MINUTES

CERTIFICATION OF CONFIRMATION OF WASTE ADVISORY COMMITTEE MINUTES

13 FEBRUARY 2020

I, Cr Steve Wolff hereby certify that the minutes from the Waste Advisory Committee Meeting held on 13 February 2020 pages (1) to (102) were confirmed at a Committee meeting held on 5 March 2020.

Signature

Cr Steve Wolff
Person presiding at Meeting

WASTE ADVISORY COMMITTEE

MINUTES

13 February 2020

(REF: D2020/00688)

A meeting of the Waste Advisory Committee was held at the EMRC Administration Office, 1st Floor, 226 Great Eastern Highway, BELMONT WA 6104 on **Thursday, 13 February 2020.** The meeting commenced at **5:00pm**.

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1 DECLARATION OF OPENING AND ANNOUNCEMENT OF VISITORS

The Chairman opened the meeting at 5:00pm, welcomed visitors and Ms Zara Pedder, Manager Quality and Environment from the Southern Metropolitan Regional Council (SMRC) and acknowledged the traditional custodians of the land on which the meeting was held and paid respects to the elders past, present and future.

2 ATTENDANCE, APOLOGIES AND LEAVE OF ABSENCE (PREVIOUSLY APPROVED)

Committee Members

Cr Steve Wolff (Chairman)	EMRC Member	City of Belmont
Cr Mel Congerton (Deputy Chairman)	EMRC Member	City of Swan
Cr Kathryn Hamilton	EMRC Member	Town of Bassendean
Cr Giorgia Johnson	EMRC Member	City of Bayswater
Cr Dylan O'Connor	EMRC Member	City of Kalamunda
Cr Doug Jeans	EMRC Member	Shire of Mundaring
Mr Brice Campbell *(Deputising for Mr Adams)*	Recycling & Waste Coordinator	Town of Bassendean
Mr Mike Worthington *(Deputising for Mr Pearson)*	Manager Environmental Health	City of Bayswater
Mr Steve Morrison *(Deputising for Ms Reid)*	Manager Works	City of Belmont
Mr Brett Jackson	Director Asset Services	City of Kalamunda
Mr Shane Purdy	Director Infrastructure Services	Shire of Mundaring
Mr Jim Coten	Executive Manager Operations	City of Swan
Mr Marcus Geisler	Chief Executive Officer	EMRC

Apologies

Cr John Daw	EMRC Member	Shire of Mundaring
Mr Phillip Adams	Executive Manager Infrastructure	Town of Bassendean
Mr Doug Pearson	Director Works and Infrastructure	City of Bayswater
Ms Melanie Reid	Director Infrastructure Services	City of Belmont

EMRC Officers

Mr Stephen Fitzpatrick	Chief Project Officer
Mr Hua Jer Liew	Chief Financial Officer
Mrs Wendy Harris	Chief Sustainability Officer
Mr Stephen Conway	Manager Engineering & Waste Services
Mrs Annie Hughes-d'Aeth	PA to Chief Financial Officer/Council Support (Minutes)

Visitor(s)

Ms Zara Pedder	Manager Quality and Environment, Southern Metropolitan Regional Council (SMRC)

3 DISCLOSURE OF INTERESTS

Nil

4 ANNOUNCEMENTS BY THE CHAIRMAN OR PRESIDING MEMBER WITHOUT DISCUSSION

Nil

5 PETITIONS, DEPUTATIONS AND PRESENTATIONS

A presentation was be provided at Item 11.1 – 2019 Waste Audit Results by Ms Zara Pedder, Manager Quality and Environment from the Southern Metropolitan Regional Council (SMRC).

6 CONFIRMATION OF MINUTES OF PREVIOUS MEETINGS

6.1 MINUTES OF THE WASTE ADVISORY COMMITTEE MEETING HELD ON 21 NOVEMBER 2019

That the Minutes of the Waste Advisory Committee meeting held on 21 November 2019 which have been distributed, be confirmed.

WAC RESOLUTION(S)

MOVED CR CONGERTON SECONDED CR JEANS

THAT THE MINUTES OF THE WASTE ADVISORY COMMITTEE MEETING HELD ON 21 NOVEMBER 2020 WHICH HAVE BEEN DISTRIBUTED, BE CONFIRMED.

CARRIED UNANIMOUSLY

7 QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN

Nil

8 QUESTIONS BY MEMBERS WITHOUT NOTICE

Mr Purdy noted that the proposal for the Container Deposit Scheme (CDS) failed twice when presented to the EMRC Council and asked if there was any intention to pursue further.

The CEO provided an update to the meeting regarding the CDS and advised that WARRRL has approached other organisations for the refund and aggregation points.

Cr Johnson queried the process of recording the votes.

The CEO advised that this can be accommodated at the request of Councillors following each vote.

Cr O'Connor queried whether the restructure of the executive team was in place.

The CEO confirmed this as was previously advised at the briefing session on 30 January 2020. The CEO advised that the Chairman and Deputy Chairman were consulted and in agreement and an update would be presented to the CEOPRC.

9 ANNOUNCEMENT OF CONFIDENTIAL MATTERS FOR WHICH MEETINGS MAY BE CLOSED TO THE PUBLIC

Nil

10 BUSINESS NOT DEALT WITH FROM A PREVIOUS MEETING

Nil

11 REPORTS OF EMPLOYEES

11.1 2019 WASTE AUDIT RESULTS

REFERENCE: D2020/00720

PURPOSE OF REPORT

The purpose of this report is to inform Council of the results of the recent waste audit of the member Council rubbish bins to inform the implementation of the Food Organics and Garden Organics (FOGO) strategy.

KEY POINTS AND RECOMMENDATION(S)

- The Southern Metropolitan Regional Council (SMRC) was appointed in October 2019 to conduct an audit of the member Council rubbish bins.
- Six hundred bins were audited between October 2019 and December 2019 at the SMRC's Canning Vale audit facility.
- A total of 8,732 kg of waste was collected and audited against the various waste audit categories.
- There was an average of 27% recyclables in the bins (paper, cardboard, plastics, glass, aluminum and steel).
- The average organics content was 55.1%, which included food waste, packaged food waste, green waste, timber and other putrescible waste, of which 43.5% would be considered as processible FOGO waste.
- There was an average of 5.2 eligible CDS containers per household per week.
- Results of the Waste Audit 2019 will be used in the modelling of FOGO collections and in the tender for a FOGO processing facility.

Recommendation(s)

That:

1. The report be received.
2. The results from the 2019 Waste Audit be used in the tender process for a FOGO processing facility and in the FOGO modelling study.

SOURCE OF REPORT

Chief Project Officer

BACKGROUND

The EMRC periodically conducts audit of the member Council waste stream, including the rubbish, recycling, tip face and on one occasion a trial organics (2009).

