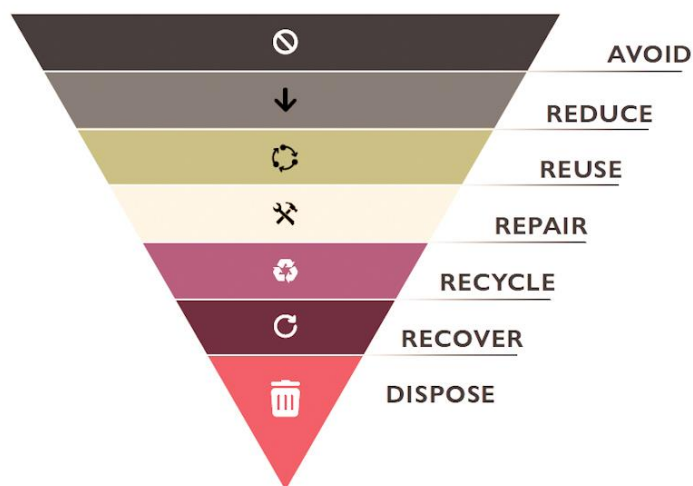
Action	Key Initiatives
1.1 Environmental compliance enhancement	<ul style="list-style-type: none"> <li>• Conduct a comprehensive review of current waste management practices to identify areas requiring improvements.</li> <li>• Develop and implement necessary corrective measures to ensure full compliance with all permit requirements.</li> <li>• Provide progress updates to the EPA and the community.</li> </ul>
1.2 Investigate waste management options	<ul style="list-style-type: none"> <li>• Conduct a cost–benefit analysis of long-term options for the management of all waste in the municipality. This is to include management options for leachate, asbestos, biosecurity, and clinical and related wastes.</li> </ul>
1.3 Develop a plan for waste infrastructure	<ul style="list-style-type: none"> <li>• Taking into consideration the above investigations, develop an operational masterplan for Council’s waste management facilities, including the management of organic, reusable, and recyclable materials and residual waste.</li> <li>• Conduct community consultation on service standards for waste management, resource recovery, waste facility accessibility and opening hours.</li> </ul>
1.4 Implement resource recovery systems	<ul style="list-style-type: none"> <li>• Finalise planning and approvals for the Operations Shed at the Whitemark Waste Facility.</li> <li>• Construct Operations Shed.</li> <li>• Apply for funding for necessary operational machinery.</li> </ul>
1.5 Investigation of alternative waste treatments for residual waste	<ul style="list-style-type: none"> <li>• Collaborate with experts and relevant government agencies to assess the feasibility and environmental impact of alternative waste treatment methods, such as incineration.</li> <li>• Explore opportunities to implement these alternative methods, where viable, to reduce waste to landfill.</li> </ul>
1.6 Waste management on Cape Barren Island	<ul style="list-style-type: none"> <li>• Investigate environmentally sustainable waste disposal and recycling options for Cape Barren Island.</li> <li>• Conduct community consultation on options.</li> <li>• Source cost estimations or quotations and review funding options.</li> </ul>
1.7 Rehabilitation plan for the legacy landfill areas	<ul style="list-style-type: none"> <li>• Commission a final capping and rehabilitation plan for legacy landfilling areas at the Whitemark Waste Facility.</li> <li>• Integrate the rehabilitation plan into the capital delivery program.</li> <li>• Implement the final capping and rehabilitation plan.</li> </ul>



## 5. Improving Resource Recovery

### 5.1 Overview

In line with the waste hierarchy (Figure 2), Council is committed to resource recovery as a means of improving waste diversion from landfill. Waste education initiatives will address waste avoidance and reduction. This section will focus on re-use and recycling and promote local solutions and collaboration with the business community.



