Waste Strategy 2023-2028



Next Date of Review: May 2028

Document Controller:Infrastructure ManagerDocument Reviewer:Infrastructure Manager

Date Adopted by Council: 22 May 2023

Resolution Number: 23/105

Table of Contents

1.	Intro	duction:	4				
2.	Strat	Strategic and Legislative Context:					
	2.1.	Commonwealth Government	5				
	2.2.	Tasmanian Government	6				
	2.3.	Cradle Coast Waste Management Group	7				
3.	Curre	Current Context:					
	3.1.	Waste Management Services	7				
	3.2.	Issues and Opportunities	11				
4.	Strat	Strategy Development:					
	4.1.	Achieve 60% resource recovery					
	4.2.	Eliminate use of priority single use plastic from its operations	15				
	4.3.	Increase range and quantity of recycled and recovered materials into its operations					
	4.4.	Contribute to regionally consistent and effective waste management practices					
5.	Imple	Implementation:					
	5.1.	Kerbside FOGO Collection	17				
	5.2.	WTS Upgrades	17				
	5.3.	Public Place Recycling	19				
	5.4.	Understanding current practice	20				
6.	Mon	itoring, evaluation and review:	20				
Act	ion Pla	n	21				

1. Introduction:

Council provides Waste Management services to the community through kerbside services the operation of the Spreyton Waste Transfer Station and the provision of public place waste and recycling bins. It is also a waste generator, with waste quantities and materials varying across its diverse operations.

Council adopted a Waste Strategy in 2018 and has been undertaking work to contribute to the identified priorities. However, progress against some of the measures of success did not meet expectation including:

- Reducing the average amount of waste to landfill (small increase)
- Domestic resource recovery rate above 20% (18% at last measure)

This indicates that progress has stagnated, and a change of approach is required to make improvements. Significant legislative and industry changes have occurred since 2018 and change is likely to continue. This presents both issues and opportunities for Council.

This review and renewal of the strategy is required to respond to ensure it remains in alignment with Council's Strategic Plan 2009-2030, and that it responds to any significant external changes and opportunities to continue to meet the needs and expectations of the community.

The Waste Strategy 2023-2028 proposes Council driven improvements that will provide the community with opportunities and incentivise behaviours that will reduce waste to landfill, as well as improving its own operations and contributing to regional improvements.

The strategy identifies four objective that align with Council's Strategic Goal of 'Living lightly on our environment':

- 1. Achieve 60% resource recovery
- 2. Eliminate use of priority single use plastic from Council operations
- 3. Increase range and quantity of recycled and recovered materials into its operations
- 4. Contribute to regionally consistent and effective waste management practices

The Strategy includes an action plan of 14 actions that contribute to the achievement of the identified objectives.

2. Strategic and Legislative Context:

Council has adopted a vision for the future of our municipality as outlined in the Council Strategic Plan 2009-2030:

"Devonport will be a thriving and welcoming regional city, living lightly by river and sea."

The Strategic Plan sets goals and outcomes to be achieved over the life of the plan. The goals set out where the organisation wants to be. The outcomes and underpinning strategies are the steps needed to get there. Goals and strategies relating to the Waste Strategy 2023-28 are shown in Table 1.

Goa I No.	Goal	Strategy No.	Strategy	Waste Strategy 2023- 28 Context
1	Living lightly on our environment	1.4.1	Promote reduction, re- use and recycling options to minimise waste materials within Council, the community and businesses	Identified improvements are proposed in the Strategy and the Action Plan
		1.4.2	Facilitate, and where appropriate, undertake improvements in waste and recycling collection, processing services and facilities	Identified improvements are proposed in the Strategy and the Action Plan

Table 1: Strategic and legislative context

There are other Council strategies and plans that the strategy relates to:

- Environment Strategy 2019-2024
- Greater Devonport Residential Growth Strategy 2021-2041
- Strategic Asset Management Plan 2021-2031

