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Final Strategy adopted by Council on 10th December, 2019.

1 Executive Summary

Council aspires to become a resource smart city that shifts away from the paradigm of a 'take, make, waste' society, and instead advocates and supports a system of 'make, use, return'.

We need to rethink our use of resources and consider the whole life cycle of materials, adopting a circular economy approach to maintain the value of these resources for as long as possible.

In previous strategies, Council focused on essential improvements in waste and recycling. It is now time to set more ambitious targets and become leaders in resource management and recovery.

This strategy considers the achievements of Council over the past decade and outlines the key opportunities and actions to achieve greater resource recovery in the coming years.

Over the past 15 years, Council has made significant headway in the waste and resource recovery space. These achievements include a 59% reduction in recycling contamination, a 6% increase in the recycling rate, as well as a 20% reduction in the overall amount of waste we create, despite a growing population.

While these achievements should be celebrated, there is much still to be done. As a City, our diversion rate is still lower than the metropolitan average, and Council does not collect as much organic waste using the kerbside bins as the average Council in Victoria.

Furthermore, as a City, our patterns of consumption and the volume of waste we produce are both highly influenced by social and climatic effects, such as drought, and periods of economic downturn.

With recent changes in the recycling and waste processing industry, including options for increased source separation, there is much opportunity to improve and reduce our waste as a municipality.

In line with Waste Management Policy 2019, Council have established aspirational targets to achieve a waste diversion rate of 60% by 2030 and move toward zero waste to landfill by 2040.

To achieve these goals, this strategy identifies seven key waste streams which present the greatest potential for waste diversion, or which strongly impact our environmental performance as a Council.

For each of these waste streams, actions have been developed and aligned with the waste hierarchy.

2. Overview

To separate our waste into the correct bins is not enough. As a municipality we need to reduce our impact on the planet. In terms of Waste Management, that means together as Council and Community we need to aim for zero waste.

Towards Zero Waste means reducing consumption and the amount of waste that we generate as a priority, before deciding where we should dispose of unwanted items.

Maribyrnong City Council has a vision to become a city that generates minimal waste and considers that waste as a valuable resource to be managed sustainably.

This strategy identifies goals and actions to implement in the short and mid-term. All actions can be achieved within the next 3-5 years.



3. Context

This **Towards Zero Waste Strategy** aligns with and supports the strategic directions of the key Federal, State and Local Government plans, policies and regulations relating to waste.

A full list of these policies is included in Appendix D, including an analysis of recent changes to the Environment Protection Act, which are intended to come into force in July, 2020.

The **Towards Zero Waste Strategy** should be read in conjunction with the following Council waste documentation:

- Waste Management Policy 2019
- Provision of Waste Management Services
- Waste Management Planning Guidelines for Residential and Commercial Developments

3.1 Waste Hierarchy

The Environment Protection Act 1970 embeds the waste management hierarchy. This hierarchy is the underlying principle of waste management policies across Australia.

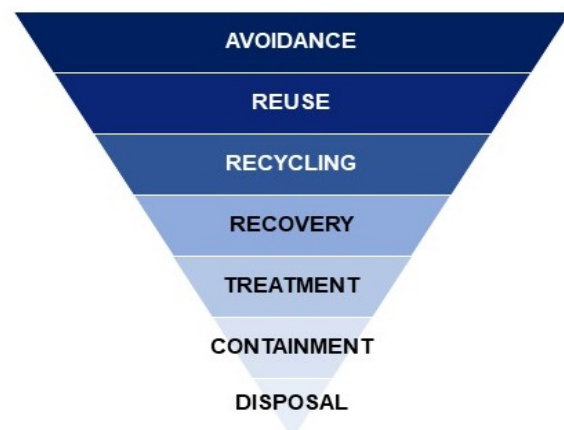
It establishes the order of preference for waste management, with the goal of achieving waste avoidance and reuse before options for recycling and disposal.

The avoidance of waste is considered the most preferable outcome, and disposal to landfill considered the least preferable. This has the potential to influence all municipal activities that generate waste.

A definition of each waste management hierarchy outcome is outlined in Figure 1.

The initiatives identified in the action plan have been considered and aligned with this hierarchy, prioritising avoidance and reuse before recycling, treatment and disposal.

Figure 1 EPA Victoria Waste Management Hierarchy



4. Where Are We Now?

Maribyrnong City Council has delivered waste services to its community for over 24 years, since it formed in 1994 from the merger of the City of Footscray and parts of the City of Sunshine.

The way that we collect and manage waste has changed significantly during this time.

In 2004, Council introduced commingled recycling bins to all residential properties and also made these available to small commercial and retail properties.

Prior to 2004, recycling services were provided for houses only, with recycling crates provided for bottles and cans, and paper and cardboard collected separately.

In 2004, multi-unit dwellings also received recycling services for the first time, with the introduction of skip bins for larger properties.

In 2006, garden bins were made available to residents on an opt-in, user-pays basis.

Today, Council provide a full waste management service, including:

- A kerbside collection of Landfill, Recycle and Garden waste bins
- A booked annual collection service for hard waste and garden waste (at call)
- A kerbside collection service for textile and small electrical items (at call)
- Installation of Clothing & Electrical Recycling Hubs (drop off)
- Public Place Recycling bins (PPR)
- Street litter collection (including street litter bins)
- Street sweeping;
- Collection and investigation of illegally dumped rubbish
- Collection of landfill and recyclables generated at local Festivals and Events
- Program for drop-off of household hazardous/toxic waste (e.g. household chemicals, motor oils, paint, car batteries, gas bottles etc)
- Community waste education programs such as Compost Community and My Smart Garden
- Community education including the launch of Council's free Maribyrnong Bins & Recycling App
- Development of Waste Management Guidelines for Residential and Commercial developments.

Highlights

59%	reduction in recycling contamination
6%	increase in recycling rate
20%	reduction in total waste created
16%	increase in population

All of these programs have helped achieve current successes. Three of the most significant are:

- 59% reduction in recycling contamination
- 6% increase in recycling rate from 28% to 34% (2001 – 2016)
- 20% reduction in total waste created despite a growing population, from 759 kg/household/year to 637 kg/household/year.

The 2014 Waste Minimisation Strategy identified 58 actions which could be implemented to assist in meeting Council waste minimisation objectives and optimising waste services for the community.

A review of the 2014 Strategy conducted in November 2018 revealed that 91% of the actions identified have been completed or are ongoing.

4.1 What is in our landfill bin?

The average landfill bin in Maribyrnong City Council shows a large proportion of garden and food waste, or organics.

In May 2019, an audit of kerbside bins across Maribyrnong City Council revealed that organic waste makes up 49% of our landfill bin.

In fact, when we examine the contents found in the average kerbside landfill bin, the results show that just 32% of that waste is suitable for landfill.

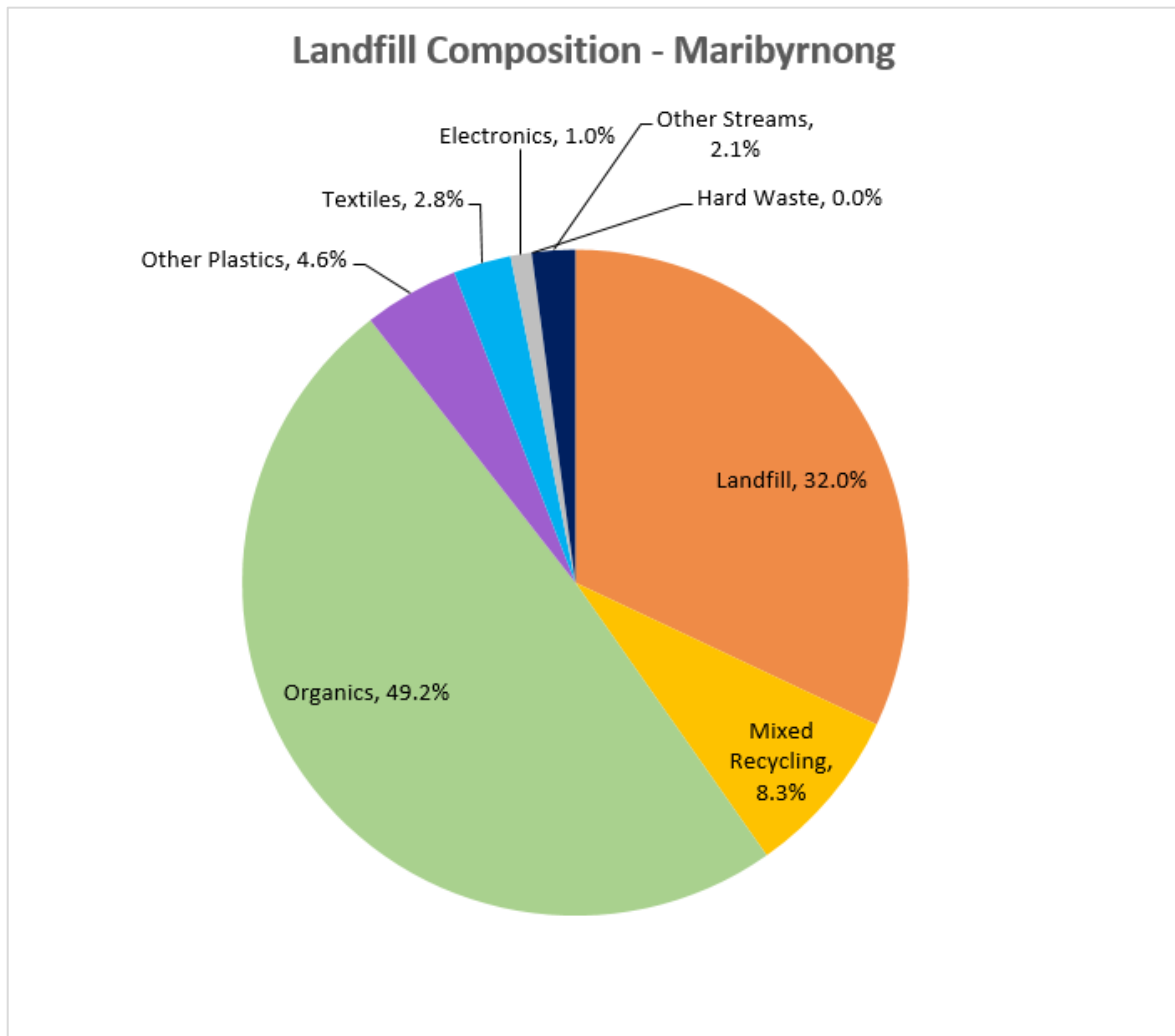
This means that 68% of the waste currently being sent to landfill has the potential to be recycled or reused.