**Figure 2.** Waste hierarchy (Tasmanian Waste and Resource Recovery Board, 2023)

Flinders Council has successfully implemented initiatives for aluminium cans, vehicle batteries, motor oil, household batteries, fluorescent light tubes and bulbs, clothes, and bric-a-brac. A modest revenue is earned by selling aluminium cans and vehicle batteries to Tasmanian recycling markets. Council plans to adopt a progressive and adaptive approach to gradually expand services for the collation, sorting, and baling of other recyclables. While cardboard, steel cans, hard and soft plastics, and the pulverising of glass for local use are among the potential waste streams to be considered, their inclusion will be assessed based on the success of trials, cost efficiency and the feasibility of their implementation.

In September 2023, Council established the first Recycling Hub at Walker's Supermarket. This hub leverages off the many free product stewardship programs that are being facilitated through organisations such as TerraCycle, MobileMuster and Planet Ark. Council's objective is to strategically locate more hubs in areas that offer maximum accessibility to the community. To achieve this, the Council will actively engage and collaborate with local businesses.

Improved segregated areas are proposed for several recoverable streams. This measure will increase accessibility to building materials, such as scrap metals, treated and untreated timber, bricks, and concrete, for local re-use. The Landfill Levy allows Council to apply for grants that may provide a pathway to support such resource recovery initiatives.

After experiencing several delays, the Tasmanian Container Refund Scheme (CRS) is expected to be launched in 2024. This scheme will allow Tasmanians to receive a 10-cent refund for each eligible drink container they return

to a designated Refund Point. The impact of this State Government initiative on the quantity of eligible drink containers to be processed at Council's waste facilities is uncertain, however a considerable reduction is anticipated. The specific details regarding the implementation and management of this scheme are still being finalised. To effectively accommodate these changes and adapt to any new initiatives that may arise, the Strategy will maintain its flexibility and ability to respond accordingly.

Council's goal is to significantly limit landfill disposal to non-recoverable items and align with the State's circular economy mission. Investment in technology for collecting, sorting, and processing cardboard/paper, metals, plastics, and glass will enable Council to achieve this goal. Investment into a composting system for green waste, food waste, and other compostable materials, will support the State's target of diverting 80% of waste from landfill by 2030. Remaining flexible and open to progress will be important to take advantage of opportunities and initiatives that arise.

## 5.2 Targets

Council will have:

- Identified and prioritised waste streams that are recoverable by the end of 2024.
- Implemented processes for the recovery of priority waste streams by the end of 2024.
- Improved the overall recovery rate of recyclables and reusable materials by the end of 2025.
- Identified and worked with commercial waste generators to maximise commercial waste diversion by the end of 2026.

*Baled aluminum cans*



## 5.3 Actions

Action	Key Initiatives
2.1 Increase resource recovery services	<ul style="list-style-type: none"> <li>Investigate and implement consistent waste segregation systems at waste facilities to support increased resource recovery efforts.</li> <li>Introduce clear and consistent signage across facilities.</li> <li>Investigate, and if feasible, implement technology suitable for treatment of glass to deliver localised re-use solutions.</li> <li>Assess areas suited to public place recycling bin placement.</li> <li>Install recycling bins in high use public locations.</li> <li>Improve waste segregation at public events.</li> </ul>
2.2 Pilot recycling programs	<ul style="list-style-type: none"> <li>Commence collation, processing and baling of easily identifiable recyclable streams (such as steel cans and milk bottles).</li> <li>Monitor the effectiveness of these resource recovery measures.</li> <li>Community consultation to assess engagement, accessibility, and feedback.</li> <li>Subject to the outcome of above, pilot the collation and processing of other recoverable streams.</li> </ul>
2.3 Feasibility of alternate waste treatment for recoverable streams	<ul style="list-style-type: none"> <li>Assess feasibility of alternative waste treatment technology that may be suited to the municipality. This could include anaerobic digesters, waste to energy systems, and pyrolysis technology.</li> </ul>
2.4 Increase the recovery rate of commercial waste	<ul style="list-style-type: none"> <li>Evaluate the types and volume of commercial waste generated within the municipality.</li> <li>Identify key recoverable commercial waste streams.</li> <li>Hold consultations with key businesses to assess how to facilitate waste avoidance, reduction, and resource recovery.</li> <li>Communicate the success of businesses that make measurable improvements in waste management.</li> </ul>
2.5 Increase the recovery rate of construction and demolition waste	<ul style="list-style-type: none"> <li>Establish clear builder's waste segregation areas.</li> <li>Ensure appropriate safety and processes regarding community salvaging from waste facilities.</li> <li>Establish partnerships with community groups to use recovered goods (e.g. Community Shed).</li> </ul>
2.6 Conduct waste audits	<ul style="list-style-type: none"> <li>Commission waste audits at waste facilities to understand the composition of household and commercial waste and track reductions over time.</li> </ul>
2.7 Mechanisms to drive waste reduction within Council activities	<ul style="list-style-type: none"> <li>Undertake operational waste audits of key Council waste generators and establish department specific waste diversion programs.</li> <li>Establish policy to encourage Council to utilise recovered resources.</li> <li>Develop a sustainable purchasing policy to encourage full life-cycle assessment of products purchased by Council.</li> </ul>
2.8 Mechanisms to drive waste reduction within the community	<ul style="list-style-type: none"> <li>Develop an action plan to reduce single-use plastics within the municipality.</li> <li>Investigate possible mechanisms that encourage recycling and resource recovery while discouraging practices that lead to improper disposal.</li> <li>Develop disposal fee structures for commercial waste, building waste and end-of-life vehicles and heavy machinery.</li> </ul>