2.1. Commonwealth Government

The National Waste Policy: Less waste more resources 2018 provides a framework for national efforts in reducing waste where possible and making productive use of waste where waste generation cannot be avoided. The policy employs circular economy and waste minimisation principles. The accompanying National Waste Policy Action Plan 2019 sets out the following targets:

- ban on the export of materials including glass, mixed plastics, tyres, single resin or polymer plastics, mixed paper and cardboard between 2021 and 2024
- reduce total waste generated in Australia by 10% per person by 2030
- 80% average resource recovery rate from all waste streams following the waste hierarchy by 2030

- significantly increase the use of recycled content by governments and industry
- phase out problematic and unnecessary plastics
- halve the amount of organic waste sent to landfill by 2030
- make comprehensive, economy-wide and timely data publicly available to support better consumer, investment and policy decisions.

2.2. Tasmanian Government

The Draft Tasmanian Waste and Resource Recovery Strategy 2022-25 includes targets aligned with the Commonwealth Government including:

- Reduce waste generated in Tasmania by 5% per person by 2025 and 10% by 2030;
- Achieve a 40% average recovery rate from all waste streams by 2025 and 80% by 2030;
- Reduce the volume of organic waste sent to landfill by 25% by 2025 and 50% by 2030;
- Reduce food waste by 50% by 2030;
- 100% of packaging is reusable, recyclable or compostable by 2025;
- Phase out of problematic and unnecessary plastics by 2025.

The Tasmanian Waste and Resource Recovery Act 2022 introduced a levy on all material being disposed of as landfill. This levy creates an incentive for consumers and waste industry stakeholders (like Council) to reduce waste to landfill. The levy also generates funds to be invested in the waste and resource recovery sector supporting existing industry and creating new jobs and businesses for Tasmanians. Funds will also be used to educate people about reducing waste and to support programs that tackle littering and illegal dumping around the State.

The Container Refund Scheme Act 2022 (CRS) will place value on certain beverage containers, which will incentivise their collection for recycling. These containers are a significant component of litter and commonly disposed of as landfill rather than recycled. The CRS will be known as 'Recycle Rewards'



Figure 1: Recycle Rewards¹

A yet-to-be-named bill is forecast for 2025 to prohibit the use of certain plastic products.

2.3. Cradle Coast Waste Management Group

The Cradle Coast Waste Management Group (CCWMG) represents seven local government authorities in north west Tasmania. It's Strategic Plan 2023-2028 includes the following objectives:

- By 2028, establish regionally consistent practices for waste management in all member council areas for consistent waste contracts, services and best practice principles
- 2. By 2028, target 60% MSW resource recovery
- 3. By 2028, target <10% contamination rate in kerbside recycling bins (based on annual kerbside recycling auditing)
- 4. By 2028, phase out priority single-use plastics.

3. Current Context:

3.1. Waste Management Services

Council undertakes a range of waste management service at cost of around \$6.5M (2022-23). The services provided haven't fundamentally changed for around 15 years.

3.1.1. Kerbside Services

Each residential property in Devonport receives the following collection services:

- Weekly collection of a kerbside waste bin up to 240L
- Fortnightly collection of a kerbside co-mingled recycling bin 240L

Council self performs the waste collection service with a fleet of three trucks. Waste is unloaded at the WTS and transferred in bulk to the Dulverton landfill.

Council engages Veolia to provide the recycling collection services, as part of a regional contract. Material collected is unloaded at Veolia's material recovery facility (MRF) at Spreyton for sorting and distribution to processing.

For commercial properties, three 240L waste bins are collected per week and cardboard is collected twice per week for recycling. Council provides commercial services using one truck. No co-mingled recycling service is provided.

3.1.2. Spreyton Waste Transfer Station (WTS)

Spreyton Waste Transfer Station (WTS), located in Bay Drive, Spreyton. In 2021-22, over 45,000 customers visited the site and disposed of over 22,000T² of materials.