The last comprehensive waste audit was done in 2013, results of which were provided to member Councils and informed the Resource Recovery Facility project.

In a confidential report to the 22 August 2019 meeting of Council, it was resolved:

"*THAT:*

1. *COUNCIL ENDORSES THE REQUIREMENT FOR A WASTE AUDIT OF MEMBER COUNCILS PRIOR TO THE IMPLEMENTATION OF A FOOD ORGANICS AND GARDEN ORGANICS (FOGO) COLLECTION SYSTEM.*

Item 11.1 continued

2. *LOCATIONS OF THE AUDITS TO BE DETERMINED IN CONSULTATION WITH MEMBER COUNCILS.*
3. *THE AUDIT IS TO INCLUDE COUNTING AND CLASSIFYING DATA ON CDS MATERIALS.*
4. *COUNCIL BY ABSOLUTE MAJORITY IN ACCORDANCE WITH SECTION 6.8(1)(B) OF THE LOCAL GOVERNEMNT 1995 AUTHORISES AN EXPENDITURE UP TO THE AMOUNT SPECIFIED IN THE REPORT FOR A WASTE AUDIT.*
5. *THE REPORT REMAIN CONFIDENTIAL AND TO BE CERTIFIED BY THE CHAIRMAN AND CEO."*

REPORT

The Southern Metropolitan Regional Council (SMRC) was appointed in October 2019 to conduct an audit of the member Council rubbish bins.

Six hundred s were audited between October 2019 and December 2019 at the SMRC's Canning Vale audit facility – one hundred (100) bins per member Council.

A total of 8,732 kg of waste was collected and audited against the categories of:

1. Recyclables (paper, cardboard, plastics, glass, aluminium and steel).
2. Non-recyclables (organics, earth, textiles, medical, pathogenic infectious, hazardous, e-waste, miscellaneous).

There was an average of 27% recyclables in the bins (paper, cardboard, plastics, glass, aluminium and steel) and of this, there was an average of 5.2 eligible CDS containers per household per week.

Within the non-recyclables fraction, the average organics content was 55.1%, which included food waste, packaged food waste, green waste, timber and other putrescible waste. If packaged food waste and timber is excluded then 43.5% of the contents would be considered as processible FOGO waste.

By way of comparison, the Organics Trial from 2009 showed that the dedicated third for organics (food and greenwaste) yielded 45% of the total waste collected from the selected households (organics plus the residual).

Results of the 2019 waste audit will be used in the modelling of FOGO collections, in the tender specification for a FOGO processing facility and will also help inform the CDS implementation and behaviour change in waste education.

STRATEGIC/POLICY IMPLICATIONS

Key Result Area 1 – Environmental Sustainability

1.1 To provide sustainable waste disposal operations

1.2 To improve regional waste management.

1.3 To provide resource recovery and recycling solutions in partnership with member Councils.

FINANCIAL IMPLICATIONS

The cost of the 2019 waste audit was approved by Council at its meeting on 22 August 2019.

SUSTAINABILITY IMPLICATIONS

The organic fraction of household waste is the driver for the EMRC FOGO strategy to produce quality compost and/or biogas and renewable energy.

Item 11.1 continued

MEMBER COUNCIL IMPLICATIONS

Member Council	Implication Details
Town of Bassendean City of Bayswater City of Belmont City of Kalamunda Shire of Mundaring City of Swan	Results of the Waste Audit 2019 will inform member Council waste education.

ATTACHMENT(S)

EMRC Waste Audit Report 2019 (D2020/00710)

VOTING REQUIREMENT

Simple Majority

RECOMMENDATION(S)

That:

1. The report be received.
2. The results from the 2019 Waste Audit be used in the tender process for a FOGO processing facility and in the FOGO modelling study.

Ms Zara Pedder, Manager Quality and Environment from the Southern Metropolitan Regional Council (SMRC) provided a presentation and discussion ensued.

WAC RECOMMENDATION(S)

MOVED CR O'CONNOR SECONDED CR CONGERTON

That:

1. The report be received.
2. The results from the 2019 Waste Audit be used in the tender process for a FOGO processing facility and in the FOGO modelling study.

CARRIED UNANIMOUSLY

Eastern Metropolitan Regional Council

Waste Audit Report 2019

31 January 2020

EMRC

SOUTHERN METROPOLITAN REGIONAL COUNCIL
REGIONAL RESOURCE RECOVERY CENTRE

Date	Document Format	Issued to	Number of Documents Issued
28 January 2020	Electronic Mail	Stephen Fitzpatrick	1
31 January 2020	Electronic Mail	Stephen Fitzpatrick	1

Revision				
Rev. No	Significant Change Update	Description of Change	Author	Effective Date
2	Diagrams not presented and extra Table Inputs	Diagrams fig2 and fig10 updated in pdf version and CDS per household per council included.	ZPe	31/01/2020

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All images are copyright Southern Metropolitan Regional Council unless otherwise indicated.

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This audit would not have been possible without the support and the supply of information from:

- Eastern Metropolitan Regional Council
- Southern Metropolitan Regional Council
- Town of Bassendean
- City of Bayswater
- City of Belmont
- City of Kalamunda
- Shire of Mundaring
- City of Swan
- Cleanaway
- Suez

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1 Executive Summary

At the request of Eastern Metropolitan Regional Council an audit was carried out on samples of Waste collected in selected areas within their regional councils. The objective of the audit was to gain an understanding of the material composition of the waste streams in the Town of Bassendean, City of Bayswater, City of Belmont, City of Kalamunda, Shire of Mundaring, and City of Swan. The resultant information would be utilised to develop plans to improve waste management strategies.

Key Findings

- All councils Waste sample material was composed of 27% Recyclables, 55.1% Organic in nature (Food and Green Waste, Packaged Food Waste, Wood, and Other Putrescible) and the remaining 17.9% of Pathogenic Infectious 4.69%, Earth 3.88%, Miscellaneous 3.32%, Hazardous 1.05%, Textiles 3.97%, Electronic Waste 0.74%, and Medical 0.23%.

