

SUTHERLAND SHIRE COUNCIL
WASTE MANAGEMENT STRATEGY
2022 - 2042



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Sutherland Shire Council (Council) local government area is home to approximately 242,811 residents and 87,000 households. More than 210,000 weekly services including garbage, green waste and recycling collections are provided to residents through Council's Waste Services Unit. Every week hundreds of public place bins are emptied and parks, footpaths and streets are cleaned.

Waste management is an essential core service delivered by Council. This service will continue to be subject to increasing costs and service standard pressures whilst also being required to achieve ambitious waste diversion and resource recovery targets to ensure an optimal waste management service for the community into the future.

These targets are consistent with State and Federal direction in resource re-use and recovery and aligns with Councils Community Strategic Plan which highlights Council's commitment to encourage reducing waste and increasing recycling. It also assists Council in achieving net zero greenhouse gas emissions by 2030 within its own operations and meeting its obligations as a member of the Global Covenant of Mayors for Climate & Energy.

Based on analysis and understanding of the drivers for change, Council's current services, data, and the community's feedback, it is evident that Council is in a unique position based on the following:

- Ouncil has an engaged, waste conscious community
- Council has a unique opportunity due to existing waste and resource recovery operations in the local government area (LGA)
- Ocuncil has very low contamination rates, which makes the waste streams a high-value resource
- Ouncil has high take-up of innovative waste solutions, i.e. chemical clean up, e-waste and
- Council has available resources to consider and explore innovative resource recovery options into the future.

To set the direction for continued improvement within Council's waste management system across the next 20 years, the key pillars of the Waste Management Strategy 2022 - 2042 (the Strategy) have been developed. These three pillars are:



LEADING BY EXAMPLE - to deliver the most efficient programs to residents



BETTER PRACTICE SERVICES - to maximise resource recovery



CREATING A CIRCULAR ECONOMY - by recovering and reusing resources and returning them to the local economy



Sutherland Shire's 20-year Waste Strategy balances the need for more sustainable waste practices, focusing on community priorities while meeting legislative requirements set by the NSW and Federal Governments.

Council has asked and listened to what is important to our community about waste. Residents want Council leadership in waste and recycling - and that means protecting our natural environment, reducing waste going to landfill and securing better ways to manage waste for the future.

We are all ready and willing take on the waste challenge. Currently, the LGA diverts around 50% of its household waste and we need to do better. NSW State targets include achieving 80% diversion of waste from landfill by 2030 and 50% reduction in organic waste sent to landfill by 2030.

Council is taking a responsible, phased approach to achieve these goals. It addresses waste avoidance, considers better resource recovery solutions, encourages the circular economy and explores advanced technology where needed.

The Strategy starts with simple steps and delivers big impacts. It targets larger volume wastes that can be avoided and recycled through education and partnership programs, building the foundations for a combined food and garden organics service (FOGO) and assessing longer term processing options.

Our community is passionate about our beautiful local environment and preserving our planet's precious and limited resources. Every person has a part to play in reducing their waste. Via the Strategy, Council is striving to provide the best services and support to manage waste more sustainably.

"Our Vision: A sustainable and equitable waste service for the community that protects the environment, enables enjoyment of our public open spaces and promotes a circular economy."

## **KEY OUTCOMES**

Council is dedicated to progressing its waste management and resource recovery services and striving for best practice. The key objectives of the Strategy are to:

- Reduce the environmental impact of waste
- Align with Federal and State directions in Resource Re-Use and Recovery and current targets set by the NSW EPA in the 2021-2041 Waste and Sustainable Materials Strategy
- Align with Council's Community Strategic Plan to encourage waste reduction and increase recycling
- Meet community expectations and provide cost effective, innovative, technologically advanced, and sustainable waste solutions and services
- Provide strategic direction of local resource recovery and circular economy options to minimise waste disposal to landfill
- Ensure best practice environmental performance
- Oreate clean and safe parks, footpaths, and roadways for residents to enjoy.



## **WASTE POLICY & PRINCIPLES**

This Strategy has been developed to align with Circular Economy principles and to address waste in accordance with the waste management hierarchy.

## **Circular Economy**

NSW is transitioning to a circular economy over the next 20 years.

A circular economy helps close the loop by minimising waste that goes to landfill by productively reusing resources in the waste streams. It is a more sustainable alternative to the traditional linear economy of taking resources, making and using goods and then disposing of them (take, make, use, dispose).