The WTS accepts waste primarily from Devonport, although approximately 7% of waste is received from Latrobe Council residents under a commercial arrangement with that Council. Analysis in 2022 showed that 11.2% of waste by weight received at the WTS originates from outside Devonport.³

² Includes around 9,600T of waste collected by kerbside services

³ MRA Consulting Group, Spreyton Waste Transfer Station – Improvement Review, 2022



Figure 2: Spreyton WTS

The site is arranged so that recyclable materials can be disposed of free of charge. Landfill waste is disposed of in the push pit and bulk recoverable materials including waste concrete, green waste and timber is disposed of in stockpiles, which are then processed either on or off site, for resale. The 2022-23 fee schedule is shown in Figure 3 below.



Figure 3: WTS fees 2022-23

Lifeline Tasmania operate a resale shop on the site and accept donations of goods from customers. They also have the right to salvage material from areas of the site, excluding the push pit. Council supports this operation with cash and in-kind contributions.

The WTS is classified as a Resource Recovery Facility – Class A by the Tasmanian Waste and Resource Recovery Act 2022. Detailed monthly reporting requirements commenced in July 2022, in which all inward and outward vehicle movements are recorded by waste type, estimated weight, source and destination of the material.

3.1.3. Public place waste services

Council provides waste bins in its parks and in other activity areas. In 2021 it commenced the rollout of public place recycling bins in high profile areas including Victoria Parade, Mersey Bluff and the foreshore. A budget allocation has been made to extend this rollout in 2022-23.

3.1.4. Current resource recovery rate

In 2022, over 16,000T of waste from Devonport rate payers and customer was disposed of at the Dulverton Landfill. An estimated 7,770T of various materials were recycled or recovered, giving a resource recovery rate of 32%.

This is lower than CCWMG's regional target for 2022 of 50% and significantly lower than targets set by CCWMG, the Tasmanian Government and the Australian Government between 2025 and 2030 as shown in figure 4.

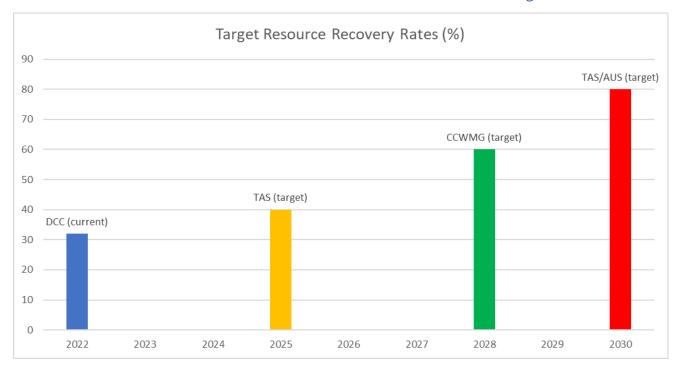


Figure 4: Regional, State and National waste recovery targets

3.2. Issues and Opportunities

Whilst Council has been effective in delivering its defined services over a long period of time, local, national and global factors have impacted the waste industry.

For Council, maintaining the status quo in its operations is unsustainable for a range of reasons including:

- Cost pressures on ratepayers and WTS customers from State Landfill Levy
- Community expectations on Council and the waste industry
- National and State government expectations on Council and the waste industry
- Community, business and industry reliance on new products made from finite resources
- Finite capacity of landfills

Issues and opportunities exist for Council at most tiers of the waste hierarchy. The waste hierarchy exists to demonstrate the preferred and most effective ways to minimise waste in terms of resource input and environmental impact. Figure 5 below is included in the Draft Tasmanian Waste and Resource Recovery Strategy 2022-25.



Figure 5: The waste hierarchy⁴

3.2.1. Customer Growth / Site Capacity

Council has seen significant growth in customer numbers at the WTS in recent years and has projected a range of scenarios. Customer numbers in 2035 are likely to be between 48,000 and 65,000.