Table 1 All Council Summary Table Waste

EMRC Waste Audit		
	Total All Council Data	
Recyclables	Net Weight	Percentage of Weight
Paper	729.1 kg	8.35%
Cardboard	282.3 kg	3.23%
Plastics	775.8 kg	8.88%
Glass	315.5 kg	3.61%
Aluminium	84.4 kg	0.97%
Steel	172.5 kg	1.98%
Recyclables Total		
	2,359.5 kg	27.0%
Non-Recyclables		
Organic	4,810.9 kg	55.1%
Earth	338.4 kg	3.88%
Textiles	347.0 kg	3.97%
Medical	20.5 kg	0.23%
Pathogenic Infectious	409.5 kg	4.69%
Hazardous	91.6 kg	1.05%
Electronic Waste	65.0 kg	0.74%
Miscellaneous	289.9 kg	3.32%
Non-Recyclables Total		
	6,372.7 kg	73.0%
Summary		
Total Recyclables	2,359.5 kg	27.0%
Total Non-Recyclables	6,372.7 kg	73.0%
	8,732.2 kg	**100%**

2 Introduction

The Southern Metropolitan Regional Council (SMRC) was commissioned by the Eastern Metropolitan Regional Council, to carry out an audit on the composition of residential waste in the localities; Town of Bassendean, City of Bayswater, City of Belmont, City of Kalamunda, Shire of Mundaring, and City of Swan. This audit was conducted at the end of Spring 2019 on the waste material to create a baseline of bin collection system. The information will be utilised to implement strategies for continuous improvement in waste services, waste avoidance and resource recovery.

2.1 Project Objectives

Material analysis of domestic properties in the Eastern Metropolitan Region within the local governments of; Town of Bassendean, City of Bayswater, City of Belmont, City of Kalamunda, Shire of Mundaring, and City of Swan.

2.2 Audit Objectives

The Audit is based on:

- Provide data to assist in developing knowledge of generation and composition.
- Identification and classification of sample material
- Contamination level from the Waste stream (MSW)

2.3 Scope

A composition analysis was conducted on each of the Waste streams for Town of Bassendean, City of Bayswater, City of Belmont, City of Kalamunda, Shire of Mundaring, and City of Swan including:

- Provide data which is statistically accurate
- Provide information based on a classification breakdown, of all materials into the categories as detailed.
- Provide comparative analysis of the waste streams by local government.
- Arrange schedule collection of waste to SMRC Audit Facility, sorting and disposal of all material.

The analysis conducted included:

- Identification and classification of sample material;
- Total weight of materials sampled;
- Contamination levels from the waste streams;
- Container Deposit Scheme (CDS), for each council, of the total weight and counts.

3 Methodology

3.1 Sample Selection

The methodology is Per Property method, which requires the collection and analysis of the contents of bagged General Waste (MSW) from individual properties MGB's (bin by bin). MGB's from single-unit properties are randomly selected from council suburbs that represent the socio-economic average for the local government. A total of 600 properties will be collected and audited from the whole eastern metropolitan region. From each council, 100 properties will be audited. Using a random number generator; single-unit dwellings will be selected to attain a primary list. From the primary list, a secondary list of randomly selected single-unit residential addresses will be chosen to be audited.

3.2 Sample Collection

The methodology used was to, 'bag n tag' on the normal bin collection day, recording the bin presentation, percentage full and time collected, before returning to RRRC's Audit Facility to audit the individual MGB's contents. Annual seasonal variations will be not considered.

The three (3) areas/suburbs were chosen by the local government but in suburbs that represent the social economic average for the that local government in which it is situated. Samples were collected by the SMRC auditors and delivered to the SMRC Audit Facility.

3.3 Physical Audit Method – Sorting

The material was separated and sorted into 58 categories of recyclable and non-recyclable components. The sample material underwent a preliminary sort to remove any large clearly visible materials. Once completed the secondary and more thorough sort was conducted where the smaller items were removed for further inspection and sorting.

3.4 Weighing

Note: The sorted material was weighed in smaller fractions using weigh scales with a rated accuracy of +/- 5%; hence there may be minor discrepancies between the incoming weights and the final total weights recorded in the audit process. This factor was taken into account when viewing the data obtained. Also, environmental impacts and the components of the material samples may also influence accuracy of data/error percentages during the physical auditing process. For example, large volumes of liquid mixed in with the material may create subsequent moisture and mass loss through decomposition and evaporation.

3.5 Records

Audit data was recorded using a mix of electronic and paper based systems to create and maintain appropriate auditing records.

3.6 Limitations

These audits may not reflect a whole representative sample of the local government population, it only reflects behaviour of one week's worth of waste from that chosen area.

A few local governments chose to only give a small sample set for random selection.

Shire of Mundaring sample set was extended, due to shortage of households to randomly select.

The allowance for some re-sampling of houses where the council/contractor has inadvertently collected the waste stream prior to the sampling was extended in all councils to reach the 100 bin samples per council.

4 Total Weights

4.1 Total Material Weights collected

Table 2 Material Weights

	Waste Total
Bassendean	1,392.0 kg
Bayswater	1,073.4 kg
Belmont	1,603.4 kg
Kalamunda	1,642.5 kg
Mundaring	1,192.0 kg
Swan	1,828.9 kg
Bassendean	1,392.0 kg
Overall	**8,732.2 kg**

* Note weight is based on the total 1 week cycle period of sample material from sample areas

5 Findings

The overall audit data collected in summarised in Table 3.