## 6. Waste Education

### 6.1 Overview

Avoiding and minimising the generation of waste means less waste to manage. This, in turn, leads to reduced costs associated with transporting, sorting, and recycling materials and ultimately less waste to landfill. Reducing the amount of waste that people generate is a significant challenge requiring behavioural change from individuals, as well as changes by industry in the way products and packaging are designed. Council can deliver communication and education programs that help people understand how they can support resource recovery and the actions they can take to reduce and avoid waste.

Council aims to distribute waste reduction ideas and innovations to the community via social media platforms and enable community members to share their ideas. Print media avenues will also be maintained to increase messaging coverage. A key program will be established for the community to communicate what services are available for residents that support resource recovery, which recyclables are accepted into each segregation area, in what condition they should be delivered, and what outcomes are being achieved by these services. Littering, illegal dumping and waste burning is also an issue for Council. Targeted initiatives aimed at raising awareness of the impact of these activities will also be developed and distributed.

Striving for waste minimisation and resource recovery necessitates a collective effort involving our community. Council aims to empower community-driven sustainable initiatives, that align with Council's strategic objectives, the waste hierarchy, and the principles of a circular economy. Several such projects have been in development or established within the last couple of years. The Trove Project, Dianna Droog's home composting project and the Killiecrankie Glass Crushers are examples of community-driven projects that not only aim to contribute to waste reduction, but also exemplify innovation and environmental stewardship. Flinders Council embraces such endeavours that empower our residents to be proactive agents of change in building a more sustainable future.

### 6.2 Targets

Council will have:

- Introduced programs, by the middle of 2024, that enhance the community's knowledge on which resources can be recovered.
- Worked in partnership with the State Government, by the middle of 2025, to develop and facilitate waste education programs for the Furneaux Islands.
- Supported at least one community-led waste reduction initiative per year, throughout the life of this strategy.