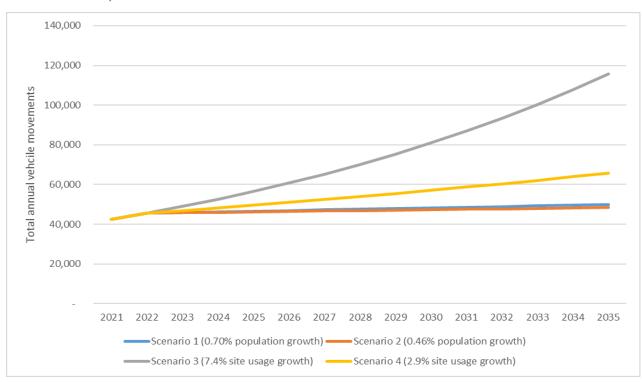


Figure 6: Forecast customer number – Spreyton WTS⁵

Increased customer numbers will increase the volume of material handled at the site, even with a per capita reduction in waste generated, as the Australian Government aspires to.

⁴ Waste and Resource Recovery Board, Draft Tasmanian Waste and Resource Recovery Strategy 2022-2025

⁵ MRA Consulting Group, Spreyton Waste Transfer Station – Improvement Review, 2022

Increased customer numbers present a challenge to Council to ensure the site has the capacity to deal with a larger number of vehicles on the site.

Consideration must be given to the capacity of areas of the site to ensure queue lengths remain acceptable and access to drop off areas are efficient.

Council will also require more frequent outward loads, requiring more frequent service from contractors and downstream processers unless storage or stockpiling increases, which is usually less preferable.

Increased volumes are unlikely to impact the recovery rate without other initiatives. But increased volumes may create an economy of scale where new recycling or recovery opportunities may become viable.

3.2.2. Waste avoidance and reduction

Council is a waste generator, but also manages waste generated by around 12,000 properties in Devonport, as well as servicing waste generated from a proportion of properties from Latrobe at the WTS.

Council can quantify its waste footprint and take action to avoid and reduce. Council is less impactful on the waste generated in the community but can continue to deliver local messaging and support regional, state and national education and awareness programs. Current and proposed legislation and its mechanism such as the State Landfill Levy incentivise waste avoidance and reduction.

3.2.3. Increase diversion of reusable materials

Council can increase diversion of reusable items from landfill by prioritising activities that support this outcome at the WTS. The current tip shop operation is passive and does little to intercept reusable materials beyond accepting donations. Its retail presence is constrained by the site layout. It should be noted that the operator is fulfilling is obligations to Council, but the agreement requires modernisation.

Opportunities for Council to consider include:

- Moving the interception/drop off point to be the first stop for all customers
- Providing shelter for customers at this point (i.e., indoor or undercover) to ensure that the customer environment is comfortable
- Staffing this part of the site, providing active assistance and advice as to what material can be donated for resale.
- Providing improved retail opportunities for the resale shop with a more prominent and accessible location on the site

3.2.4. Increase diversion of recyclable materials

Council provides well established recycling services, collecting a range of materials. However, in 2017 an audit of material in the WTS push pit identified that well known recyclable materials including cardboard, glass, metals and

paper made up 12.3% of material being disposed of as landfill. It is forecast that around half of this material could be diverted through a combination of initiatives including:

- Improved interception opportunities for recyclable materials as described above for reusable materials
- Charging by weight for landfill waste
- Transitioning to true cost recovery for landfill waste disposed of at the WTS

Ongoing education is important to increasing diversion of recyclable materials. Markets for recycled commodities can vary over time and by location, so what can be recycled at one place at one time may not be recycled in another place at another time. Education also contributes to reduced contamination in recycling streams which makes recycling collection and sorting more cost effective.

The CRS is, in part, a price signalling tool that intends to increase the recycling rates of eligible containers which are common in landfill and as litter.

Identifying and addressing gaps in the collection of recyclable materials may also increase the diversion of recyclable materials. Further rollout of public place recycling and expansion of recycling services to commercial properties may be effective measures.