Council have identified goals in Section 6 to change the way that we separate, reuse and recycle our waste to recover the maximum amount of these resources and divert them from landfill.



The figures on the right and below provide a visual breakdown of the contents found in the average residential kerbside landfill bin.

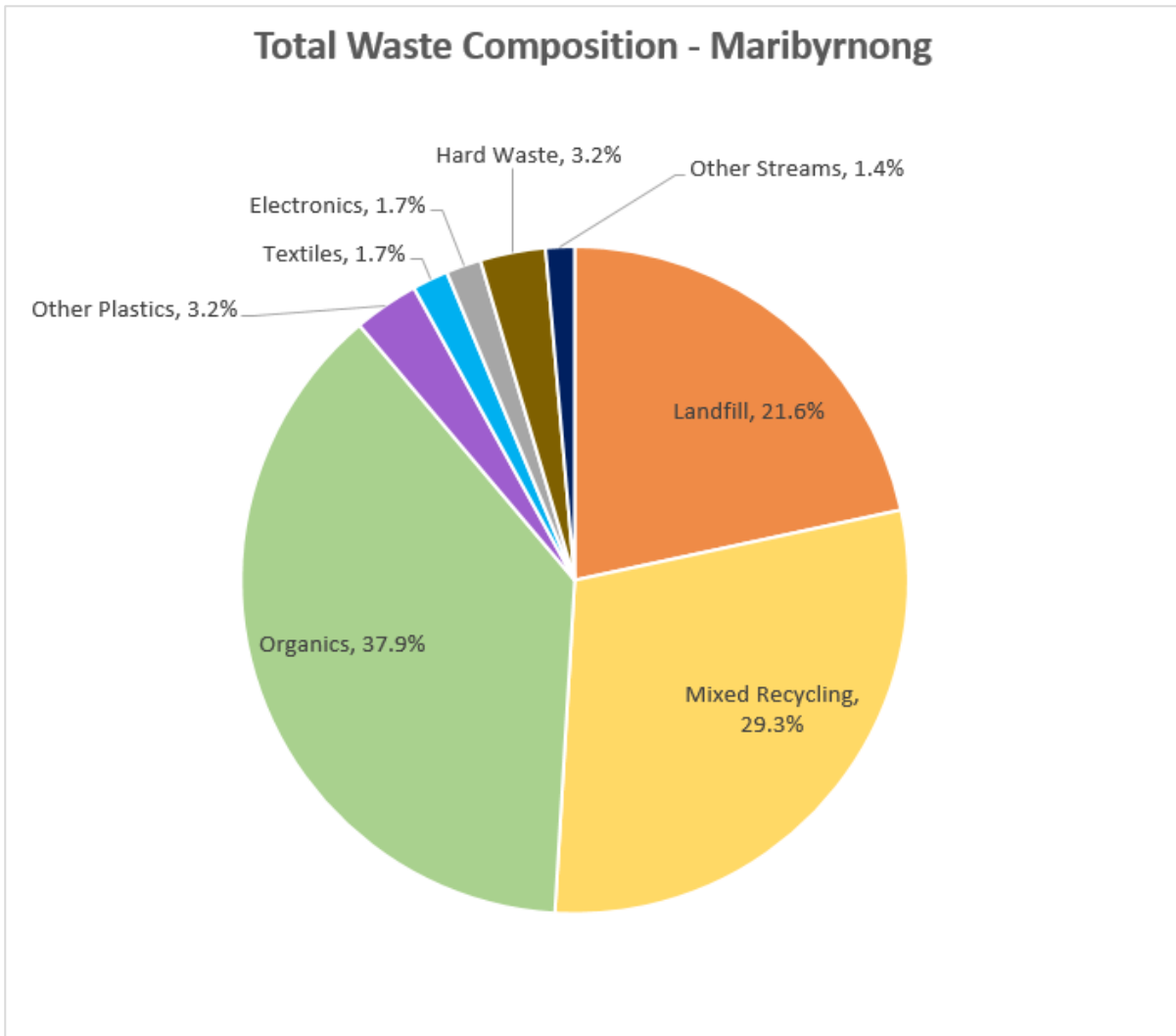
Figure 2 What is going to landfill



When we compile and examine all of the waste collected across Council, including mixed recycling, landfill, garden waste bins, hard waste and green waste collected through the at-call service, we can analyse the waste composition across Council (see Figure 3).

This data will inform the key strategic waste streams identified in section 7, with detailed action plans to reduce waste across these different categories.

Figure 3 Total Waste Composition



4.2 How do we compare to others?

4.2.1 Waste Streams

Sustainability Victoria collect data from all Victorian Councils. The common waste streams for which data is collected are landfill, recycle and garden bins, hard waste, bundled garden waste and drop-off waste at transfer stations.

Our current service is the same as most councils in Victoria. The City of Maribyrnong kerbside service includes:

- Landfill bins (120 or 660L/1100L skips weekly)
- Recycle bins (240 or 660/1100L skips fortnightly)
- Garden waste bins (User pays) (120L/240L fortnightly)
- Hard waste collections (Annual)
- Garden waste – bundled collection (Annual)

In addition we offer:

- Textile drop off and collection service
- Electrical waste drop off and collection service

Figure 4 and Figure 5 compare the volume of different waste streams collected by Maribyrnong City Council and more broadly across Victoria.



These figures show that Maribyrnong City Council waste volumes show steady recycling and landfill volumes, both of which are highly influenced by social and climatic effects. The data also shows that, when compared with the State average, Maribyrnong City Council collects significantly less organics (garden and food waste) than most councils.

The volume of organic waste collected across Victoria increased significantly in 2015-2016 due to the number of Councils who introduced FOGO (Food Organics Garden Organics), where residents were able to place both food waste and garden waste into their garden waste bin.

There are several reasons why the organic waste volumes are low in Maribyrnong City Council. It is likely to be a combination of:

- Food waste not currently being included in the garden waste service
- Affordability (the garden waste bin is currently a user pays service)
- Smaller blocks / Less garden space
- Home Composting / Composting Community Program participation
- Community uptake of elderly services for gardening
- Community housing gardens maintained by DHHS

Figure 4 City of Maribyrnong Waste Volumes (2001-2016)

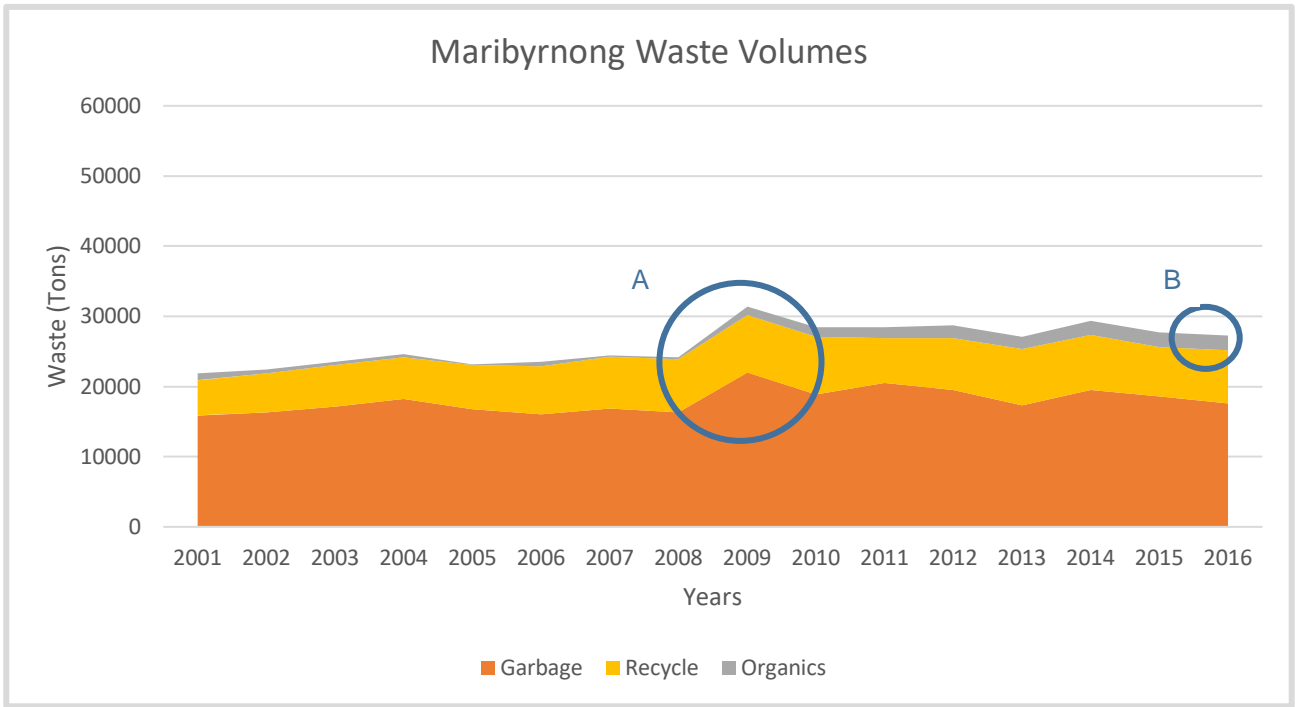
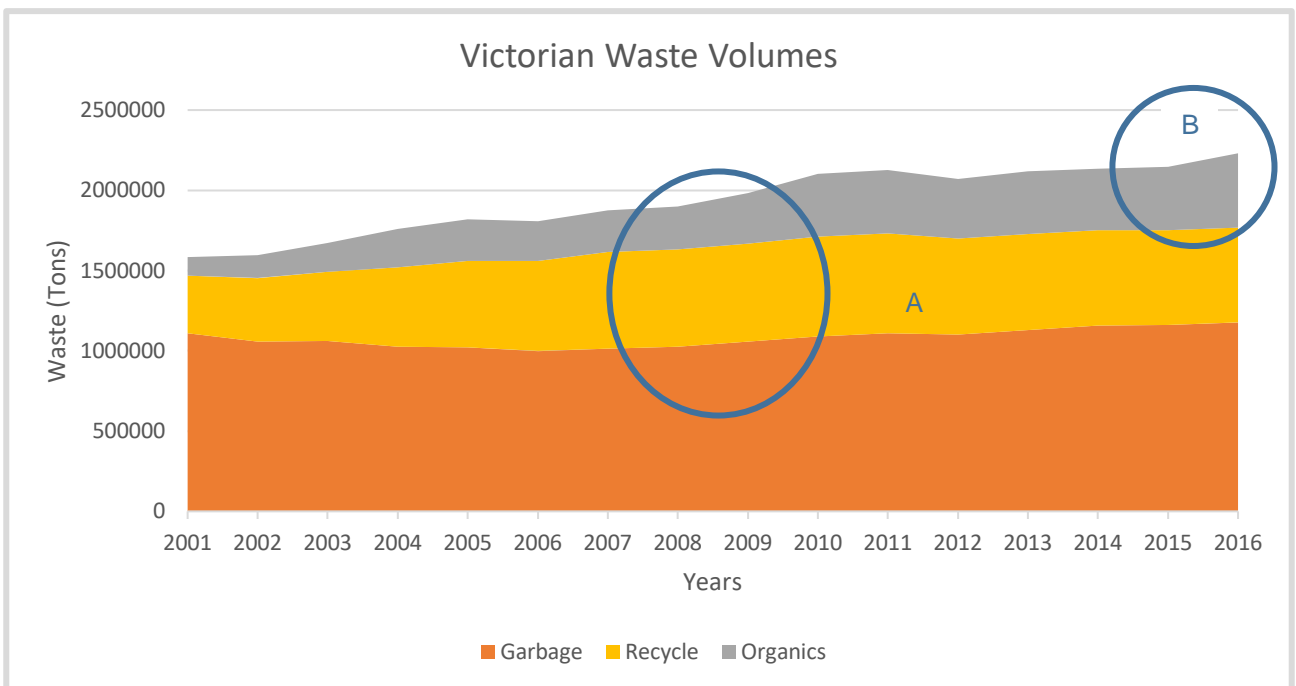