## Waste Management Hierarchy

The Waste Management Hierarchy model is the foundation for classifying and assessing different resource recovery options in this Strategy. Options which achieve outcomes higher up the model are preferred; all options are considered by the total benefit they can deliver residents.



#### **COMMUNITY VALUES**

Two independent surveys were conducted to understand community perceptions and ensure that resident waste management priorities are addressed by the Strategy.

## **Biennial Satisfaction Survey**

Shire residents rate household waste services of high importance and high satisfaction (Micromex Research, 2016; Sutherland Shire Council, 2017; Micromex Research, 2019; IRIS Research, 2021).

Analysis of performance and satisfaction for such services has remained consistently high since 2016 and suggests that Council needs to continue maintaining this high level of service.

## **Community Waste Survey 2021**

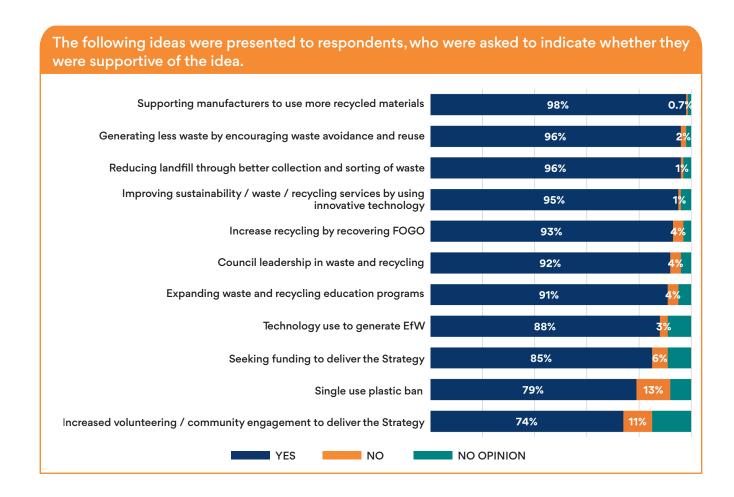
The objectives of Community Waste Survey 2021 were to analyse the current waste behaviours and preferences of residents, measure support for ideas for the Strategy and identify future priorities for Council related to waste.



404 responses were received from the survey.



377 completed online surveys were received.



## **COMMUNITY WASTE SURVEY 2021 FINDINGS**

## **Collections**

93% of residents stated their waste collection service met their requirements. This result aligns with the best-performing NSW Metropolitan councils results for satisfaction regarding waste services.

**98%** are in favour of supporting manufacturers to use more recycled materials.

**62%** use Council's Pre-Booked Council Clean-up service. However of those who do not use the service over half also feel that they do not need this service.

**93%** want to increase recycling through the introduction of a combined food and garden organics collection (FOGO).

#### Education

**91%** of respondents supported the expansion of waste and recycling education programs to the community.

68% report using waste services such as prebooked Council Clean-up, Chemical Clean-up and eWaste events in past 24 months, however, residents report greater awareness is beneficial. **96%** of respondents want to reduce waste by Council supporting residents in how to avoid and reuse waste.

**62%** of respondents want to learn more about sustainable waste management.

## **Community Working Group**

As part of the Community Survey, residents were asked if they would like to register their interest in participating in a Community Working Group to support the development of the Strategy.

211 residents from across the Council area responded "yes" to register their interest in participating in a Community Working Group to support the development of the Strategy.

These 211 residents details were placed in a database for use as part of the stakeholder community engagement associated with the Strategy.

A Community Working Group presents an excellent opportunity for Council to engage with a diverse and interested range of people from different age groups and locations within the LGA to provide community insights on the Strategy.

#### STATE TARGETS

The NSW Waste and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027 is the first stage in a 20-year plan that sets a long-term vision for managing waste, planning for infrastructure, reducing carbon emissions, and refocusing the way NSW produces, consumes, and recycles products and materials. This Strategy replaces the NSW Waste Avoidance and Resource Recovery (WARR) Strategy.