The development of new process and markets may be possible, with funding available from the State Landfill Levy. Council may not be directly involved in these developments but can contribute by collecting the materials at the WTS.

3.2.5. Increase diversion of recoverable materials, including organics

Council has established markets for crushed concrete, screened soil and mulch (generated from its own operations, not green waste) sold from the WTS. Green waste and timber waste are processed on site and transported for downstream use. However, the 2017 audit of material in the WTS push pit identified 43.2% of material was either wood, garden organics or masonry materials⁶.

It is forecast that more than half of this material could be recovered rather than disposed of as landfill, through two significant initiatives:

- Introduction of a kerbside FOGO collection service. This would provide an in-home opportunity for residents to separate their garden waste from the general waste
- Improvements to the WTS layout and operation to divert this material for recovery. Details of the improvements include reversing the site traffic

⁶ MRA Consulting Group, Spreyton Waste Transfer Station – Improvement Review, 2022

flow to match the waste hierarchy and adopting a pricing structure that supports diversion of recoverable materials.

4. Strategy Development:

The Waste Strategy 2023-2028 responds to the changing expectations and obligations on Council. It identifies four objectives that contribute to Council's Strategic Goal of 'Living Lightly on our Environment'

4.1. Achieve 60% resource recovery

As a member of CCWMG, Council is obligated to contribute to the recovery targets set in the CCWMG's Strategic Plan 2023-2028 (60% by 2028). This target is in alignment with State and National targets and is shown to be achievable, with action, by Council.

4.2. Eliminate use of priority single use plastic from its operations

The state government has stated its objective to "Phase out of problematic and unnecessary plastics by 2025.". It recently advised that it planned to introduce legislation to ban certain plastic products to suit its timeline.

The state Department of Natural Resources and the Environment (NRE) has identified problematic single use plastics (PSUPs) as plastic straws, bowls, plates utensils and expanded polystyrene food containers. It is understood more PSUPs may be added to the list.

4.3. Increase range and quantity of recycled and recovered materials into its operations

Significant changes proposed at a state and local level including:

- Improved waste diversion at Spreyton WTS
- State Landfill Levy investing in new facilities and infrastructure to recycle and use more things

Will create new and improved opportunities for access to products that are either wholly or partially derived from recycled or recovered material. If Council proactively pursues these opportunities, it can contribute to the development of new markets. With a materials and services budget of over \$30M, Council can use its regional market influence to drive change.

4.4. Contribute to regionally consistent and effective waste management practices As a member of CCWMG, Council can contribute to regionally consistent and

effective waste management practices. Council currently participates in several regional agreements including kerbside recycling and green waste shredding and transport. It also participates in regional initiatives like hazardous waste collection and battery recycling.

There are regional inconsistencies, the most obvious being gate fee pricing, but there are also differences across the region in terms of the level of service provided. A level or autonomy is beneficial, but all Councils should contribute to regional consistency where possible.

Regional consistency is important, as many customers utilise services across more than one Council in the region. Furthermore, it can contribute to achieving economies of scale required to unlock other benefits including lower pricing, access to new markets and services.

Contributing to and benefiting from the regional knowledge base can also assist Council in delivering its own services efficiently.

5. Implementation:

There are a range of initiatives required to deliver the four identified objectives.

5.1. Kerbside FOGO Collection

Analysis from 2022 showed that a kerbside FOGO collection service in Devonport would divert 3000T per year from landfill⁷, raising the recovery rate by 15%.

Introduction of this service will be a significant operational change for Council and the community. Council has detailed costing sourced through a regional procurement process, but must consider the service delivery model that best suits its operations.

There are a range of delivery options for collection and handling, but all options include delivery of material and processing at Dulverton landfill, where a new composting facility is scheduled to be commissioned in early 2024. Detailed analysis of options will allow Council to confirm its preferred option by mid-2023 and make appropriate budget allowances, which will then allow Council to undertake the change management, communication and operational planning required to commence the service in early 2024.