Figure 5 Victorian Waste Volumes (2001-2016)



Point A on the graphs shows the impact of the 2008-2009 Government Stimulus package and the Global Financial Crisis on waste generation in Maribyrnong.
Point B on the graphs compare the current volume of garden and food organics collected across Maribyrnong.

4.2.2 Overall Waste Generation

It is positive to see that the City of Maribyrnong overall waste generation rate per household going to landfill has declined over time.

The actual figures for 2011 and 2016 are shown in the Table below. This data shows us that Maribyrnong City Council achieved a reduction in the amount of waste that we create of 20 percent, while the State average saw a decrease of 8 percent.

Considering the population increase in the City of Maribyrnong was faster than the state average, this is a significant achievement.

Table 1 Waste composition 2001 and 2016 in kg/year

Year	Location	Total Kg/year	Waste Generation Change	Population	Population Change
2011	Maribyrnong	793	-20%	75154	+16%
2016		637		86942	
2011	Victoria	759	-8%	5,537,817	+11%
2016		698		6,173,172	

5. Where Are We Headed?

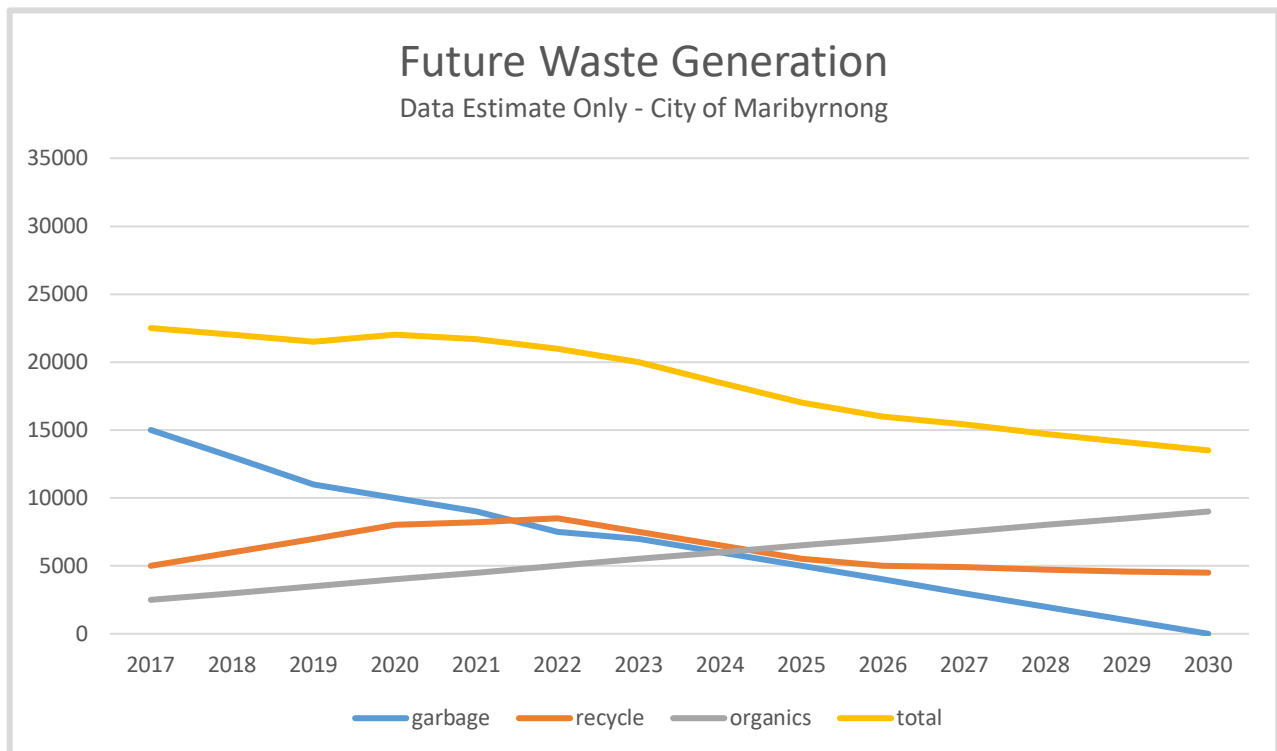
Council aspires to become a resource smart city that moves away from the paradigm of a 'take, make, waste' society, and instead advocates and supports a system of 'make, use, return'.

In line with the waste management hierarchy, a much stronger focus on avoiding waste in the first place is needed, with the goal of transitioning toward a system where landfilling is no longer required.

The graph below illustrates our goal of decreasing total waste generation, despite an increasing population.

Achieving this goal will require a change in mindset of the broader community to rethink the way we choose products and how we treat these products at the end of their life. We must become stewards of natural resources rather than primarily consumers and producers of waste.

Figure 6 City of Maribyrnong Future Waste Generation Estimate



In previous strategies, Council focused on essential improvements in recycling, and set goals to align with the average diversion rate of the Melbourne Metropolitan region. Council now aspires to achieve much more ambitious targets, to become leaders in resource management and recovery.

In line with Waste Policy 2019, Council have established aspirational targets to achieve a waste diversion rate of 60% by 2030 and move toward zero waste to landfill by 2040.

Council acknowledges that achieving these ambitious targets depends on developments in the waste industry which are outside Council's control, such as improved recycling technology and changes to regulations and policies.

6. Objectives and Goals

Overall aspirational target is to achieve a waste diversion rate of 60% by 2030 and move toward zero waste to landfill by 2040.



The City of Maribyrnong Council Plan 2017- 2021 includes six key objectives:

- Objective 1: Strong Leadership
- Objective 2: Healthy and Inclusive Communities
- Objective 3: Quality places and spaces
- Objective 4: Growth and prosperity
- Objective 5: Mobile and connected city
- Objective 6: Clean and Green

This strategy has been developed to deliver several actions within Objective 6. The high level strategies included in the Council plan that relate to Waste Management are listed below.

Council Plan Objective 6: Clean and Green		
Council will strive for a clean, healthy city for people to access open spaces, cleaner air and water and respond to climate change challenges.		
Strategies achieving the objective		Strategic indicators measuring success
6.3	Progress Zero Carbon Maribyrnong	Annual compliance with zero carbon corporate emissions
6.4	Improve the visual presentation, cleanliness and amenity of the city	Improved cleanliness in Footscray CBD with less graffiti, dumped rubbish and complaints
6.5	Substantially increase Council's waste diversion rate	Kerbside waste diversion improved from 34% to 46% by 2019-20
6.7	Incorporate Ecologically Sustainable Design and measures in Council buildings	Improved building energy efficiency and thermal comfort levels
6.9	Educate the community on environmental issues and best practice in waste management	Increased number of community members participating in environmental education programs



Waste Management Policy (2019)	
Key Objectives	
1	Comply with the intent of the applicable Commonwealth and State environment legislation, regulations, standards, policies and initiatives.
2	Maintain a safe, transparent, affordable and sustainable approach to all Council waste management and resource recovery services and provide a consistent level of service to ratepayers and eligible properties.
3	Ensure Council provide innovative solutions and strive for best practice waste and recycling services to process all types of waste generated across the municipality.
4	Keep pace with emerging technologies and actively participate with peak industry bodies, operators and organisations to advocate an improved and competitive waste and resource recovery industry.
5	Increase recycling and recovery rates, and reduce contamination across the municipal waste stream.
6	Reduce the amount of litter, illegal dumping, and stormwater pollution across Council.
7	Prioritise waste avoidance by reducing the consumption of goods and packaging.
8	Communicate with and educate our community about effective ways to reduce, reuse and recycle waste whether at home, work or play.
9	Continue to monitor, collate and report quality waste and recycling data across the municipality.
10	Adopt greater use of recycled materials and resources across all aspects of procurement.
11	Protect public health and minimise the environmental impacts associated with waste management services.



Towards Zero Waste Goals			
The key goal to achieve a Toward Zero Waste Maribyrnong is to reduce overall waste generation.			
Strategies achieving the objective		Strategic indicators measuring success	% Change
1	Increased Avoidance	Kerbside waste generation decreases from 637 kg per household per year to 570 kg household per year by 2022 (a 10% decrease).	-10%
2	Increase Recycling	Kerbside recycling (Commingled and organic waste) diversion from landfill rate increase from 34% per year to 40% per year by 2022.	+6%
3	Decrease contamination	Kerbside recycling contamination rates decrease from 7% to 5% by 2022.	-2%
4	Decrease recyclables in landfill	Kerbside landfill bin decreases percentage of recyclable items from 9% to 5% by 2022.	-4%
5	Increase source separation	Collection of separated waste streams increases by 20%	+20%
6	Increase use of recycled content in construction	Council construction contracts to increase requirement for recycled content target 25% recycled content by 2022.	+25%
7	Increase use of recycled content in public realm	Council assets to increase requirement for recycled content by 25% by 2022.	+25%

7. Strategic Actions

To achieve the Objectives and Goals established in Section 6, this strategy identifies seven key waste streams which present the greatest potential in terms of reducing and diverting waste from landfill, and improving our environmental performance as a Council.

Strategic actions for each waste stream have been developed and aligned with the priorities of the waste hierarchy.