## 6.3 Actions

Action	Key Initiatives
3.1 Develop a community engagement plan to promote waste avoidance, reduction, re-use, and resource recovery	<ul style="list-style-type: none"><li>• In collaboration with the State Government, develop a community engagement plan that aligns with Flinders Council Waste Management Strategy 2024–28, operational priorities, and targets, covering the following community groups:<ul style="list-style-type: none"><li>○ Flinders and Cape Barren Islands residents and visitors</li><li>○ Off-island property owners</li><li>○ Youth (primary and secondary education)</li><li>○ Commercial businesses</li><li>○ Council staff and departments</li></ul></li></ul>
3.2 Waste reduction campaign	<ul style="list-style-type: none"><li>• Launch targeted social media campaigns that share informative content, tips, and success stories related to waste reduction, recycling, and composting. Encourage residents to share their own experiences and ideas.</li></ul>
3.3 Resource hub	<ul style="list-style-type: none"><li>• Create a comprehensive resource hub that provides residents and visitors with easy access to information on effective waste management practices, recycling guides, and local drop-off points for specific waste items.</li></ul>
3.4 Community events	<ul style="list-style-type: none"><li>• Organise regular community workshops and events that focus on waste minimisation, re-use, recycling, and composting. These workshops can provide practical tips, tools, and resources for residents to reduce waste in their daily lives.</li></ul>
3.5 Empower community-led waste reduction initiatives	<ul style="list-style-type: none"><li>• Develop a framework for assessing, reviewing, and supporting community-led initiatives wishing to apply for Council support.</li></ul>
3.6 Community sustainability awards	<ul style="list-style-type: none"><li>• Establish a recognition program that celebrates and rewards community members, schools, and businesses for their exceptional efforts in waste reduction and sustainable practices.</li></ul>
3.7 Reduce illegal dumping and waste burning through awareness building	<ul style="list-style-type: none"><li>• Develop a coordinated communication plan targeting illegal dumping and waste burning.</li><li>• Targeted surveillance and enforcement at identified illegal dumping hotspots.</li></ul>

## 8. Implementation Planning

### 8.1 Delivery timeline

Strategic Action	Delivery Timeframe				
	2024	2025	2026	2027	2028
<b>1. Planning Future Waste Infrastructure</b>					
1.1 Environmental compliance enhancement					
1.2 Investigate waste management options					
1.3 Develop a plan for waste infrastructure					
1.4 Implement resource recovery systems					
1.5 Investigation of alternative waste treatments for residual waste					
1.6 Waste management on Cape Barren Island					
1.7 Rehabilitation plan for the legacy landfill areas					
<b>2. Improving Resource Recovery</b>					
2.1 Increase resource recovery services					
2.2 Pilot recycling programs					
2.3 Feasibility of alternate waste treatment for recoverable streams					
2.4 Increase the recovery rate of commercial waste					
2.5 Increase the recovery rate of construction and demolition waste					
2.6 Conduct waste audits					
2.7 Mechanisms to drive waste reduction within Council activities					
2.8 Mechanisms to drive waste reduction within the community					
<b>3. Waste Education</b>					
3.1 Develop a community engagement plan to promote waste avoidance, reduction, re-use, and resource recovery					
3.2 Waste reduction campaign					
3.3 Resource hub					
3.4 Community events					
3.5 Empower community-led waste reduction initiatives					
3.6 Community sustainability awards					
3.7 Reduce illegal dumping and waste burning through awareness building					

## 8.2 Assessment and review

This Strategy outlines a vision for Resource Recovery and Waste Management until the year 2028, including three strategic outcome areas with 22 distinct actions. The success of the Strategy will be monitored through the key milestone targets set throughout the strategic period. To ensure the Strategy can respond to future changes that may arise in legislation or community attitudes, a major review will occur in 2026. A complete review will be conducted in the second half of 2028 to prepare for the next strategic period. Minor reviews may be carried out as necessary.

Progress against targets will be monitored and, where possible, quantitative data will be used to assess the performance on an annual basis. Examples of this include resource recovery of household waste, and total waste diverted from landfill. This information will be published annually as part of Council's annual reporting cycle.

There are also several actions that may represent significant changes in the way the Furneaux community manage waste, such as the cost-benefit analysis of waste management options and the potential introduction of organic composting. As Council moves towards these sorts of decisions, further consultation with the community and other stakeholders will occur.