5.2. WTS Upgrades

Council has undertaken an analysis of the WTS operations and developed a plan for infrastructure upgrades that will contribute to the achievement of the strategic objectives.

The plan has been developed considering features of other sites across Tasmania and Australia that contribute to high recovery rates. It responds to the features and constraints of the existing site and prepares the site for anticipated future growth. The concept design in Figure 7 below has been reviewed by industry experts and is shown to be operationally feasible and capable of delivering the proposed recovery rates, with increased diversion forecast across and range of streams.

⁷ Cradle Coast Waste Services, Regional Recyclables Request for Tender Assessment, 2022

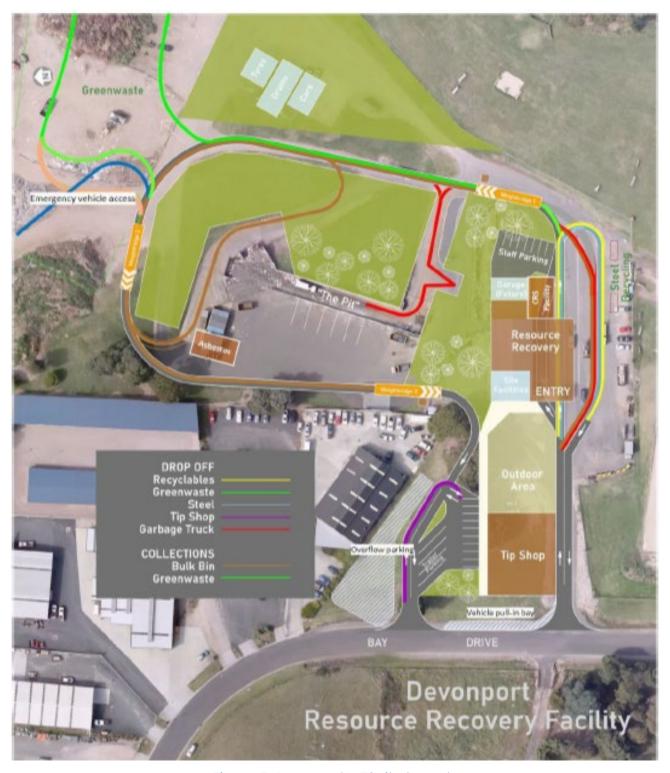


Figure 7: Proposed WTS site layout

A staging plan for the improvements has been developed, which prioritises the phases required to achieve the identified objectives and considers how to maintain site operations through the implementation process.

Project stage ⁸	Priority	Cost	Staging
Triple weighbridge system	High	High	1
Improved asbestos collection and management	High	Low	1
Improved fire safety	High	Low	1
Unidirectional traffic flow (plus additional vehicle queueing)	High	Mid	2
Toll booth repositioning	High	Mid	2
Develop dedicated emergency vehicle access	High	Mid	3
Changes to site pricing	High	Low	3
Covered RRC drop-off area	Mid	High	4
Tip Shop and parking repositioning	Mid	High	4
RRC management arrangement	Mid	Low	4
Upgrade push pit infrastructure	Mid	High	5
Leachate collection and management	Mid	High	5
Changes to site staffing	Low	Low	6
Scrap metal hardstand	Low	Mid	7
CRS intermediary facility	Low	High	8

Table 2: Indicative staging plan

Although a capital budget allocation of \$1.01M is available in 2022/23, the phases of the project are yet to be fully costed. Additional budget allocations may be required in future to deliver the phases that directly relate the strategic objectives, while allocations further into the future may be required for other operational, safety and environmental improvements.

5.3. Public Place Recycling

Ongoing expansion of public place recycling will provide greater opportunity to divert recyclable material, mainly carboard and containers from landfill. Pairing new recycle bins with existing waste bins will provide a consistent customer

⁸ MRA Consulting Group, Spreyton Waste Transfer Station – Improvement Review, 2022

experience in public areas including parks, streets and facilities. In some cases, it may allow for rationalisation of waste bins or less frequent servicing.