NSW WASTE AND SUSTAINABLE MATERIALS TARGETS						
2025 TARGETS	2030 TARGETS					
Phase out problem and unnecessary plastics	Reduce total waste generated by 10% per person					
<ul> <li>Plastic litter reduction target of 30%</li> </ul>	• 80% recovery rate from all waste streams					
	Overall litter reduction of 60%					
	<ul> <li>Councils to provide food and garden waste collections to all NSW households</li> </ul>					
SUB TARGETS						
Eliminate problem and single use plastics	Triple plastics recycling rate					
	Halve the amount of organic waste sent to landfill					
	Net zero emissions from organics to landfill					

## STRATEGY TARGETS

Based on State, Federal and Regional waste and resource recovery targets the Strategy will strive to achieve the following targets over the next 10 years:

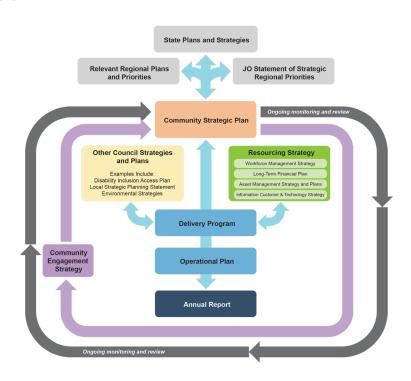
- 80% diversion of waste from landfill by 2030 currently 50%
- 50% reduction in organic waste sent to landfill by 2030 currently 37% of waste goes to landfill
- Net zero emissions from organic waste by 2030 currently 91% of Council controlled emissions
- Less than 1% contamination of organics currently 1%
- Less than 6% contamination in recycling bins currently 10%
- Maximise resource recovery of 75% of internal Council generated waste currently 65%
- 50% reduction of hazardous waste in general / residual type waste by 2030 currently 0.7%.



#### OUR PLANNING PROCESS

Council's Plan and Strategies work together to make Sutherland Shire a connected and safe community that respects people and nature, enjoying active lives in a strong local economy.

Development of the Waste Management Strategy falls under Outcome 2 A beautiful, protected and healthy natural environment, Strategy 2.2 2 Effectively manage and conserve our natural resources in the CSP.



## **IDEAS TO ACTION**

Council has an integrated approach. Council's Plans and Strategies work together to make the Sutherland Shire a liveable place for all people.

This Waste Management Strategy and Implementation Plan will integrate with our four year Delivery program and annual Operational plans, supporting our delivery of Sutherland Shire's Community Strategic Plan. The Waste Strategy also complements councils other supporting documents around the Environment, Climate Change and Land Use planning.



#### COMMUNITY STRATEGIC PLAN

A 10 year plan that identifies our community's priorities and vision for the future



## SUPPORTING DOCUMENTS

A level of interconnected documents that provide further detail about how we are going to achieve positive outcomes for the community



#### DELIVERY PROGRAM

Sets out the key activities and projects that will be delivered to the community during the Council term



## OPERATIONAL PLAN

Provides more detail of the Delivery Program including projects, activities and budgets



#### DOMESTIC COLLECTION SERVICES

#### **Kerbside Collection**

More than 210,000 weekly services are provided to residents through Councils Waste Services Unit.

As required by section 496 of the Local Government Act 1993, a domestic waste charge is applied to all developed residential properties.

Residents can elect to apply for and pay for additional bins supplied by Council.

Council provides a 3-bin kerbside collection system for residential properties



## Pre-booked Kerbside Collection of Bulky Items

Council offers each rate paying household access to two pre-booked kerbside collection of bulky waste/or garden organics items (capped at 3 cubic metres/collection) each financial year. Acceptable materials include:



Furniture - cupboards, tables & similar (except furniture containing glass)



**Garden Organics** 



Mattresses and mattress bases



Scrap metal - fencing, hot water systems, BBQs



Electronic waste (e-waste)



Whitegoods - fridges, washing machines and similar

Residents in inaccessible or remote locations are offered scheduled clean-up dates. Large residential complexes have a common collection date which must be pre-booked by a strata manager.

## **Other Waste Services**



#### **Chemical Cleanout Events**

Council hosts two (2) free chemical collections each year. This event is the largest in the state.



#### **Battery and Light Globe Collection**

Battery and light globe collection points are offered by Council at a number of its facilities/buildings.



#### **E-Waste Collection Events**

Council holds two (2) free E-Waste drop off events each year.



## Additional Green Waste/Organic Services

Council offers a free monthly wood chipping services and tip vouchers (D & E ward only) during summer each year.

## **Garage Sale Trail**

Council partners annually with Garage Sale Trail to promote one of Australia's biggest social re-use and recycling programs within the LGA.

## RecycleSmart App

Council partners with RecycleSmart in offering an on-demand residential collection service for unwanted clothing and soft plastics. Residents can organise the pick-up service for a small fee per bag and have their items collected from home.

## Waste Education and Community Engagement

Council facilitates a range of waste education initiatives within the community including:



Variety of "Waste Wise" workshops; compost and worm farm workshops, chook keeping, food preserving and reusable nappies.