This hierarchy recognises that the highest priority is to avoid waste in the first place and seek opportunities for reuse, before taking actions that influence recycling, recovery and treatment.

Actions have also been identified against the four pillars of effective waste management; Education, Infrastructure, Enforcement and Advocacy.

7.1 Key strategic waste streams



1. Organic waste



**2. Single use
Plastics**



**3. Mixed
recycling**



**4. Electrical
waste**



5. Hard waste



6. Litter



7. Other streams

Further strategic actions have also been identified under the three categories below:



Commercial



Public Realm



Other Opportunities

7.2 Residential

7.2.1 Organics

Organics

What is it:

In our urban and household environments, organic waste commonly is generally made up of kitchen food waste, garden waste, and other organic substances such as pet hair and dust.

Other material such as soiled paper towel and tissues may also become part of the organics stream as they are no longer recyclable due to their low structural quality and levels of contamination once used.



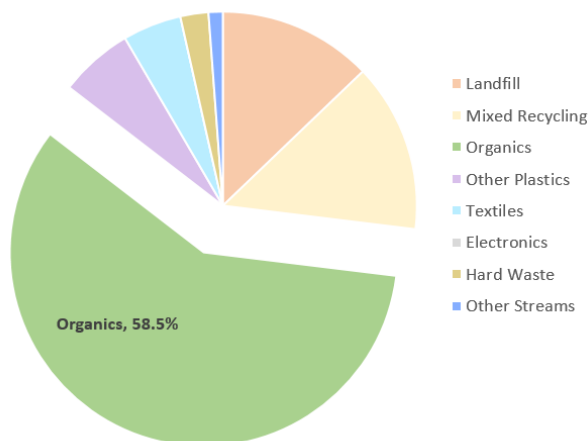
Examples:

- Fruit & Vegetable Scraps
- Coffee Grounds
- Egg Shells
- Leftover Food
- Meat Scraps
- Tissues / Hand Towel
- Garden Waste (Leaves, Branches, etc.)
- Fats, Oils and Greases (FOGs)
- Vacuum Cleaner Dust
- Pet Hair

Current Issues:

When organic matter is disposed of in landfill, it undergoes anaerobic decomposition which produces methane, a greenhouse gas that is 25 times more potent than CO₂.

Alternatively, organic waste can be collected and treated to create other valuable resources such as compost and soil conditioning products, which feed back into the natural environment.



Current Performance:

Maribyrnong City Council currently has a lower collection rate for organic waste than the State or municipal average.

This waste stream therefore presents a significant opportunity for Council to divert waste from landfill and meet our strategic targets.

Food waste, in particular, presents a significant opportunity for Council. Avoiding and capturing food waste is therefore a key priority in the Action Plan outlined below.

Strategic Actions - Organics

Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
1.1	AVOIDANCE	Love Food Hate Waste	Conduct educational program on reducing domestic food waste.	Education
1.2	AVOIDANCE	Food Waste Outreach	Promote food waste charity programs (i.e food banks and soup kitchens) to commercial uses such as grocery stores and restaurants to prevent food waste.	Advocacy
1.3	REUSE	Compost community	Promote and provide incentives for homes, communities, schools and businesses to set up on-site food and garden waste compost systems.	Education
1.4	REUSE	Mulch return program	Work with community gardens to provide mulch and compost products from local green waste bins back to residents via the Back to Earth program.	Infrastructure
1.5	REUSE	Compost drop off options	Support the establishment and use of community gardens and local compost drop offs via ShareWaste.	Education
1.6	RECYCLING	FOGO service collection	Incorporate food organics into the existing user pays green (garden) waste service.	Infrastructure
1.7	RECYCLING	FOGO campaign	Develop and deliver ongoing educational campaign to promote and drive uptake of FOGO	Education
1.8	RECYCLING	Universal FOGO - single dwellings	Introduce a universal FOGO bin for residential rate payers in stand-alone buildings.	Infrastructure
1.9	RECYCLING	Weekly FOGO Service	Investigate feasibility of weekly FOGO collection service and fortnightly landfill collection.	Infrastructure
1.10	RECYCLING	Best Practice Food waste Recycling Options for Multi-unit Dwellings	Investigate options for food and organic waste recovery in multi unit dwellings, including on-site organic waste treatments such as worm farms or bokashi bins, FOGO collection, insinkers, and other food waste collection services.	Infrastructure
1.11	RECYCLING	FOGO contamination program	Implement program to ensure contaminated FOGO bins are notified and not collected. Include three strike clause in waste collection contract.	Enforcement
Medium Term Actions (within next 5yrs)				
1.12	RECYCLING	Public Place Organics Bin Trial	Trial the implementation of a third bin for organics disposal in prominent public places where food consumption and takeaway dining is common.	Infrastructure

7.2.2 Single Use Plastics

Single Use Plastics

What is it:

Plastics are made from a variety of petroleum products, varying in densities and additives. In general terms, plastics can be classified as either hard (rigid) plastics or soft (flexible) plastics.

Rigid plastics are widely used for products such as bottles, containers, toys, pipes and homewares/furniture, and have strong recycling potential. However the majority of soft plastics are designed for single use, and used for packaging, plastic bags, builder's film, and agricultural films such as bale wrap.



Hard Plastics:

- Milk Bottles
- Soft drink/Water Bottles
- Takeaway Containers
- Toiletry Bottles/Tubes (Shampoo, Moisturiser, Soap Dispenser)

Soft Plastics:

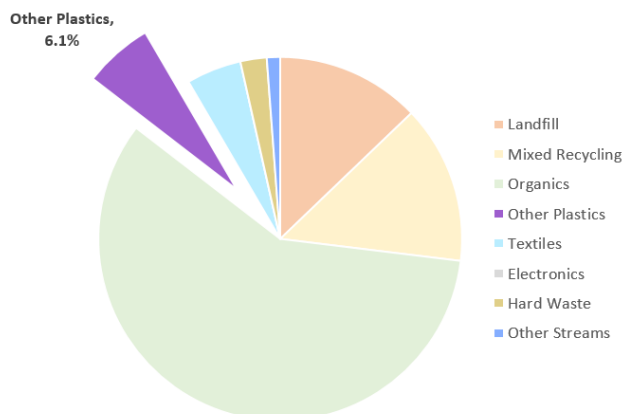
- Packaging Film
- Plastic bags
- Chip Packets
- Cling wrap
- Chocolate/Lolly Wrappers

Current Issues:

Single use plastics are a growing concern. On average, Australians use 65 kilograms of plastic per person each year, and one third of these are single-use plastics (DELWP, 2017). Single use plastics account for nearly 50% of marine pollution, with plastic bags, bottles and balloons among the most harmful pollutants threatening marine wildlife. (UN Environment Program 2018).

Soft plastics and bagged recycling are currently the leading cause of recycling contamination in kerbside recycling bins. Though a wide range of hard plastics are accepted in kerbside recycling bins, and can be easily separated from landfill, currently soft plastics can only be recycled through drop-off systems such as REDcycle. This relies heavily on user understanding and willingness to participate in the program.

Plastic pollution proves hazardous to one million seabirds and over 100,000 fish and marine mammals globally. In addition, plastic does not biodegrade, but breaks into smaller and smaller pieces becoming microplastic. The impact of these on the marine environment and the food chain is of major concern.



Current Performance:

Hard plastic items are accepted and can be recycled via the kerbside recycling bins.

There is currently no soft plastics accepted via the kerbside collection.

Soft plastics can be taken to drop off facilities at major supermarkets, however there is no available data for community uptake and use of this service.

Council deliver educational campaigns and workshops to encourage residents to avoid single use plastics and promote reusable alternatives.

Strategic Actions – Single Use Plastics

Short Term Actions (within next 3yrs)

No.	Hierarchy	Action	Detail	Approach
2.1	AVOIDANCE	Single Use Plastics Council Ban	Adopt a policy to prevent/ban the use of single use plastics such as disposable shopping bags, plastic straws and cutlery, balloons, disposable coffee cups/pods across Council operations and events.	Enforcement
2.2	AVOIDANCE	Single Use Plastic Prevention	Conduct educational program on preventing the use of single use plastics across the wider municipality/community.	Education
2.3	AVOIDANCE	Plastic Free July Campaign	Run workshops, events and campaign to support Plastic Free July and 'say no to the big four'.	Education
2.4	AVOIDANCE	Alternative products	Provide advice on alternative products to single use plastic products.	Education
2.5	AVOIDANCE	Plastic Bag Ban	Support traders in the implementation of the Victorian Plastic Bag Ban through education and awareness regarding alternatives.	Education
2.6	AVOIDANCE	Packaging education	Undertake education program for traders on avoiding excess packaging.	Education
2.7	AVOIDANCE	Waste Wise Business Precinct	Work with Traders to have a precinct where carry bags are not offered. Eg. 'Boomerang Bags' would be available instead.	Education & Advocacy
2.8	AVOIDANCE	Wash Against Waste Trailer	Investigate option to develop or support hire of a wash against waste trailer for events to avoid the use of single-use items at food festivals and events. <i>*Need to consider environmental health laws/requirements.</i>	Infrastructure
2.9	REUSE	Recycled Plastic Infrastructure	Introduce and prioritise the use of recycled plastic materials for new or replacement public place infrastructure within the municipality (i.e. park benches, street planter boxes, playground equipment, etc.)	Infrastructure
2.10	RECYCLING	Soft Plastics Drop-off Hubs	Work with a promote REDcycle soft plastic drop-off points.	Infrastructure

NOTE:

As the development and use of plastics is such a rapidly changing environment, Council have focused on immediate and short term actions within the next three years.

Further medium term strategic actions will be developed as the industry and recovery options for plastics develop.

7.2.3 Mixed Recycling

Mixed Recycling (Glass, paper, metals)

What is it:

Mixed recycling (or commingled recycling) is the standard kerbside recycling system used across Australia, where various types of recyclable items are collected in one bin. Rather than separating recyclable items by material (paper/cardboard, glass, aluminium, steel or plastic) these items are collected together.

This system relies on further sorting at a Material Recovery Facility in order to separate the different material types so that they can be recycled into further products.



Examples:

Glass: Bottles, jars etc.

Paper: Newspapers, letters, magazines etc.

Cardboard: Cereal boxes, packing boxes, egg cartons etc.

Metal: Steel cans etc.

Aluminum: Cans and trays etc.

Hard/rigid plastics: Plastic containers, shampoo bottles, fruit punnets etc.