Arguably the need for this service is reduced by the CRS, as a percentage of containers will be deposited by consumers directly to the refund points. However, a well-planned network of public recycling bins and an optimised collection program can deliver this improvement at low cost.

5.4. Understanding current practice

Access to reliable data is a significant barrier to improvement. Council has the ability to measure movements in and out of the WTS, that provide outputs including recovery rate. However, the Strategy identifies a need for Council to begin measuring:

- Total waste footprint from its own operations
- Problematic single use plastics use
- Recycled and recovered materials used

Council has diverse operations, and has a range of external events, commercial and other activities occurring on land and facilities it owns or manages. Audits are required to quantify these indicators, to allow measurement and promotion of identified improvements.

6. Monitoring, evaluation and review:

Council has an established method of reporting on progress of Strategic Actions annually. Improvements may be possible to provide more detailed and timely information to customers and the community in a way that continues to encourage behaviour that contributes to a reduction in waste to landfill.

A review of Council's Waste KPIs is required, to improve alignment with CCMWG's Strategic Plan.

Action Plan

Waste Strategy 2023-2028

		Year Planned					Resources:			
No	Action:	FY2023	FY2024	FY2025	FY2026	FY2027	Priority: H,M,L	A-OPEX F-OPEX	Targets	Responsible Department
	Objective 1: Achieve 60% resource rec	overv						F-CAPEX		
1.1	Implement a kerbside FOGO collection service	Overy .					Н	F-OPEX	Service is implemented	Infrastructure, Works
1.2	Undertake infrastructure and process improvements at Spreyton Waste transfer Station						Н	F-CAPEX	Upgrades are delivered	Infrastructure, Works
1.3	Actively participate in the Container Refund Scheme						М	TBC	Council supports the CRS	Infrastructure, Works
1.4	Increase the number of public place recycling bins						М	F-CAPEX	Public place recycling increases	Infrastructure, Works
1.5	Quantify Council's waste footprint and identify and implement improvement opportunities						М	A-OPEX	Council's waste footprint reduces	All departments
	Objective 2 - Eliminate use of priority sin	gle use plas	tic from Cou	uncil operati	ons			I.		
2.1	Audit Council operations to identify use of Problematic Single Use Plastics (PSUPs). Include all activities on Council owned or managed land						М	F-OPEX	Council understands its current use of PSUPs	All departments
2.2	Plan and communicate elimination of PSUPs in line with legislated timeline						М	F-OPEX	Council complies with PSUP legalisation	All departments
2.3	Consider and implement options to further reduce plastic use						М	F-OPEX	Use of other plastics are reduced	All departments
	Objective 3: Increase range and quant	ity of recycle	ed and reco	vered mater	ials into its o	perations				
3.1	Establish baseline data to document existing practice						М		Council understands its current use of recycled and recovered materials	All departments
3.2	Update procurement practices to prioritise waste reduction						М		Procurement process updated	All departments
3.3	Innovate to incorporate recycled and recovered materials into operations						М		New opportunities are explored	All departments
3.4	Monitor and measure use of recycled and recovered materials						М		Improvement is measured and communicated	All departments
	Objective 4 - Contribute to regionally co	onsistent and	l effective w	aste manag	ement pract	ice				
4.1	Participate in regional procurement opportunities						М	A-OPEX	Council benefits from regional opportunities	Infrastructure, Works
4.2	Update Council's waste KPIs in alignment with CCWMG						Н	A-OPEX	Council's KPIs are comparable regionally	Governance

WASTE STRATEGY 2023-2028 21



137 Rooke Street, 03 6424 0511 council@devonport.tas.gov.au devonport.tas.gov.au

Postal address PO Box 604 Devonport TAS 7310

Office hours

After hours emergency 03 6423 3074