## 9. List of References

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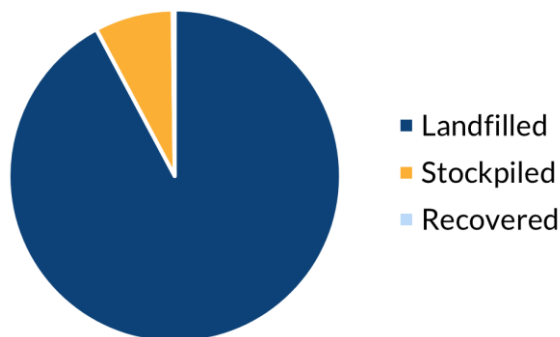


## Appendix 1. Disposal Data for Flinders Island

Effective waste management and resource recovery rely on accurate and comprehensive disposal data. Such data enables Council to understand the current waste generation patterns, identify areas for improvement, and track progress towards waste reduction targets. The introduction of the landfill levy in July 2022 mandated local governments to accurately collect and report waste disposal data under the *Waste and Resource Recovery Act 2022*. Though waste data has been collected previously, comparing the different datasets may introduce biases. Data collected between October 2022 and September 2023 is more comparable, with some inconsistencies observed. Changes introduced in July 2023 will improve waste classification and weight estimation. Therefore, the baseline figures presented below are indicative and will be updated in July 2024, once a full year of consistent data have been gathered.

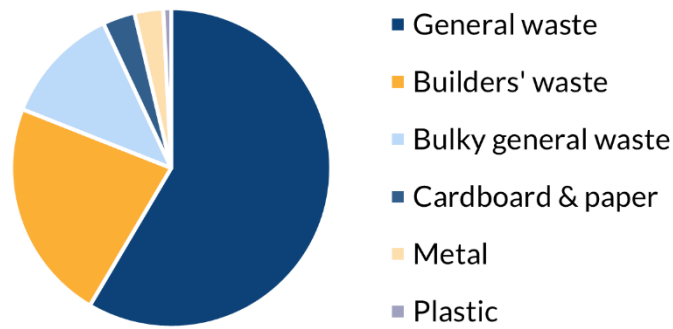
During the period from October 2022 to September 2023, Flinders Council managed over 1,915 tonnes of solid waste, averaging 159.7 tonnes per month. Accurate proportions of domestic and commercial waste could not be determined for this period. Noteworthy is the fact that 50.3% of all waste during this period originated from the Lady Barron and Killiecrankie waste transfer stations. Future data will aim to differentiate between these two transfer stations.

Of the total waste disposed, 1,766 tonnes were landfilled (92.2%), 146 tonnes were stockpiled for future recovery or recycling (7.6%) and 4 tonnes were recovered (0.2%; Figure 3).



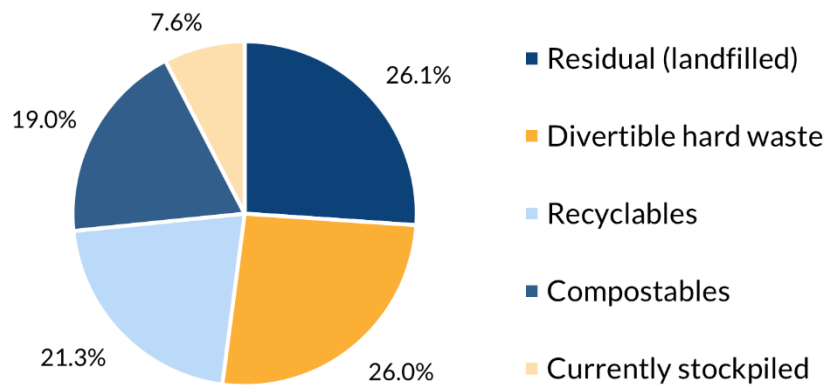
**Figure 3.** Proportion of waste landfilled, stockpiled, and recovered at the Whitemark Waste Facility between October 2022 and September 2023. N.B. the percentage of the recovered waste is too small to visualise.

Twenty tonnes of landfilled waste were classified as clean fill. This is considered a resource and was used for operational cover of the landfill. A further 26% of all waste could be diverted away from landfill if the waste was appropriately segregated on disposal (Figure 4). Builders' waste, constituting 22.2% of landfilled waste, is highly recoverable. Cardboard and paper could be recycled or composted (3.2%). Scrap metal (2.9%) has an established re-sell market in Tasmania, however the cost of sorting through the current mixed hard-waste stockpile makes recovering this resource less financially viable.



**Figure 4.** Composition of the landfilled waste at the Whitemark Waste Facility between October 2022 and September 2023.