EMRC Total Waste Audit														
	Town of Bassendean		City of Bayswater		City of Belmont		City of Kalamunda		Shire of Mundaring		City of Swan		Total All Councils	
Recyclables	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight	Net Weight	Percentage of Weight
Paper	85.1 kg	6.1%	119.7 kg	11.1%	176.8 kg	11.0%	95.5 kg	5.8%	103.9 kg	8.7%	148.1 kg	8.1%	729.1 kg	8.3%
Cardboard	39.5 kg	2.8%	47.0 kg	4.4%	46.4 kg	2.9%	57.0 kg	3.5%	31.7 kg	2.7%	60.7 kg	3.3%	282.3 kg	3.2%
Plastics	112.8 kg	8.11%	113.7 kg	10.6%	126.2 kg	7.9%	139.9 kg	8.5%	126.8 kg	10.6%	156.3 kg	8.55%	775.8 kg	8.9%
Glass	42.0 kg	3.0%	47.1 kg	4.4%	51.2 kg	3.2%	67.4 kg	4.1%	52.0 kg	4.4%	55.9 kg	3.1%	315.5 kg	3.6%
Aluminium	12.5 kg	0.90%	15.4 kg	1.44%	12.7 kg	0.79%	17.5 kg	1.07%	11.6 kg	0.97%	14.6 kg	0.80%	84.4 kg	0.97%
Steel	22.8 kg	1.64%	14.7 kg	1.37%	25.3 kg	1.57%	53.5 kg	3.26%	25.1 kg	2.10%	31.2 kg	1.70%	172.5 kg	1.98%
Recyclables Total														
	314.8 kg	22.6%	**357.6 kg**	33.3%	**438.6 kg**	27.4%	**430.9 kg**	26.2%	**351.1 kg**	29.5%	**466.7 kg**	25.5%	**2,359.5 kg**	27.0%
Non-Recyclables														
Organic	884.5 kg	63.54%	552.1 kg	51.43%	908.1 kg	56.64%	923.0 kg	56.20%	596.9 kg	50.08%	946.2 kg	51.74%	4,810.9 kg	55.09%
Earth	66.9 kg	4.81%	39.5 kg	3.7%	92.0 kg	5.74%	46.1 kg	2.8%	44.4 kg	3.7%	49.5 kg	2.71%	338.4 kg	3.88%
Textiles	36.2 kg	2.60%	28.0 kg	2.60%	40.2 kg	2.50%	128.9 kg	7.85%	50.0 kg	4.20%	63.7 kg	3.49%	347.0 kg	3.97%
Medical	0.90 kg	0.06%	2.32 kg	0.22%	4.02 kg	0.25%	3.75 kg	0.23%	8.08 kg	0.68%	1.43 kg	0.08%	20.5 kg	0.23%
Pathogenic Infectious	56.26 kg	4.04%	44.60 kg	4.16%	61.59 kg	3.84%	79.26 kg	4.83%	66.54 kg	5.58%	101.21 kg	5.53%	409.5 kg	4.69%
Hazardous	14.77 kg	1.06%	1.12 kg	0.10%	13.86 kg	0.86%	12.22 kg	0.74%	43.78 kg	3.67%	5.86 kg	0.32%	91.6 kg	1.05%
Electronic Waste	8.2 kg	0.59%	16.6 kg	1.55%	13.2 kg	0.83%	8.6 kg	0.52%	15.1 kg	1.27%	3.2 kg	0.18%	65.0 kg	0.74%
Miscellaneous	9.49 kg	0.68%	31.61 kg	2.95%	31.89 kg	1.99%	9.78 kg	0.60%	16.09 kg	1.35%	191.05 kg	10.45%	289.9 kg	3.32%
Non-Recyclables Total														
	1,077.2 kg	77.4%	**715.8 kg**	66.7%	**1,164.9 kg**	72.6%	**1,211.6 kg**	73.8%	**840.9 kg**	70.5%	**1,362.3 kg**	74.5%	**6,372.7 kg**	73.0%
Summary														
Total Recyclables	314.8 kg	22.6%	357.6 kg	33.3%	438.6 kg	27.4%	430.9 kg	26.2%	351.1 kg	29.5%	466.7 kg	25.5%	2,359.5 kg	27.0%
Total Non-Recyclables	1,077.2 kg	77.4%	715.8 kg	66.7%	1,164.9 kg	72.6%	1,211.6 kg	73.8%	840.9 kg	70.5%	1,362.3 kg	74.5%	6,372.7 kg	73.0%
	1,392.0 kg	**100%**	**1,073.4 kg**	**100%**	**1,603.4 kg**	**100%**	**1,642.5 kg**	**100%**	**1,192.0 kg**	**100%**	**1,828.9 kg**	**100%**	**8,732.2 kg**	**100%**

Table 3 Waste Summary

5.1 Key Performance Indicators

5.1.1 Waste generation by household/week/year

The weight, in kilograms of waste per household, per week, per council, was determined based on the total weight of material received from each area sampled for Bassendean, Bayswater, Belmont, Kalamunda, Mundaring and Swan and the number of household rubbish bins collected on the day of sampling. The below tables show the bins kilogram per sample/per sample week are averaging 14.6kg. The City of Bayswater at 10.7kg, of which 3.6kg was recyclable and the remaining 7.2kg non-recyclable was the lowest bin weights. The City of Swan held the most bin weight per sample week with 18.3kg, of which 4.7kg was recyclables, and only 13.6kg was non-recyclables.

Waste generation by household/week/season	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan
Total Kilograms collected	1,392.0 kg	1,073.4 kg	1,603.4 kg	1,642.5 kg	1,192.0 kg	1,828.9 kg
Number of Samples Presented	100	100	100	100	100	100
kilograms per household / sample week	13.9 kg	10.7 kg	16.0 kg	16.4 kg	11.9 kg	18.3 kg
kilograms per household / per year	723.8 kg	558.1 kg	833.8 kg	854.1 kg	619.8 kg	951.1 kg