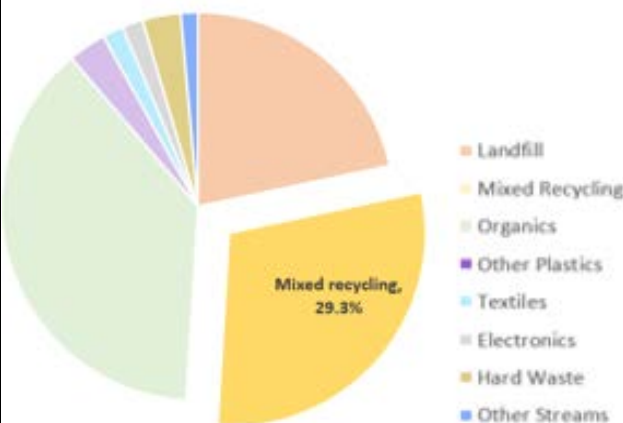
Current Issues:

While mixed recycling, or commingled recycling, is a convenient system for households, combining different types of materials in one bin leads to contamination, and relies heavily on a secondary sorting process.

One of the key issues with mixed recycling is that glass items smash in the bin during transportation and as they are compacted in collection trucks. This results in glass fines contaminating other types of material, particularly paper, which decreases the value and recyclability of these materials.

Many other countries around the world provide separate bins for each recycling stream (glass bin, paper bin, metals bin etc), which results in cleaner source separation and higher value for recycled materials.

Until 2018, Australia relied heavily on exporting recyclable materials to international markets. However, in 2018, China began to enforce restrictions on the importation of contaminated recycled materials under its National Sword Policy. This caused the value of recyclable materials to drop drastically, and without these markets, many Councils across Australia were forced to send their recyclables to landfill.



Current Performance:

Council's recycling service provider, VISY, continued to separate and recycle all items during the recycling crisis, no recycling loads have been sent to landfill, however the cost of recycling has increased for Council.

Like most Councils, Maribyrnong provides a fortnightly kerbside collection for commingled recycling bins across Council.

When compared with other metropolitan Councils, Maribyrnong has a comparatively low contamination rate of 8%, due to ongoing education programs. Key sources of contamination are soft plastics and bagged recycling.

Strategic Actions – Mixed Recycling (Glass, paper, metals)

Short Term Actions (within next 3yrs)

No.	Hierarchy	Action	Detail	Approach
3.1	AVOIDANCE	Waste reduction programs	Conduct ongoing community education program on avoiding excess purchasing, packaging and reducing waste.	Education
3.2	REUSE	Reuse and container refill promotion	Promote programs and develop campaign encouraging options to refill, repurpose and reuse containers.	Education & Advocacy
3.3	RECYCLING	Source separation	Investigate opportunities and best practice bin infrastructure to increase source separation in recycling.	Infrastructure
3.4	RECYCLING	Trial additional bins	Investigate viability of additional bins for increased source separation, such as separate bins for paper and cardboard, or glass.	Infrastructure
3.5	RECYCLING	Recycling App	Continue to update the A-Z search list and promote the Maribyrnong Bins & Recycling App to the wider community	Education
3.6	RECYCLING	Australasian Recycling Symbol	Promote the Australasian Recycling symbol as a tool to correctly sort and separate recyclable items and products.	Education & Advocacy
3.7	RECYCLING	Recycling education program	Run an ongoing education program and promotion of best recycling practices, including advice and translated materials for CALD communities.	Education
3.8	RECYCLING	Recycling education	Deliver recycling information and educational workshops at local schools, libraries, festivals and events.	Education
3.9	RECYCLING	Contamination education	Implement program to ensure contaminated recycling bins are notified and not collected. Include three strike clause in waste collection contract.	Enforcement
3.10	RECYCLING	Contamination enforcement	Implement follow up fine for households who continue to contaminate after receiving three strikes warning during collection.	Enforcement
3.11	RECYCLING	Signage and education	Develop and install point of use waste and recycling signs for MUD waste and recycling storage areas.	Education
3.12	RECYCLING	Container Deposit Scheme	Continue to advocate for introduction of State Container Deposit Scheme and investigate viability for municipal level Container Deposit Scheme.	Advocacy
3.13	RECYCLING	Public Place Recycling Bins	Identify suitable locations to install and expand use of Public Place Recycling Bins.	Infrastructure
3.14	RECYCLING	Trial public place source separation	Investigate opportunities and trial use of source separation bins in public places/events.	Infrastructure
3.15	RECOVERY	Support local recycling industry	Adopt policy for Council to reuse material content such as glass fines in public infrastructure and construction works.	Advocacy

7.2.4 Electrical Waste

Electrical Waste

What is it:

E-waste, or electrical waste is a popular, informal name for electronic products nearing the end of their useful life. E-waste specifically refers to any electronic or electrical equipment which uses a plug, battery or cord that is no longer working or wanted.



Examples:

- Phones
- Computers / Laptops / iPads
- Keyboards / Mouse / Monitor
- Televisions
- Whitegoods (Fridge, Vacuum, Microwave)
- Gaming Consoles
- Remote Control Cars / Drones
- Digital Watches
- Electronic Tools (Drills, Sewing Machines)
- Appliances (Hairdryers, Electric mixer, Blender)

Current Issues:

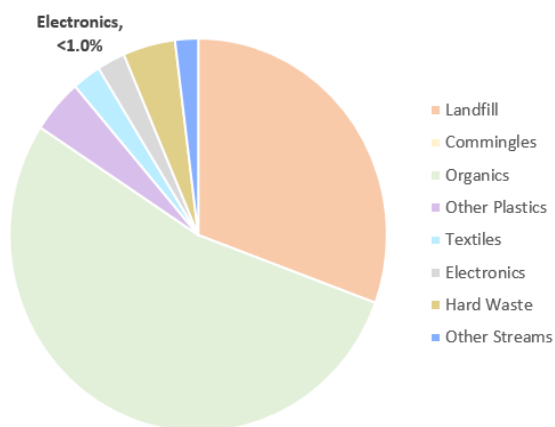
Australians are among the highest users of technology, and e-waste is one of the fastest growing types of waste in Australia (ABS, 2018).

E waste items are not suitable for kerbside commingled recycling collection, and due to the rapid consumption and obsolescence of electrical items, many of these end up in landfill as a result.

E-waste can contain hazardous materials including heavy metals and glass which if broken or damaged pose an unacceptable environmental hazard.

Around 90% of what is used to make electrical items such as televisions and computers can be recycled, saving valuable, finite resources.

In July 2019, the Victorian Government passed legislation banning all e waste from going to landfill.



Current Performance:

Council currently provides a service to collect and recycle electrical waste via free drop off points throughout the City, and via a booked collection service called 'Thread Collect', which incorporates both clothing and electrical waste.

Since the installation of the clothing and electrical drop off hubs, over 93,278 kg of clothing and textiles have been diverted from landfill. In addition to saving \$15,275.10 in landfill fees, this also represents a reduction of 6,037,284 kg of greenhouse gases.

E waste collected from Council's hard waste service is also separated for recycling.

Data is not available for the quantity of e-waste which is taken to neighbouring transfer stations.

Strategic Actions – Electrical Waste

Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
4.1	AVOIDANCE	E Waste avoidance campaign	Run campaign on smart purchasing, understanding the lifetime of products and planned obsolescence.	Education
4.2	REUSE	Reuse Initiatives	Promote initiatives for the reuse and repair of electrical items and products such as Repair Cafes, Buy Swap Sell groups and garage sales.	Advocacy
4.3	RECYCLING	Promote E Waste Ban	Continue to promote and inform residents of the e-waste ban and local opportunities to recycle e waste.	Enforcement
4.4	RECYCLING	Review Drop-off Hub Locations	Review the existing electrical drop-off hubs throughout the municipality to ensure residents are aware of their locations and potentially improve accessibility. Investigate increasing the number of locations if gaps are identified.	Infrastructure
4.5	RECYCLING	E-waste Recycling Campaign	Launch educational campaign to provide clarity on what e-waste is and how to dispose of it appropriately. Advertise appropriate drop-off locations, take-back facilities etc.	Education
4.6	RECYCLING	E-waste Drop off Map	Develop e-waste collection point map including all locations to drop off e waste across the municipality and deploy on website and app.	Education
4.7	RECYCLING	E-waste Kerbside Collection & Recycling Service	Further promote existing kerbside electrical recycling booked collection service	Infrastructure
Medium Term Actions (within next 5yrs)				
	Hierarchy	Action	Detail	
4.8	RECOVERY	Innovative E-waste Technology	Investigate opportunities to support advanced e-waste recovery technologies within the municipality.	Infrastructure

7.2.5 Hard Waste

Hard Waste

What is it:

Hard waste typically describes waste that is either too large to be disposed of through standard bins (such as furniture) or has specific disposal requirements. This includes bulky items such as old or broken furniture, fridges, washing machines, mattresses, and household items.



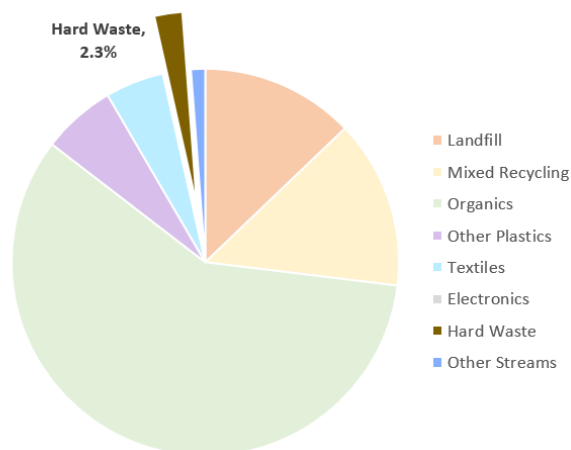
Examples:

- Furniture (Tables, Chairs, Shelving, Couches)
- Mattresses and Bed Frames
- Bicycles
- Fridges
- Broken kitchen Appliances
- Television sets
- Large Toys
- Tools
- Garden Equipment

Current Issues:

While Council provide a free hard waste collection service to residents, lack of awareness about the service, or perceived inconvenience of arranging a collection can lead to illegal dumping, where residents dump items in public areas. Illegal dumping of waste causes health and safety risks for both people and the natural environment.

Due to the mixed nature of items categorised as hard waste, it is also difficult to separate and recycle useful components of this waste stream. Steel and mattresses are easier to recover, whereas composite materials, or poorly manufactured furniture do not currently have high value, and are therefore difficult to recycle.



Current Performance:

Council offer a free booked annual hard and garden waste collection service for residents, and collect approximately 1200 tonnes of hard waste each year.

Residents of registered multi-unit dwellings are offered a monthly or at call service, provided sufficient space is available within the property.