In June 2021, Flinders Council and the Northern Tasmania Waste Management Group (NTWVG) commissioned a waste audit at the Killiecrankie and Lady Barron transfer stations. The audit found that 71% of all waste disposed within the general waste bins was recoverable through either recycling (37%) or composting (34%) (Harper & Jones 2021, p. 14). Taking this composition into account, a further 772 tonnes, or 40%, of all waste could be diverted away from landfill if the appropriate infrastructure was available (Figure 5). It is important to note that the 2021 waste audit provides insight into the likely rather than actual composition and is regarded as a 'snapshot' of waste on Flinders Island.



**Figure 5.** Estimated composition of all waste disposed at the Whitemark Waste Facility between October 2022 and September 2023, calculated using the 2021 waste audit proportions.

## Appendix 2. Recoverable Streams and Current Status by Waste Facility

### Appx. 2.1 Whitemark Waste Facility

Stream	Current and Planned Actions	Current Status
Clothes, other cloth items, books, toys & bric-a-brac	The Giving Shed collects usable items for community re-use. Options to enlarge and better manage this initiative will be investigated.	Re-used/Stockpiled
Aluminium cans	During Cash-4-Cans sorting days, community members remove ineligible items. Sorted cans are then baled and sent to market. Proceeds currently support the local school. The Tasmanian Container Refund Scheme will process this stream once established.	Recycled
Household batteries	The collection point is at the Tip office/gatehouse. Ask the attendant for the current location. Sent off-island for recycling.	Recycled
Fluorescent light globes & tubes	The collection point is at the Tip office/gatehouse. Ask the attendant for the current location. Sent off-island for recycling.	Recycled
Mobile Phones	The collection point is at the Tip office/gatehouse. Ask the attendant for the current location. Sent off-island for recycling.	Recycled
Motor oil	Disposal unit available. Sent off-island for recycling.	Recycled
Vehicle batteries	Collected and sent to market.	Recycled
Agricultural and veterinary chemical drums	The drumMUSTER stewardship scheme recommenced in November 2023. Drums to be sent off-island for recycling.	Stockpiled/Recycled
Cooking oil	Disposal units to be established for off-island recycling.	Stockpiled
End-of-life vehicles & farm machinery	Some parts salvaged by community. Scrap metal markets to be investigated.	Stockpiled
E-waste	Off-island recycling to be investigated.	Stockpiled
Glass	On-island re-use options are being investigated. The Tasmanian Container Refund Scheme will process part of this stream once established.	Stockpiled
Green waste	On-island mulching and composting are possible future processing options.	Stockpiled
Tyres	Off- and on-island recycling/processing options to be investigated.	Stockpiled
Wire	Some salvaging by community. On and off-island recovery options to be investigated.	Stockpiled
White goods	Community salvaging is encouraged. An undercover area would reduce damage and increase salvaging opportunities. Investigate options for degassing fridges and freezers and send scrap metal to markets.	Stockpiled

Stream	Current and Planned Actions	Current Status
Building materials	Some salvaging by community. Segregated areas for each waste stream to be established and local re-use encouraged.	Landfilled
Bulk bags	Two national stewardship schemes are being investigated for recovery options.	Landfilled
Cardboard & paper	The need for minimal contamination and poor returns makes this stream challenging to recycle. Market to be monitored for changes. On-island alternative waste treatment methods to be investigated.	Landfilled
Food scraps & other compostables	Some residents are composting or feeding scraps to animals. Home composting is encouraged. On-island alternative waste treatment methods to be investigated.	Landfilled
Old furniture & mattresses	Separation of source materials for recycling will be encouraged. Recycling options to be investigated.	Landfilled
Pallet strap & wrap	Reduction options to be investigated.	Landfilled
Plastic (PET/PETE)	A large proportion of this plastic type will be processed by the Tasmanian Container Refund Scheme once established. Other off-island recycling options are being investigated.	Landfilled
Plastic milk bottles	Collation, baling and shipping for off-island recycling to be trialled.	Landfilled
Plastics (HDPE, LDPE, PP, PS)	Off- and on-island recycling/processing to be investigated.	Landfilled
Sanitary items	On-island alternative waste treatment methods to be investigated for nappies and other sanitary items.	Landfilled