Table 4 KPI – Waste generation by household/week

***Note:** The Shire of Mundaring has 140L size bins as compared to 240L size bins in the other councils.

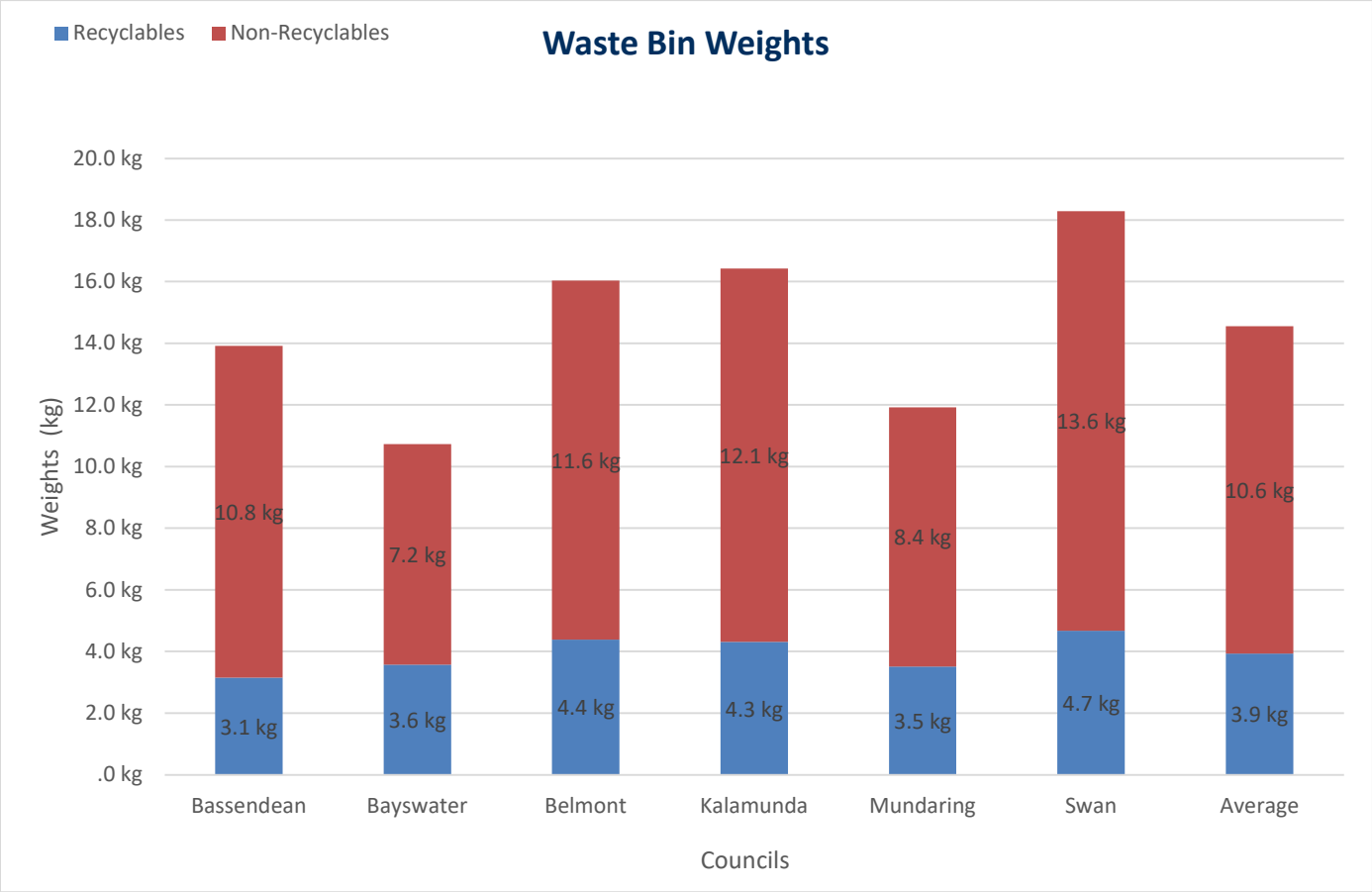


Figure 1 Waste Bin Weights

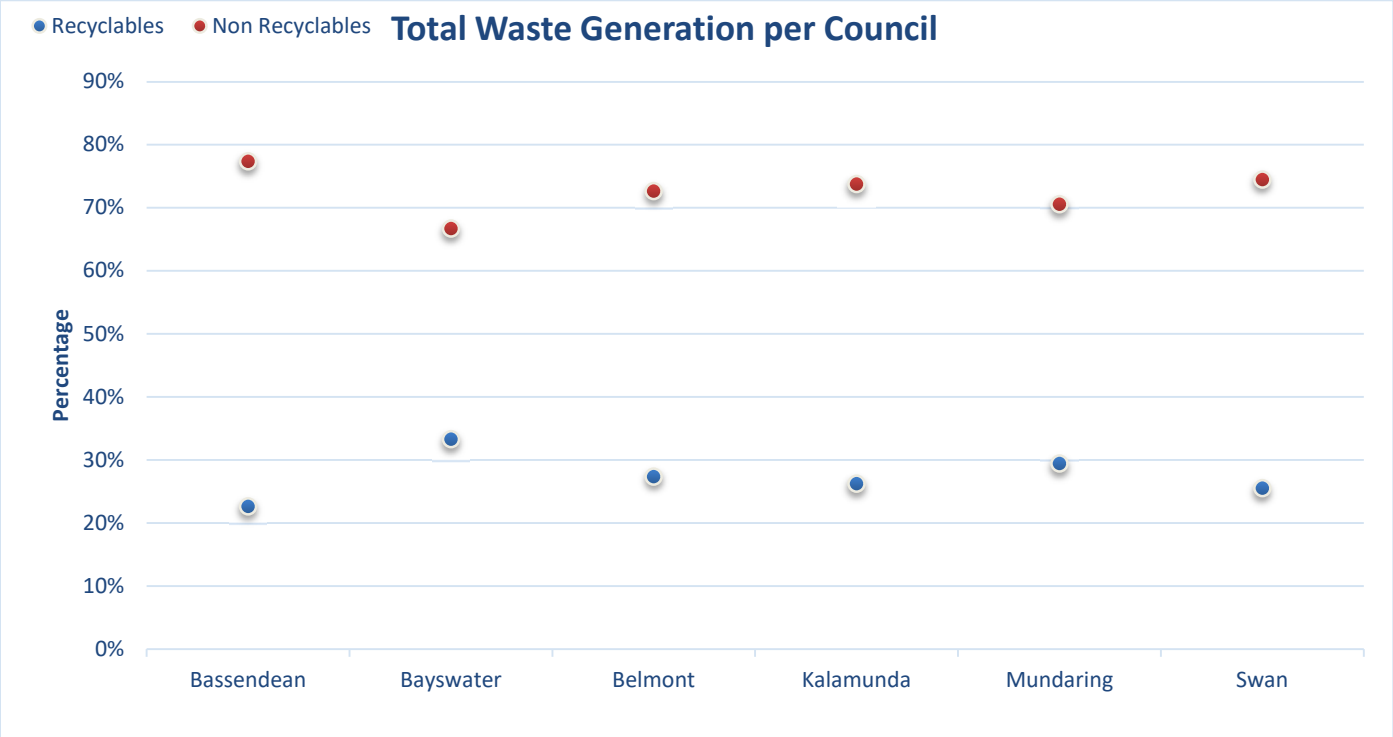


Figure 2 Total Waste Generation All Councils

The following graphs give a visual representation of the Waste Bin Breakdown and Comparison for all EMRC Regional Councils.