Council contracts require that mattresses be collected separately for recycling. Metal waste and e-waste are also separated and recycled from hard waste collections and diverted from landfill.

Strategic Actions – Hard Waste

Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
5.1	AVOIDANCE	Product Stewardship programs and education	Advocate for expanded Product Stewardship schemes for hard waste items (eg. car seats) to avoid disposal, and educate community on how to avoid and reduce hard waste.	Advocacy & Education
5.2	REUSE	Buy Back / Tip Shop promotion	Investigate and promote nearby buy-back/tip shop (i.e. second hand shop) facilities where residents can drop-off reusable goods.	Infrastructure & Education
5.3	REUSE	Reuse Initiatives	Better promote initiatives for the reuse of hard waste items such as Buy it Back Day, Flea Markets, Garage Sales, Buy Swap Sell Social Media Groups and Clothing Swaps.	Education
5.4	REUSE	Reuse Workshops and Education Events	Include repair and reuse workshops in the Sustainable Living program which help residents to repair and reduce items to avoid generating hard waste.	Education
5.5	RECYCLING	Hard waste collection and recycling	Investigate options to expand list of materials collected and recycled from hard waste, eg. electrical items, fridges, mattresses, metals etc.	Infrastructure
5.6	RECOVERY	Hard waste service promotion	Develop campaign to promote the at-call hard waste service and attract new users. Include information and translations for CALD communities	Education
5.7	RECOVERY	Real Estate Agents Booklet	Work with other Councils in the western region to develop a Councils of the West waste management booklet for real estate agents to provide to new tenants.	Education
5.8	RECOVERY	Alternative collection options/permits for MUDs	Explore alternative collection arrangements/skip hire for MUDs where space is too limited for a registered hard waste collection.	Infrastructure
Medium Term Actions (within next 5yrs)				
	Hierarchy	Action	Detail	
5.9	REUSE	Student furniture swap promotion	Work with Victoria University to develop and promote a furniture swap event for students.	Education
5.10	RECYCLING	High turnover residences Move In/Move out Services	Investigate option to develop tailored hard waste collection services to student accommodation and boarding facilities that repeatedly have high turnover of occupants on an annual basis, resulting in high quantities of hard waste.	Infrastructure

7.2.6 Litter

Litter

What is it:

Litter refers to items of rubbish that have been left in public areas, such as in parks or public streets. These items can be intentionally left, or may occur as a result of overflowing bins or animal interference.

Items of litter find their way into storm water drains and waterways during rainfall events, and ultimately wash out to sea, causing marine pollution.

**Examples:**

- Empty bottles and cans
- Cigarette butts
- Plastic wrappers
- Fast food containers
- Plastic bags
- Dog waste
- Plastic bottles
- Balloons
- Chewing gum wrappers
- Broken glass
- Bottle caps

Current Issues:

Litter poses a significant and growing risk to both human and environmental health. Litter dropped on streets, road-sides and public areas is washed or blown into creeks and rivers, polluting land, waterways and ocean environments. It is also the cause of great harm and suffering to the animals that ingest littered items or become entangled in them.

Litter not only pollutes the environment, it also diminishes our enjoyment and value of public places by making our city appear dirty and uncared for.

Cigarette butts and plastic items are among some of the most common and high risk forms of litter. Approximately 20 million cigarette butts are littered in Australia every day, and based on current projections, it has been estimated that there will be more plastic in the ocean than fish by the year 2050.

Current Performance:

Council provide cleansing services including street sweeping, provision and management of public place landfill and recycling bins, ongoing monitoring of litter hotspots, and dumped rubbish investigation as part of their City amenity and Waste Management services.

Council also facilitate and promote clean up events for the community, and monitor a number of litter traps, tree pits and gross pollutant traps throughout the municipality.

Strategic Actions – Litter

Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
6.1	AVOIDANCE	Anti-litter campaign, bin wraps and signage	Renew and expand the use of anti-litter bin wraps and signage in public areas to discourage littering and promote responsible care for the environment in parks and open spaces.	Education
6.2	AVOIDANCE	Illegal dumping campaign	Identify areas with high incidence of littering and illegal dumping and run targeted education and enforcement campaign to investigate and fine offenders.	Enforcement
6.3	AVOIDANCE	Public Place Bin policy	Review current location of public bins and develop a Policy and Strategy to ensure new bins are installed in high need places, including waterfront locations to reduce the incidence of litter.	Infrastructure
6.4	AVOIDANCE	Overflowing and full bins	Map recurring incidences of overflowing and regularly full bins, consider increasing the frequency of collection in certain shopping precincts to improve city amenity and visitor experience.	Infrastructure
6.5	AVOIDANCE	Trial Solar compacting bins	Investigate suitable locations to trial solar compacting bins, such as high use parks and public spaces, to reduce the incidence of overflow and litter.	Infrastructure
6.6	AVOIDANCE	Investigate litter prevention aids and bin designs	Investigate options to install litter prevention aids along waterways, such as barriers, litter traps and new bin designs which prevent overflow and animal-interference.	Infrastructure
6.7	AVOIDANCE	EP Act	Ensure Council meet and fulfill our duties and obligations to prevent, investigate, manage and enforce litter and pollution events as per the Environment Protection Act Amendment	Enforcement
6.8	REUSE	Expand and promote use of water drinking stations	Advocate and promote the use of refillable water bottles, and promote public water stations to reduce plastic bottle litter.	Education
6.9	RECYCLING	Support local clean up groups	Develop program to support local clean up groups by providing materials and bins for litter collected.	Advocacy
Medium Term Actions (within next 5yrs)				
6.10	AVOIDANCE	Expand use and location of litter traps	Investigate litter hotspots and appropriate locations to install litter traps to prevent storm water pollution and collect data on types and quantities of materials collected.	Infrastructure
6.11	AVOIDANCE	Develop litter source reduction plans	Based on data from local litter traps, identify key types of litter entering the waterway and develop targeted source reduction plans.	Education

7.2.7 Other Streams

Other Streams

What is it:

Other waste streams refer to items that are not typically recycled by municipal collection services but still have the ability to be processed or repurposed as a separate stream. These items tend to occur in smaller quantities by weight, however can have large environmental impacts. For example, polystyrene, batteries, ceramics and nappies.



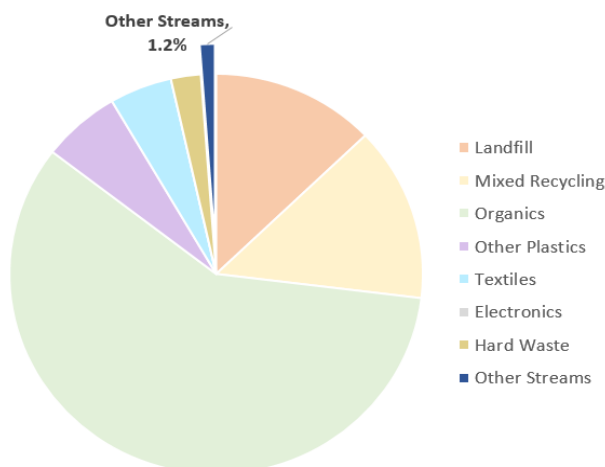
Examples:

- Textiles
- Polystyrene (EPS)
- Batteries
- Cooking Oil
- Engine Oil
- Coffee Pods
- Ceramics / Crockery / Pyrex
- Nappies
- Light bulbs
- CDs and DVDs
- VHS tapes
- X Rays
- Corks
- Paint
- Tyres

Current Issues:

While these waste streams are often easily identified, they are not always as easily disposed of. Furthermore, the available information on how to appropriately recycle these items is confusing and inconsistent.

Commercial industries are currently leading in the recovery, separation and recycling of these streams as it is easier for them to separate at source, and they typically deal with higher volumes and regular turnover. The challenge is how we can improve the separation of these waste streams at a domestic level where volumes are low and infrequent.



Current Performance:

Council support or have established drop off locations for some of the items above, including clothing and textile waste, however many of the items listed above can only be taken to specialist drop off points or transfer stations.

Council do not operate a transfer station within our boundary. However, both the Moonee Valley and Citywide transfer stations are within a few kilometres of the City of Maribyrnong.

Use of the transfer stations by City of Maribyrnong residents is unknown.

Strategic Actions – Other Streams

Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
7.1	AVOIDANCE	Reusable coffee cup promotion	Run a promotion promoting the cafes/restaurants which offer a discount to customers using a reusable coffee cup	Advocacy
7.2	AVOIDANCE	Reusable nappy and sanitary item promotion	Promote alternatives to disposable nappies and sanitary items, such as cloth nappies, moon cups and nappy cleaning services.	Education & Advocacy
7.3	REUSE	Retail Crates	Investigate options to support private crate recollection services in key business districts	Infrastructure
7.4	REUSE	Sewing groups and textile reuse	Promote local sewing groups, such as the Boomerang Bag movement and weekly Council-run sewing classes to encourage the repair and reuse of clothing	Education & Advocacy
7.5	RECYCLING	Central alternative recycling hubs	Establish and promote collection hubs in the community for hard to recycle items, e.g. VHS tapes and DVDS, batteries, X rays, light bulbs etc.	Infrastructure
7.6	RECYCLING	Develop recycling near me map	Develop and deploy recycling near me map for hard-to-recycle items (batteries, cartridges, e waste etc) and include on website and app.	Education
7.7	RECYCLING	Drop-off Hub Locations	Review the existing clothing drop-off hubs throughout the municipality to ensure residents are aware of their locations and potentially improve accessibility.	Infrastructure
7.8	RECYCLING	Clothing Recycling Service	Expand and promote existing Thread Collect clothing recycling service	Infrastructure
7.9	RECOVERY	Home Detox	Facilitate programs that provide for the safe disposal and recovery of highly toxic, unwanted household chemicals such as solvents, poisons, and cleaning products via collection facilities and campaigns.	Infrastructure
Medium Term Actions (within next 5yrs)				
	Hierarchy	Action	Detail	Approach
7.10	AVOIDANCE	Promote alternative products as these emerge	Monitor development of alternative products and continue to promote these to the community.	Advocacy & Education
7.11	RECOVERY	Polystyrene Melter	Investigate opportunities for Council to implement polystyrene melter in combination with polystyrene collection hub.	Infrastructure

7.3 Commercial Waste

Strategic Actions – Commercial waste				
Short Term Actions (within next 3yrs)				
No.	Hierarchy	Action	Detail	Approach
8.1	AVOIDANCE	Food Organics Reduction	Undertake education program for traders on avoiding excess food organics waste. Including shelf life and ordering.	Education & Advocacy
8.2	AVOIDANCE	Waste Wise Business Program	Develop Waste Wise Business program to identify and promote local businesses who undertake measures to reduce waste	Advocacy
8.3	REUSE	Food Organics Sharing	Connect traders with charity partners who can redistribute excess usable food within municipality.	Education & Advocacy
8.4	RECYCLING	Coffee Grounds Recycling	Encourage cafes/restaurants to recycle their ground coffee waste via service provider such as reground.	Advocacy
8.5	RECYCLING	Business Recycling Advice	Develop and promote resources, signage and information for specific business categories and how they can avoid and manage waste properly.	Education
8.6	RECYCLING	Commercial food waste collection trial	Trial a food waste collection service for commercial areas with a high proportion of food related businesses.	Infrastructure
8.7	RECYCLING	Trader Recycling Hubs	Investigate option to establish trader recycling hubs for food organics, cardboard and recycling	Infrastructure
8.8	RECYCLING	Waste Compliance	Work with traders to ensure waste areas are compliant with local laws and waste management plans.	Enforcement
8.9	RECYCLING	Contamination enforcement	Implement follow up fine for commercial businesses who continue to contaminate after receiving three strikes warning during collection.	Enforcement
8.10	RECYCLING	Cardboard Collection	Expand the weekly cardboard collection program in Seddon and Footscray, to include other key business districts, Yarraville and West Footscray Ensure this program is widely publicised to encourage participation.	Infrastructure

7.4 Public Realm and Construction Materials

Two of the Goals in section 6 include the City of Maribyrnong leading by example and using recycled content in both construction contracts and as assets in the public realm.