Variety of Waste Education Partnerships including Garage Sale Trail, Return & Earn and NSW EPA.



Keep Australia Beautiful "Enviromentors" workshops and education services for schools and the community.



Council's website provides a range of services and educational material for residents such as booking collections and workshops, recycling and disposable directory and reporting options.



Council uses Multiple communication avenues - social media, Waste Calendar, Our Shire, rates mail out, Compass and more.



Biennial community satisfaction surveys and regular community waste surveys exploring resident perceptions and expectations for continuous improvement of waste services.



"Compost Revolution" - discounted worm farms, bokashi bins or compost bins.



### NON-DOMESTIC WASTE SERVICES

#### Council Waste

Council provides waste services to various public facilities and locations, including administration buildings, works depots, childcare centres, libraries and leisure centres with an estimated 1,400 tonnes waste generated each year by these facilities.

There is already a significant amount of reuse and recycling in all of Council's operations including construction & demolition waste management collection of waste generated by Council's civil and operations activities.

Council aims to ensure that its community partners and contractors are committed to best practice waste management.

### **Public Place Waste Collection**

Council provides a range of public place cleansing and waste collections. Council collects waste from public bins in parks, shopping centres, ovals and near walkways to maintain the cleanliness within the LGA, and reduce pollution and outflow of waste into stormwater drains.

Asset cleansing services operate in CBDs and other high profile public places and Council facilities.



#### Litter and Illegally Dumped Waste

Working with the Sydney Regional Illegal Dumping (RID) squad, Council conducts a range of strategic, coordinated activities to prevent illegal dumping including identifying and patrolling illegal dumping hotspots, investigating incidents, organising clean-ups, identifying trends in illegal dumping, and educating the community.

## CURRENT WASTE MANAGEMENT FACILITIES IN THE LGA

There are a number of commercially operated waste management and resource recovery facilities in the local government area that service both households and businesses including a landfill site.











# WASTE DATA AND PERFORMANCE

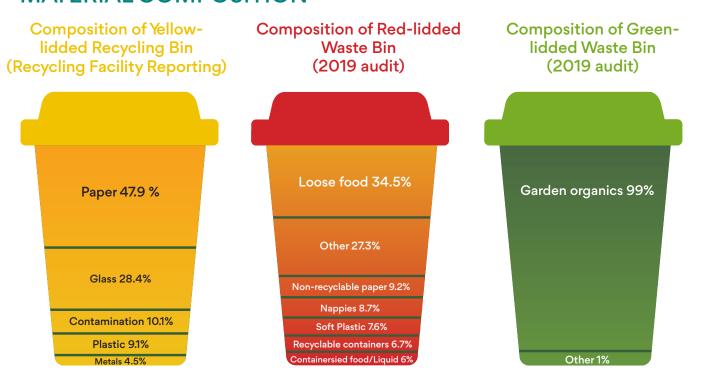
## KERBSIDE DOMESTIC COLLECTION

Recent waste audits show that the average Sutherland household produces 8.7 kilograms per week of garbage. Single Unit Dwellings (SUDs) generate twice as much residual (red lid bin) waste as Multi-Unit Dwellings (MUDs) (Southern Sydney Regional Organisation of Councils, 2019).

Council kerbside collection data from 2018/19 to 2019/20 is shown below.



## MATERIAL COMPOSITION



## WASTE DIVERTED FROM LANDFILL

Between 2016 and 2020, the total waste diverted from landfill within the LGA remained constant and averaged approximately 50%. This rested below the target of 66% landfill diversion set under the former NSW waste strategy, the WARR Strategy.

In order to improve waste diversion across the Council area, waste management and resource recovery improvement options were identified, categorised and assessed for inclusion within the Strategy.





## **KEY FOCUS AREAS**

Improvement Options to guide the life of the Strategy were planned, modelled and evaluated using an established sustainability framework to assist Council in progressing towards a sustainable long-term waste management system.

The options are identified through the community survey plus industry and local government waste and resource recovery experts.

The options are split into the following Focus Areas associated with Council's objectives for the Strategy.

For further information and detailed assessment of Improvement Options, please see Council's "Options Assessment Report, Waste Strategy 2021-2041, December 2021", available on Councils website.



LEADING BY EXAMPLE - to deliver the most efficient programs to residents and lead the way in progressive waste management policies, services and solutions for the community and the region.



BETTER PRACTICE SERVICES - to maximise resource recovery and to ensure Council strives for and delivers continued improvement over the next 20 years.