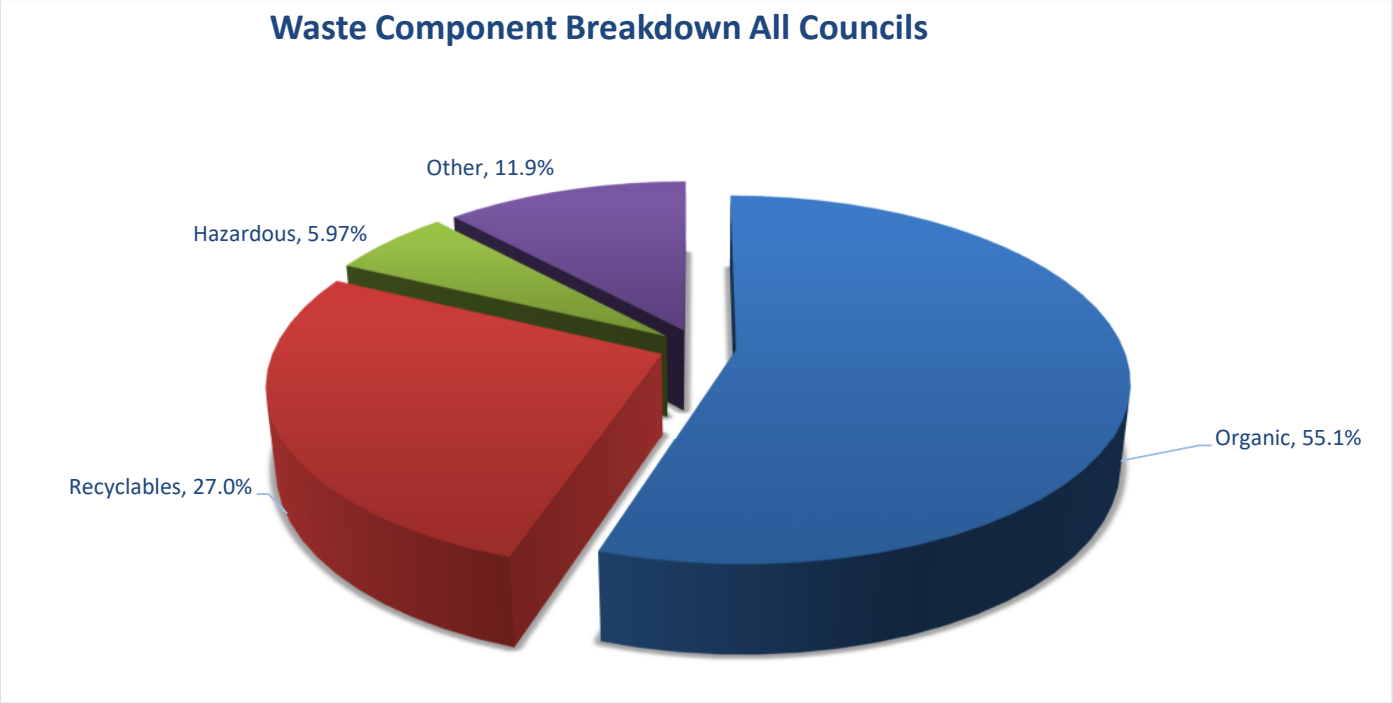
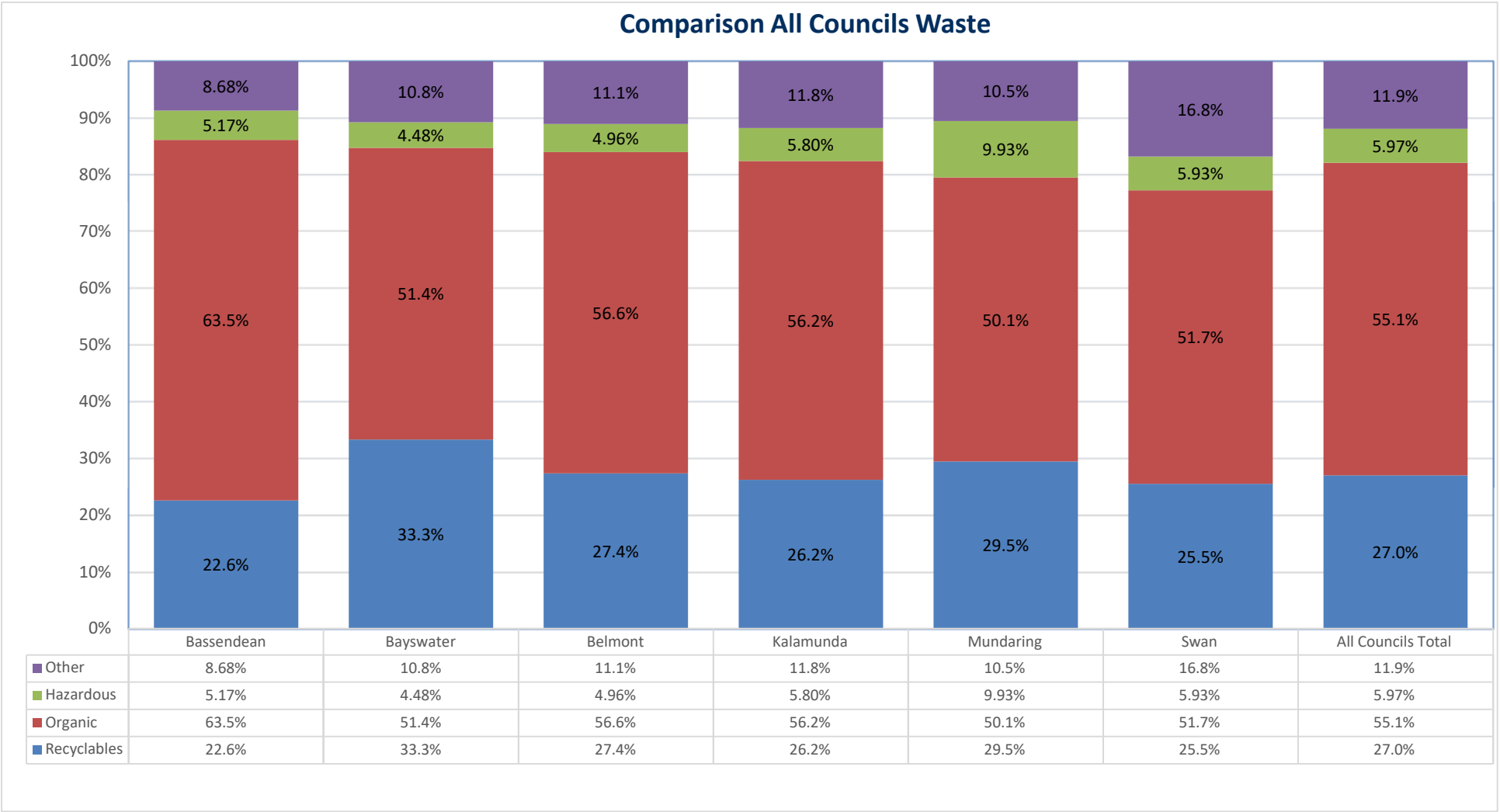


Figure 3 Waste Component Breakdown All Councils

The Organic 55.1% and the Recyclable 27% material are the highest in the comparison the Hazardous 5.9% and Other but the Other category, consistently made up of Electrical items, Computer accessories, Household items and Miscellaneous was 11.9%.



	Bassendean	Bayswater	Belmont	Kalamunda	Mundaring	Swan	All Councils Total
Other	8.68%	10.8%	11.1%	11.8%	10.5%	16.8%	11.9%
Hazardous	5.17%	4.48%	4.96%	5.80%	9.93%	5.93%	5.97%
Organic	63.5%	51.4%	56.6%	56.2%	50.1%	51.7%	55.1%
Recyclables	22.6%	33.3%	27.4%	26.2%	29.5%	25.5%	27.0%

Figure 4 Comparison All Councils Waste

5.1.2 Food waste including Other Putrescible and Green Waste disposed by per household / by week

(This does not include Packaged Food Waste)

Below the audit results show an average of 2.74kg /week / household of Food Waste including Other Putrescible is produced over all councils, and an average of 3.60kg /week / household was found for Green Waste. Together the Food Organics Garden Organics (FOGO) give an average of 6.34kg / week / household.