Council construction contracts to increase requirement for recycled content target 25% recycled content by 2022.

Council assets to increase requirement for recycled content by 25% by 2022.

Consideration for the reuse of recycled materials within public infrastructure and services, including but not limited to:

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Plastic ▪ Tyres ▪ Glass ▪ Bitumen | <ul style="list-style-type: none"> ▪ Concrete ▪ Rubber ▪ Timber |
|--|--|

Figure 7 Examples of recycled materials in Construction and Public Realm



Recycled Plastic Furniture - Photos from Replas



Recycled Rubber Roundabout - Photo from Traffic Products Australia

7.5 Other Opportunities

In order to achieve our targets and transition to zero waste, Council must anticipate and respond to emerging changes in the waste management industry.

This is a rapidly changing space, with new technologies and opportunities developing in recycling technology, source separation, and processing facilities. These new developments will, in turn, impact our options and methods for managing waste, and Council must be prepared to respond accordingly.

The table below outlines key actions that Council will take to respond to changes in the industry, ensure we continue to manage waste in an environmentally responsive way, and empower our community to do the same.

All actions will be achieved within the next 3-5 years.

INFRASTRUCTURE & SERVICES			
Short Term Actions (within next 3 years)			
No.	Hierarchy	Action	Detail
9.1	AVOIDANCE	Pay-To-Landfill	Investigate options to adopt a weight-based fee structure for residual waste in the landfill bin. This encourages residents to avoid excessive waste generation.
9.2	RECYCLING	Kerbside Collection Optimisation	Investigate options to optimise or encourage greater diversion from landfill by enhancing municipal kerbside recycling services, e.g. greater source separation through provision of additional bins to separate glass/paper and/or more efficient contracting options.
9.3	RECYCLING		Review collection frequencies of all kerbside bins as material moves from landfill bin into alternate bins or drop off locations.
EDUCATION & ENGAGEMENT			
Short Term Actions (within next 3 years)			
9.4	AVOIDANCE	Waste Education Strategy	Facilitate educational/marketing tools and programs to promote best practice social/behavioural changes to encourage residents and businesses to avoid, reduce, reuse, recycle and compost.
9.5	AVOIDANCE	Zero Waste Venues & Events	Adopt and implement zero waste goals and action plans to encourage public and private venues and events. Provide information and assistance to venue and event coordinators, including examples of displays and appropriate signage.
9.6	AVOIDANCE	Sustainable Business Promotion	Promote and/or reward zero waste businesses. Eg. Cities of Stonnington and Yarra – Green Businesses Program Explore options to introduce a new category to Council's civic award program for most sustainable or environmentally-focused business.
ENFORCEMENT			
Ongoing Actions			
9.7	AVOIDANCE	Registration of Private Waste Contractors	Develop a register of all private waste collection contractors that service the municipality. Request biannual data reports to enable improved tracking of waste quantities and movement to enable development of actions to address private waste collections.

ENFORCEMENT			
Ongoing Actions			
9.8	AVOIDANCE	EP Act compliance	Ensure Council understand and fulfil our duties and obligations to prevent, manage, investigate and enforce against litter and pollution events as per the Environment Protection Act Amendment (2018).
PLANNING			
Short – Medium term action (within next 3 – 5 years)			
9.9	AVOIDANCE	Planning Scheme Requirement	Introduce waste and recycling requirement into Section 22 of the Maribyrnong Planning Scheme including requirements for Waste Management Plan (WMP) similar to Sustainability Management Plan (SMP) requirement.
ADVOCACY			
Short – Medium term actions (within next 3 – 5 years)			
9.10	AVOIDANCE	Sustainable Procurement Policy for Businesses	Develop a procurement policy template for businesses to use to reduce consumption and enable the purchase of sustainable goods and equipment.
9.11	AVOIDANCE	Product and Packaging Redesign	Promote the use of sustainable packaging campaigns to local businesses to reduce or eliminate non-reusable packaging and service-ware from their operations and retail stock.
9.12	AVOIDANCE	Lead by Example – Zero Waste Procurement	Incorporate Zero Waste objectives into Council contractual purchases and services, e.g. avoiding purchase of disposable goods, minimal waste in product and packaging design, product take-back services, and lifecycle analysis.
9.13	AVOIDANCE	Landfill Ban – Organics	Promote the diversion of organics from landfill. Advocate for government policy relating to food organics ban from landfill.
DATA & REVIEW			
Annual ongoing actions			
9.14	AVOIDANCE	Waste Audits	Undertake annual waste audits to track performance and identify areas for improvement.
9.15	AVOIDANCE	Analysis of Audit Result	Prepare strategic actions to address waste audit results in particular waste going to landfill.

8. Evaluation & Review

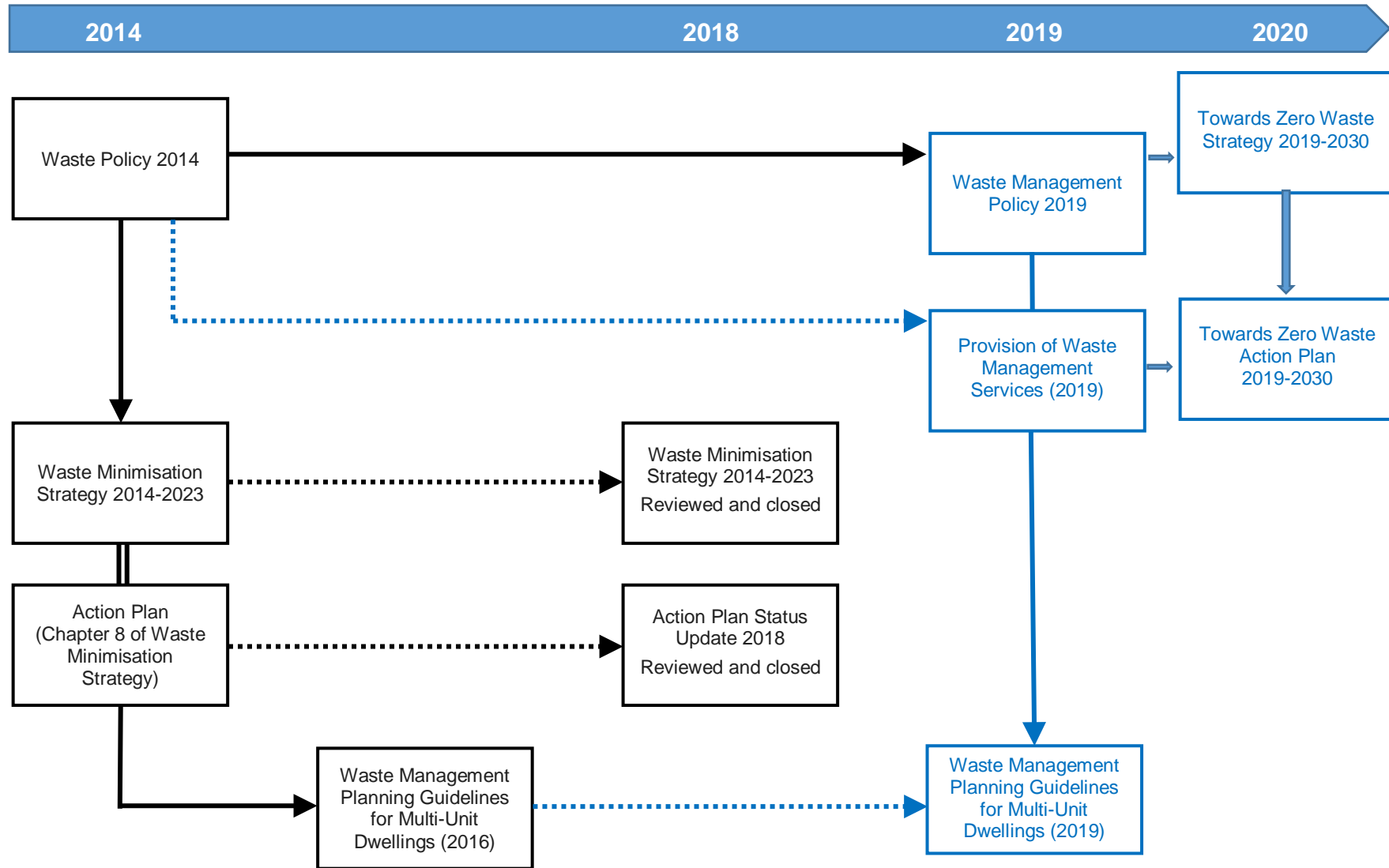
It is the responsibility of the organisation for ongoing review of this Strategy and related documentation.

Length of relevance: 5 years

Responsible Department: Infrastructure Services

Refer to Appendix A for further details.