CREATING A CIRCULAR ECONOMY - by recovering and reusing resources and returning them to the local economy.

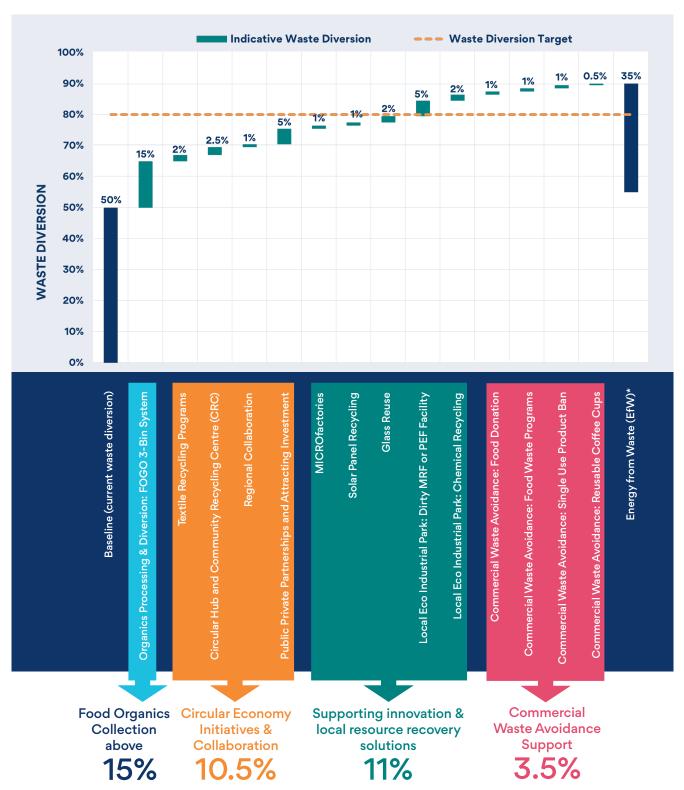
## TRIPLE BOTTOM LINE

A Triple Bottom Line analysis evaluated the options identified for the Strategy. The analysis considers the key cornerstones of sustainability and includes identification of the environmental, social, and financial impacts of each option as well as the associated infrastructure, support services and capital requirements.



# PERFORMANCE IMPROVEMENT

This diagram illustrates Council's current waste diversion rates and how Improvement Options can contribute to improving waste diversion targets. Please note, Improvement Options that do not directly divert waste are not included within the diagram.



<sup>\*</sup>Scoping EfW technology solutions will be considered as a possible longer term option for Council when it is economically, environmentally and practically viable for the community.



# **KEY IMPROVEMENT OPTIONS**



# COMBINED FOOD ORGANICS AND GARDEN ORGANICS COLLECTION (PART OF 3-BIN SYSTEM)

Council will implement a Food Organics Garden Organics (FOGO) kerbside collection system for Single Unit Dwellings and consider options for Multi-Unit Dwellings.

## **Opportunity**

Food is the primary waste stream in the red-lidded bin. Over 50% of this food waste is recoverable through a new FOGO service.

## **Action**

Council will introduce a FOGO collection service where food waste can go into the garden organics green-lidded bin for collection to be processed into compost.

#### **Outcome**

- A FOGO collection service would bring Council in line with 'best practice' organics recovery and increase waste diversion rates by up to 15%
- The reduction in the overall volume of organic materials disposed in landfill would also result in reduced greenhouse gas generation from decomposing organic materials
- Aligns with Council's commitment to addressing Climate Change
- Meets State legislation





Council will develop and implement awareness, communication, and education programs to improve resource recovery and undertake a study on behaviour change.

## **Opportunity**

Community research indicated that waste avoidance and reuse is a priority, and residents would welcome expanding waste education programs. The research also indicated there are gaps in awareness about the waste services available through Council.

#### Action

Implementing a comprehensive and more tailored communications program to improve awareness of all waste services and recycling partnerships.

Introducing a range of waste avoidance and reuse education material targeting larger volume waste streams such as food, textiles and packaging.

#### **Outcome**

- A greater awareness across the LGA about the range of waste services available
- Households generate less waste
- Reductions in organic waste, textiles and packaging going to landfill
- Better recovery and reuse of valuable resources in household waste
- Aligns with Council's commitment to addressing Climate Change



Council will undertake a CRC Feasibility Assessment and Site Selection Study to support the establishment of a modern circular economy hub in Sutherland Shire.