Food waste including Other Putrescible disposed by per household / by week (This does not include Packaged Food Waste)	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan
Total Kilograms collected	174.7 kg	309.6 kg	284.8 kg	248.6 kg	246.0 kg	377.5 kg
Number of Samples Presented	100	100	100	100	100	100
kilograms per household / sample week	1.75 kg	3.10 kg	2.85 kg	2.49 kg	2.46 kg	3.77 kg
kilograms per household / per year	90.9 kg	161.0 kg	148.1 kg	129.3 kg	127.9 kg	196.3 kg

Table 5 KPI – Food waste including Other Putrescible disposed by per household / by week

Green waste disposed by per household / by week	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan
Total Kilograms collected	541.8 kg	100.0 kg	480.5 kg	420.4 kg	199.4 kg	418.1 kg
Number of Samples Presented	100	100	100	100	100	100
kilograms per household / sample week	5.42 kg	1.00 kg	4.81 kg	4.20 kg	1.99 kg	4.18 kg
kilograms per household / per year	281.7 kg	52.0 kg	249.9 kg	218.6 kg	103.7 kg	217.4 kg

Table 6 KPI – Green waste including Other Putrescible disposed by per household / by week

Food Organics Garden Organics (FOGO) disposed by per household / by week	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan
Total Kilograms collected	716.5 kg	409.6 kg	765.3 kg	668.9 kg	445.4 kg	795.6 kg
Number of Samples Presented	100	100	100	100	100	100
kilograms per household / sample week	7.17 kg	4.10 kg	7.65 kg	6.69 kg	4.45 kg	7.96 kg
kilograms per household / per year	372.6 kg	213.0 kg	398.0 kg	347.9 kg	231.6 kg	413.7 kg

Table 7 KPI – FOGO including Other Putrescible disposed by per household / by week

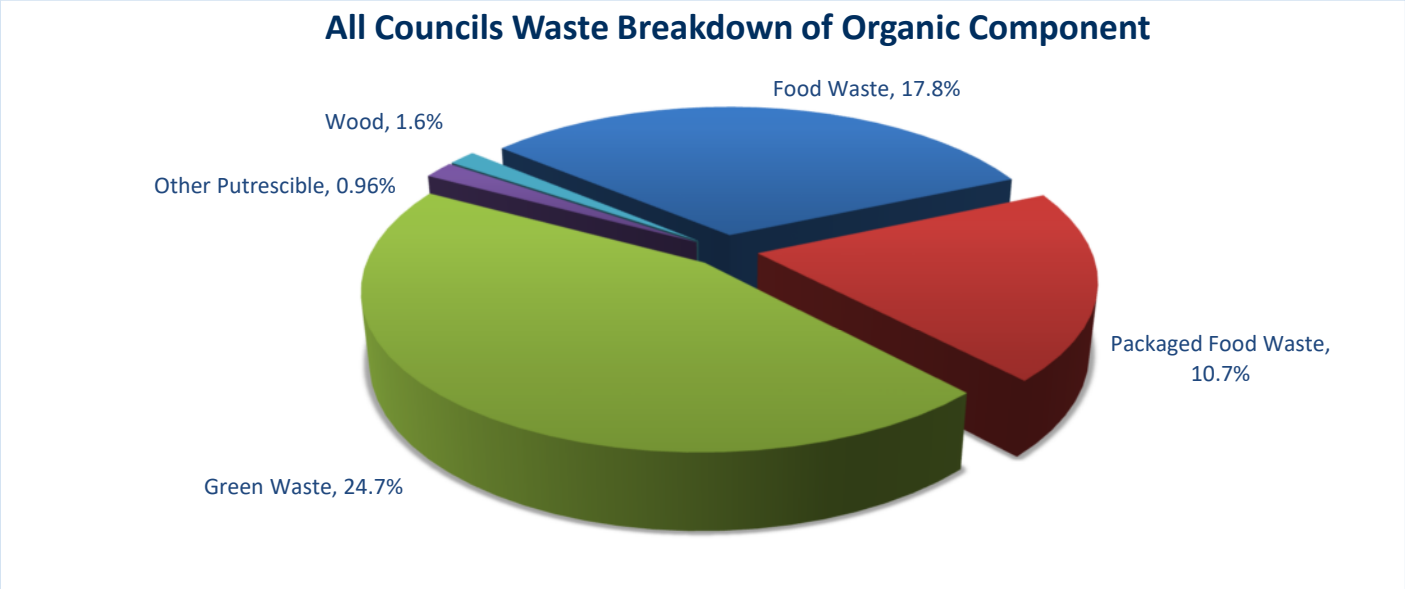
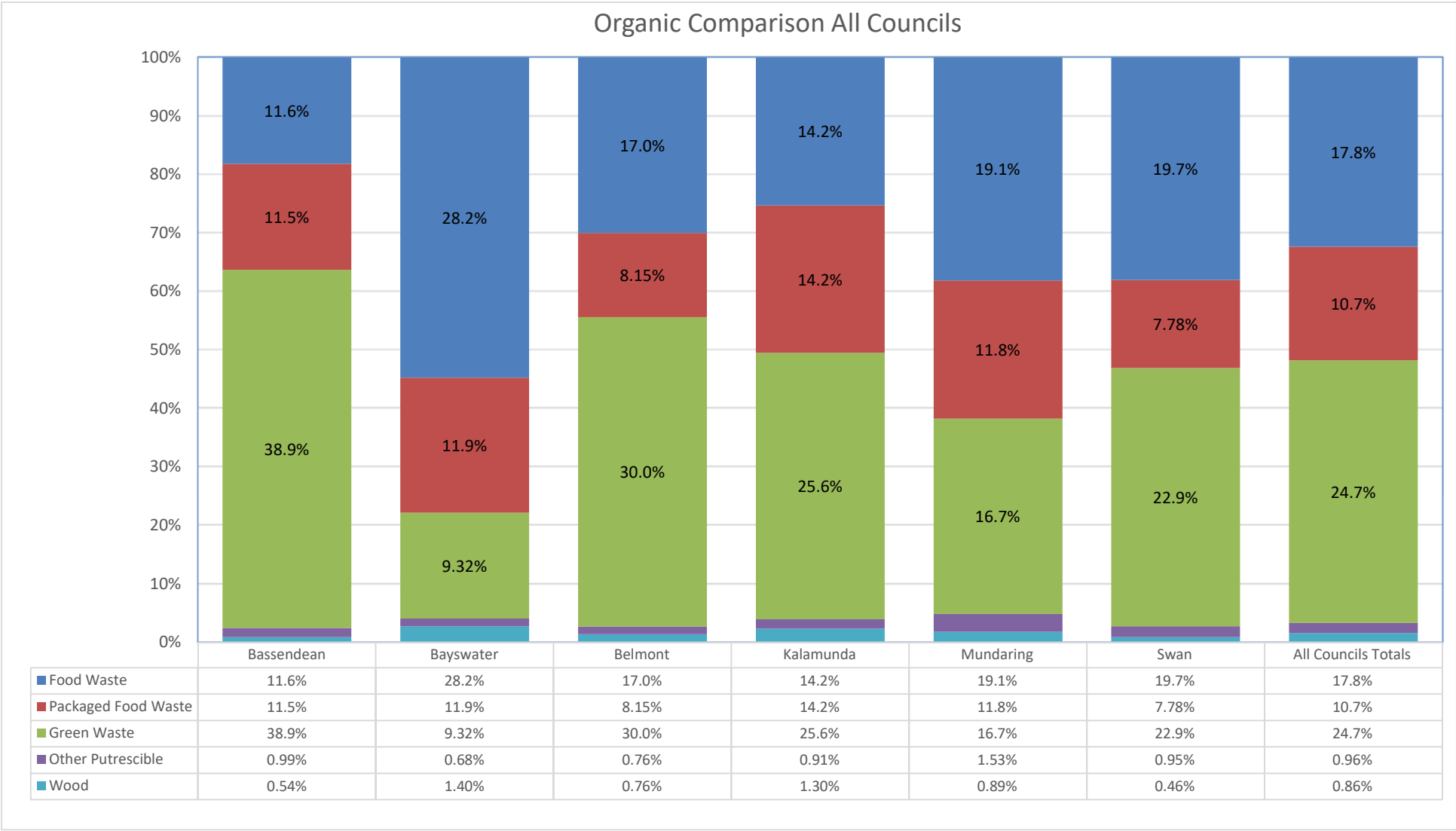