Stream	Current and Planned Actions	Current Status
Glass	Glass from this facility is transferred to Whitemark where it is stockpiled. On-island re-use options are being investigated. The Tasmanian Container Refund Scheme will process part of this stream once established.	Stockpiled
Aluminium cans	Cash-4-Cans initiative. Cans are transferred to Whitemark where community members remove ineligible items during sorting days. Sorted cans are then baled and sent to market. Proceeds currently support the local school. The Tasmanian Container Refund Scheme will process this stream once established.	Recycled
Motor oil	Disposal unit available. Sent off-island for recycling. Given the hazardous nature of this waste stream, stringent practices are necessary. A review will be conducted to assess the continuation of this service	Recycled
Vehicle batteries	Collected and sent to market. Given the hazardous nature of this waste stream, stringent practices are necessary. A review will be conducted to assess the continuation of this service	Recycled
Green waste	On-island processing options are being investigated.	Stockpiled
Food scraps & other compostables	Some residents are composting or feeding scraps to animals. Home composting is encouraged. On-island alternative waste treatment methods to be investigated.	Landfilled
Scrap metal	Contamination with other waste is a concern. Options for improving the stream and recovering the materials will be investigated for feasibility.	Landfilled

Other recoverable items are not accepted at this facility. They must be transported to the Whitemark Waste Facility.



### Appx. 2.3 Killiecrankie Transfer Station

Stream	Current and Planned Actions	Current Status
Glass	The Killiecrankie Glass Crushers is a community driven initiative that pulverise local glass bottles and jars for re-use by the community.	Re-used
Aluminium cans	Cash-4-Cans initiative. Cans are transferred to Whitemark where community members remove ineligible items during sorting days. Sorted cans are then baled and sent to market. Proceeds currently support the local school. The Tasmanian Container Refund Scheme will process this stream once established.	Recycled
Green waste	Not collected at this facility. On-island processing options are being investigated. Home composting is encouraged.	Stockpiled at the Killiecrankie public open space.
Food scraps & other compostables	Some residents are composting or feeding scraps to animals. Home composting is encouraged. On-island alternative waste treatment methods to be investigated.	Landfilled

Other recoverable items are not accepted at this facility. They must be transported to the Whitemark Waste Facility.

### Appx. 2.4 Cape Barren Transfer Station

Currently no streams are formally recovered from this facility. It is an action of this Strategy to investigate options for the Cape Barren Transfer Station.