## **Opportunity**

Demand for recycled materials from the household and commercial waste streams has steadily contracted with the closure of export markets.

The resource recovery industry has responded by focusing on valueadding and the production of high-quality, well-sorted recycled materials.

There is increasing demand for sustainably sourced and manufactured products.

## **Action**

Based on the outcome of feasibility studies, the establishment of a modern, "Circular Hub" within the LGA might include educational facilities and a Community Recycling Centre.

Engagement of key potential stakeholders such as community, businesses and internal staff to determine sustainability goals and find solutions for problematic waste and recycling materials that are not collected as part of Council's kerbside or cleanup services.

## **Outcome**

- Encouraging and supporting a local circular economy
- A collaborative, sustainable space open to the community
- Practical education for waste avoidance and reuse
- Creating partnerships that find solutions for waste and recyclable materials not collected from kerbside or clean-up services



The following Implementation Plan has been developed to guide the delivery of the Preferred Improvement Options.

Time frames for implementation are based on:

0-5 years (short term) 5+ years (medium term) 10+ years (long term) 15+ years and ongoing

This Implementation plan will be a dynamic document where progress options are reported to Council with new improvement actions identified for the next 5 year term.

Council's Waste Services and Environment Science teams will deliver the Strategy in collaboration with many business units throughout Council.

INITIATIVES	COLLABORATION	22/23	23/24	24/25	25/26	5+ YRS	10+ YRS	15+ YRS	ON GOING	FUNDE
SERVICE COLLECTION REVIEW										
Collections: Council Commercial Collections Feasibility Study Boat Service Collection	Fleet & Logistics Financial Services									<b>✓</b>
FOOD ORGANICS COLLECTION/ ORG	GANICS									
Organics Processing and Diversion:  Commercial Organics Collections Feasibility Introduce FOGO collection (3-bin) MUDs and Onsite Organics Processing Council process FOGO feasibility	Fleet & Logistics Financial Services Strategic Planning Development Assessment & Certification									<b>√</b>
STRATEGIC WASTE										
Waste and Sustainability Community Engagement	Communication, Engagement and Customer Libraries Arts & Culture Business & Community									<b>✓</b>
COMMERCIAL WASTE										
Commercial Waste Avoidance Programs	Business & Community Arts & Culture									<b>✓</b>
OTHER										
Textile Recycling Programs	Property Business & Community									$\checkmark$
Circular Hub and Community Recycling Centre (CRC)	Asset Services Financial Services Civil Operations Fleet & Logistics Communication, Engagement and Customer Building Operations Environmental Health & Building									<b>✓</b>
Regional Collaboration	Asset Services Parks Operations Financial Services Strategic Planning									<b>√</b>
Public Private Partnerships and Attracting Investment	Corporate Governance									<b>✓</b>



2 FOCUS AREA 2 - LEADING BY EXAMPLE										
INITIATIVES	COLLABORATION	22/23	23/24	24/25	25/26	5+ YRS	10+ YRS	15+ YRS	ON GOING	FUNDED
PLANS AND POLICIES										
Review and Develop Councils Corporate Waste Avoidance and Minimisation Plans, Strategies and Policies	Council Wide									<b>√</b>
TECHNOLOGY & INNOVATION										
Introduce Data Based Technologies and Innovations	Information Management & Technology									<b>✓</b>
OTHER										
Waste Management Services Financial Modelling	Financial Services									<b>√</b>
Strategic Planning, Design and Placemaking for best Waste Management outcomes	Strategic Planning Development Assessment & Certification									<b>✓</b>

FOCUS AREA 3 - CREATING A CIRCULAR ECONOMY										
INITIATIVES	COLLABORATION	22/23	23/24	24/25	25/26	5+ YRS	10+ YRS	15+ YRS	ON GOING	FUNDED
Advocate and support innovations for Emergency and Problem Waste	Asset Services Property Fleet & Logistics Environment Health & Building Civil Operations									<b>√</b>
Investigate Options/ Feasibility for Local Eco Industrial Park	Corporate Governance Strategic Planning Communication, Engagement and Customer Financial Services Asset Services Property Civil Operations Parks Operations Fleet & Logistics									<b>√</b>
Energy from Waste (EfW)  Scoping EfW technology solutions will be considered as a possible longer term option for Council when it is economically, environmentally and practically viable for the community.	Corporate Governance Strategic Planning Communication, Engagement and Customer Financial Services Asset Services Property Civil Operations Parks Operations Fleet & Logistics									<b>✓</b>