Appendix A – Council Waste Documentation History



Appendix B – Waste Management Hierarchy

A definition of each waste management hierarchy outcome is outlined as follows:

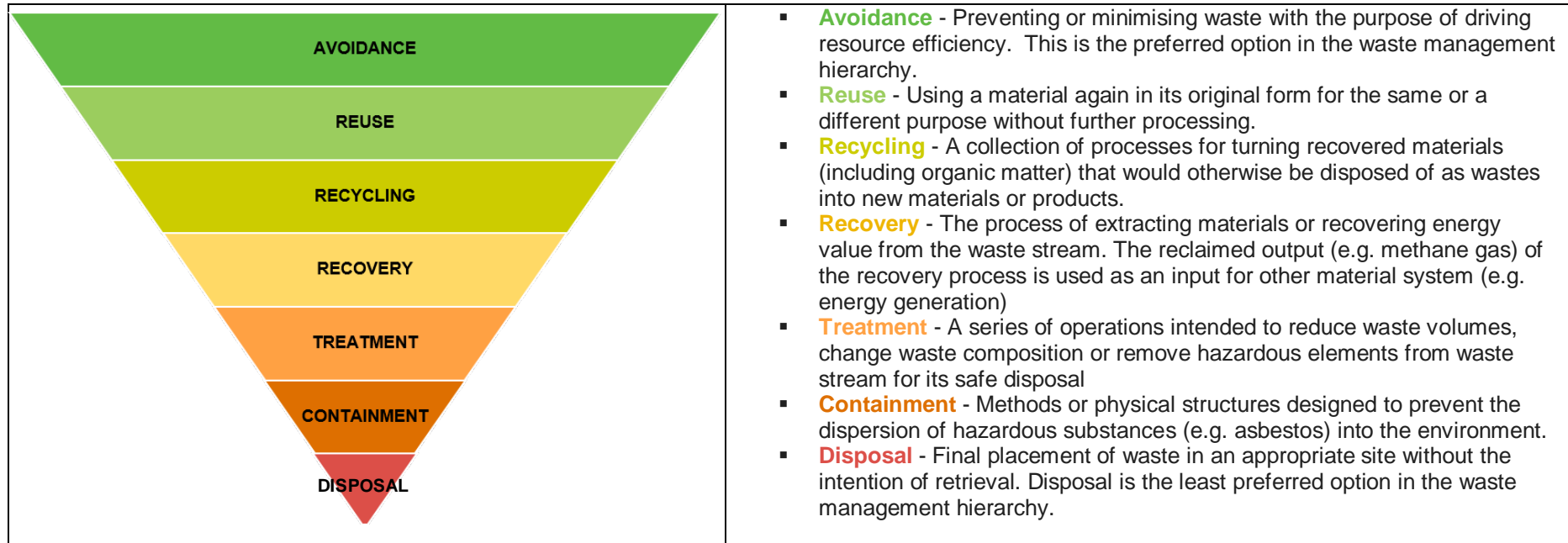


Figure 8 EPA Victoria Waste Management Hierarchy

Appendix C – Glossary of Terms

Word / Phrase	Definition
Biodegradable	Refers to products with accelerated degradation due to additive or organic base components. Note: the terms biodegradable and compostable are not synonymous. Not all biodegradable products fully decompose in the environment.
Collection	The emptying of receptacles of waste from a designated space, and the subsequent transportation and disposal of that waste.
Collection Contractor	A hired service to collect waste.
Commingled Recycling	Recyclables that are mixed together in the collection truck, instead of being sorted by individuals (e.g. paper, cardboard, plastic bottles, metal cans etc.).
Compostable	Ability of a material to completely decompose within a composting cycle. Compostable products are made of plant starch that returns to base organic components when adequately composed.
Composting	The controlled process whereby organic materials are pasteurised and microbiologically transformed under specific thermal and oxygen conditions to produce a final nutrient-rich product: compost
Construction and Demolition Waste (C&D)	Refers to the waste that arises from activities linked to residential and commercial construction, demolition or refurbishment of infrastructure.
Contamination	Inappropriate or unwanted waste material located in a bin (e.g. general waste placed in a recycling bin).
Decompose	Refers to the process whereby organic matter is broken down into smaller organic components, eventually returning nutrients to the soil.
Degradable	Capable of breaking down into smaller pieces. The term degradable and biodegradable are often used interchangeable. However, neither of these terms necessarily mean a material is compostable. See compostable.
Drop-off Centre	Waste collection facility for the temporarily holding of specific waste types (e.g. e-waste drop-off points/centres)
Flexible (or Soft) Plastics	Type of plastic that can be easily scrunched into a compact mass and does not return to its original shape.
FOGO	Food Organics and Garden Organics. This term describes the combined collection of food waste, such as kitchen scraps, and garden waste, such as lawn clippings, in the lime green lidded waste bin.
Landfill (General Waste)	Materials not able to be recycled, reused or composted.
Hard Waste	Waste that is either too large to be disposed of through standard bins (such as furniture) or has specific disposal requirements.
Leachate	A liquid that has percolated through a solid and/or been generated as a by-product of the decomposition of waste material.
Medical / Prescribed Waste	Potentially infectious waste materials generated from health care activities. Includes hospitals, clinics and first aid rooms (e.g. needles-sharps, gloves, bandages).
Municipal Solid Waste	Any solid waste generated from commercial and/ or residential activities that is collected by, or on behalf of a municipal council, but does not include any industrial waste
Receptacles	A container (waste bin) for temporarily storing of waste.
Recycling Rate	The proportion of materials recycled as a percentage of total waste.
Reuse	Materials that are recovered to be reused in current form: e.g. cardboard boxes reused in art programs.
Recyclables	Materials that are recovered and converted into reusable materials. These include the following streams:

Word / Phrase	Definition
Paper	Waste from paper based items (e.g. unwanted print outs, used notepads, etc.).
Cardboard	Waste from cardboard based items (e.g. stationary packaging, toilet rolls, food packaging, etc.).
E-waste	Electronic or electrical equipment (typically has a power supply or contains batteries).
Garden Waste	Residual organic material from a typical garden/lawn (e.g. leaves, sticks, branches, grass clippings).
Food Waste	Residual organic material from food scraps (e.g. banana peel, apple core, eggshells, leftovers, etc.).
Organic Waste	Waste composed of food waste and garden waste.
Rigid Plastics	Hard or flexible plastic that when squashed or crunched tries to return back into its original shape.
Secure Paper	Unwanted paper for shredding or recycling containing information that the user may not want to disclose.
Transfer Station	A depot for the reception and aggregation of waste streams prior to their transport to a processing facility for additional sorting, recycling or disposal.
Waste	Any item which is discarded after use.
Waste and Resource Recovery Education	Any program, activity, project, or strategy that seeks to increase awareness of appropriate waste handling and strengthen Maribyrnong's waste and resource recovery.
Waste Generation Rates	The measurement of waste generated from a particular source. Typically measured in volumes or weight against time e.g. litres per resident per week (L/resident/week).
Waste Management Plan	A document detailing the waste management operations of a site (including details such as storage provisions, collection arrangements and appropriate material separation).
Waste Hierarchy	The order of priorities for the efficient use of resources and waste minimisation.

Appendix D – Legislative Context

The Towards Zero Waste Strategy 2019 - 2030 has been developed in the context of Federal, State and Local Government Plans, Policies and Regulations for waste management and resource recovery, including:

- Maribyrnong City Council Plan 2017-2021
- Maribyrnong Council Waste Management Policy 2019
- Metropolitan Waste and Resource Recovery Implementation Plan 2016: Key strategic objectives to:
 - Reduce waste sent to landfill
 - Increase organic waste recovery
 - Deliver community, environmental and economic benefits
 - Plan for Melbourne's growing population.
- Statewide Waste and Resource Recovery Infrastructure Plan 2017-46
- Department of Environment, Land, Water and Planning's Recycling Industry Strategic Plan
- Getting Full Value: the Victorian Waste Policy;
- National Waste Policy: Less waste more resources 2018
- Local Government Act 1989
- Environmental Protection Act 1970 (2018 Amendments)

Environment Protection Act – 2018 Amendments

In 2018, the Environment Protection Amendment Act 2018 passed the Parliament of Victoria and will take effect from 1 July 2020. These reforms represent the most significant changes to Victoria's environmental regulatory regime since the introduction of the Environment Protection Act 1970.

The new legislation adopts a preventive and duties-based approach to environmental protection and imposes a General Environmental Duty (**GED**) on Victorian business, industry and the community to prevent and reduce risks to human health and environmental harm. This covers risks from waste management activities, from generation through to disposal.

In addition to the General Environmental Duty, the Amending Act will establish a new permissions scheme for licences, permits and other permissions, and new civil penalties and remedies. The legislation also introduces specific waste duties to address the risks and complexities of waste. These duties apply to any organisations that generate, transport or receive industrial waste.

How will the new legislation impact Council?

The key provisions relating to waste are contained in Chapter 6 of the Act.

One of the key changes introduced as part of the new legislation is the classification of waste. Under the Act, waste can be either industrial waste or both industrial and priority waste. Once a waste is classified as industrial, this classification determines what duties apply to the management of the waste.

Industrial waste includes household waste once it is gathered at a waste facility (e.g. transfer station, landfill). As Maribyrnong City Council do not own or operate any transfer stations, recycling facilities or landfill sites where such waste is deposited, Council do not currently manage industrial waste or priority waste.

A key requirement of the Act, however, is that all industrial waste must reach a site that is lawfully able to receive it, Council must therefore ensure that our waste collection and processing contracts with service providers meet the requirements for the safe transport, management and disposal of waste in accordance with the EP Act.

Other proposed changes in the legislation, which will impact the identification and penalties relating to litter and dumping include:

- Changes to the definition and identification of 'litter' by quantity (<50L), and changes to penalty units and fines associated with littering events: 20/100 p.u. Infringement: 2/10 p.u. \$322/\$1 610
- Changes to the definition and identification of 'dangerous litter', as a priority waste classification, with 60/300 p.u. Infringement 4/20 p.u. \$644/\$3 220
- Changes to definition and identification of 'dumping' by quantity (>50L but <1000L) and changes to penalty units and fines: 100/500 p.u. Infringement: 6/30 p.u. \$966/\$4 830
- Changes to the 'waste abatement notice' as a remedial tool, now broadened to incorporate:
 - Unlawful litter/dumping
 - Deposited waste in a way as to make the premises or place disorderly or detrimentally affect its proper use
 - Engaging in or proposing to engage in an activity that causes either of the above
 - Deposit that causes risks of harm to human health or the environment

The legislation also provides for duties relating to Pollution Incidents which incorporates a duty to take action to respond to harm caused by a Pollution Incident, and a duty to notify the EPA of Notifiable Incidents.

Council must ensure that such Pollution Incidents are reported to the EPA in accordance with the new legislation.

The proposed legislation will also has implications for Council operations with regard to the management and duties relating to contaminated land and soil. However these impacts are not within the scope of this Strategy.