## Appx. 2.5 Community Recycling Hubs

Grouping	Eligible products	Condition
Batteries	<ul style="list-style-type: none"> <li>• Camera batteries.</li> <li>• Household batteries (AA, AAA, D, C, button, 9V, 6V, etc).</li> <li>• Power tool batteries.</li> </ul>	Terminals must be taped with clear sticky tape.
Beauty & skincare	<ul style="list-style-type: none"> <li>• Cleanser bottles and pumps.</li> <li>• Deodorant sticks.</li> <li>• Facemask packaging.</li> <li>• Fragrance bottles.</li> <li>• Hair or skincare refill pouches.</li> <li>• Hand/body cream tubes, tubs, pots, tins and bottles and lids.</li> <li>• Lipstick and balm tubes and caps.</li> <li>• Shower gel bottles and lids.</li> <li>• Skin and hair serum bottles and droppers.</li> </ul>	Empty.
Coffee/hot drink capsules	<p>Three separate programs for genuine coffee/hot drink capsules from participating brands:</p> <ul style="list-style-type: none"> <li>• Lavazza aluminium and plastic capsules.</li> <li>• L'OR, Moccona, illy, Campos and Jed's.</li> <li>• Nespresso.</li> </ul>	Must be sorted by program. No other brands accepted.
Drink packaging	<ul style="list-style-type: none"> <li>• Plastic lids labelled 2, 4, HDPE, or LDPE.</li> </ul>	Clean, lid inserts removed.
Food packaging	<ul style="list-style-type: none"> <li>• Bread bag plastic tags.</li> </ul>	
Hair care	<ul style="list-style-type: none"> <li>• Hair care bottles, tubes, jars, tubs, and their lids.</li> <li>• Hair colour bottles, tubes and caps.</li> <li>• Hair colour soft plastic pouches.</li> <li>• Hair colouring disposable gloves (Latex, HDPE, Nitrile and PE only).</li> <li>• Shampoo and conditioner bottles and lids/pumps.</li> </ul>	Empty. For hair colouring containers, remove excess hair dye and triple rinse.
Household care	<ul style="list-style-type: none"> <li>• Air freshener aerosol cans.</li> <li>• Air freshener and refills and their plastic outer packaging.</li> <li>• Clip-on car freshener and refills and their plastic outer packaging.</li> <li>• Dishwashing liquid bottles and their caps.</li> <li>• Dishwashing tablets plastic packaging.</li> <li>• Surface/cleaning spray bottles and trigger heads.</li> </ul>	Empty.
Household care	<ul style="list-style-type: none"> <li>• Brita Maxtra+ Water filters.</li> <li>• Brita Maxtra+ Water filters soft plastic packaging.</li> </ul>	No other brands.
Light bulbs & tubes	<ul style="list-style-type: none"> <li>• Fluorescent tubes and lamps.</li> <li>• Other light bulbs.</li> </ul>	bulb/tubes must be intact, not broken.
Mobile phones & peripherals	<ul style="list-style-type: none"> <li>• Mobile phones.</li> <li>• Mobile phones cables and chargers.</li> <li>• Mobile phone cases.</li> </ul>	No loose batteries. No leather cases.
Office/School	<ul style="list-style-type: none"> <li>• Pens and mechanical pencils.</li> <li>• Markers and highlighters.</li> <li>• Correction fluid tape or pot.</li> <li>• Pen soft plastic packaging.</li> </ul>	No crayons, traditional pencils, rubbers, or rulers. Correction fluid pots must be empty.

Grouping	Eligible products	Condition
Office/School	<ul style="list-style-type: none"> <li>• Genuine printer cartridges from participating brands: Brother, Canon, Epson, HP, Konica Minolta, Kyocera, Lexmark, Roland, Samsung, Sharp, Toshiba, Dell, Avery Dennison, and Cartridge World.</li> </ul>	No other brands.
Oral care	<ul style="list-style-type: none"> <li>• Dental floss containers.</li> <li>• Electric toothbrush heads.</li> <li>• Interdental brushes.</li> <li>• Toothbrushes.</li> <li>• Toothpaste tubes and caps.</li> </ul>	No bamboo toothbrushes. Toothpaste tubes must be as empty as possible.

## Appendix 3: Outcomes from the Waste Management Strategy 2014–2019

Flinders Council commissioned a waste management review in 2014 by Just Waste Consulting. The resulting strategy focused on enhancing waste management practices. Despite encountering many challenges, notable achievements were made. The progress and outcome of the actions proposed by the strategy are described below.

Action	Detail	Outcome
1	Develop an effective and efficient network of waste transfer station facilities, or nodes, throughout the island for the community to dispose of domestic waste materials.	Not achieved
2	Upgrade waste transfer station bins and collection systems to improve efficiently.	Achieved
3	Continual improvement of current landfill site, with a goal of achieving environmental and safety compliance.	Achieved
4	Investigate the possibility of processing waste materials through incineration technology.	Achieved
5	Investigate resource recovery opportunities, including but not limited to, a Tip shop, silage wrap and super bag use.	Achieved
6	Provide environmentally sustainable waste disposal site for the community on Cape Barren Island	Not achieved

Action	Detail	Outcome	
7	Conduct a waste assessment of materials on the outer islands including waste type, characteristics, and volumes.	Due to financial limitations, the implementation of this action did not taken place. The management of waste on the outer islands remains an unresolved issue that will be addressed and prioritised when sufficient resources become available.	Not achieved