Figure 5 All Councils Waste Breakdown of Organic Component including Packaged Food Waste

The figures above illustrate the comparison between the percentages in Organics of Food Waste, Packaged Food Waste, Green Waste, Wood and Other Putrescible in the waste stream audited. Overall the total of Organics found in the waste material from all councils was 55.1%, FOGO material excluding Packaged Food Waste 43.5% and Packaged Food Waste 10.7% with Wood at 0.86%.



	Bassendean	Bayswater	Belmont	Kalamunda	Mundaring	Swan	All Councils Totals
Food Waste	11.6%	28.2%	17.0%	14.2%	19.1%	19.7%	17.8%
Packaged Food Waste	11.5%	11.9%	8.15%	14.2%	11.8%	7.78%	10.7%
Green Waste	38.9%	9.32%	30.0%	25.6%	16.7%	22.9%	24.7%
Other Putrescible	0.99%	0.68%	0.76%	0.91%	1.53%	0.95%	0.96%
Wood	0.54%	1.40%	0.76%	1.30%	0.89%	0.46%	0.86%

Figure 6 All Councils Waste Comparison of Organic Component

5.1.3 Recyclables disposed by per household / by week

The audit results below show an average of 3.93kg with a range of 3.15kg to 4.67kg per household / per week across all councils of recyclables lost in the waste streams.

Recyclables disposed by per household / by week	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan
Total Kilograms collected	314.8 kg	357.6 kg	438.6 kg	430.9 kg	351.1 kg	466.7 kg
Number of Samples Presented	100	100	100	100	100	100
kilograms per household / sample week	3.1 kg	3.6 kg	4.4 kg	4.3 kg	3.5 kg	4.7 kg
kilograms per household / per year	163.7 kg	185.9 kg	228.1 kg	224.1 kg	182.5 kg	242.7 kg

Table 8 KPI – Recyclables disposed by per household / by week

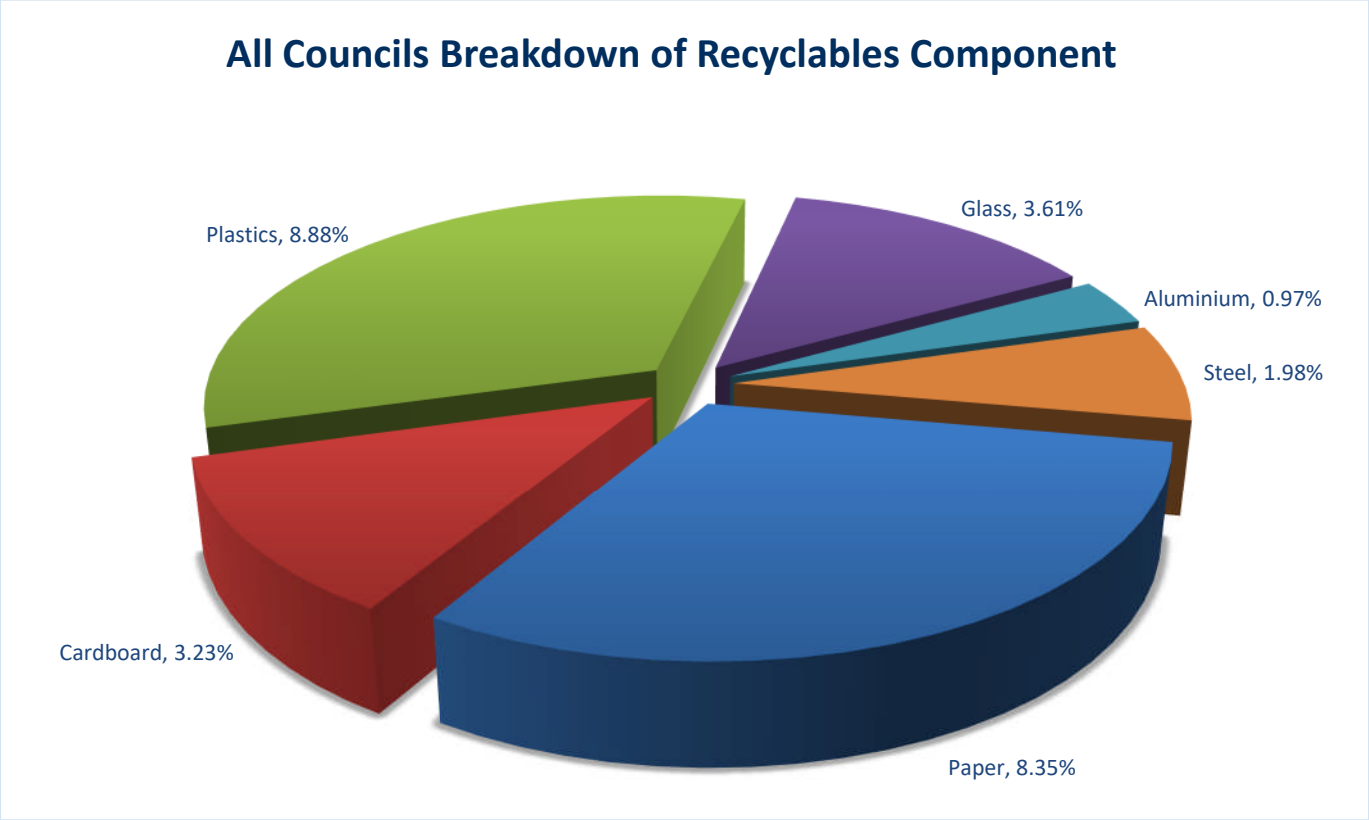
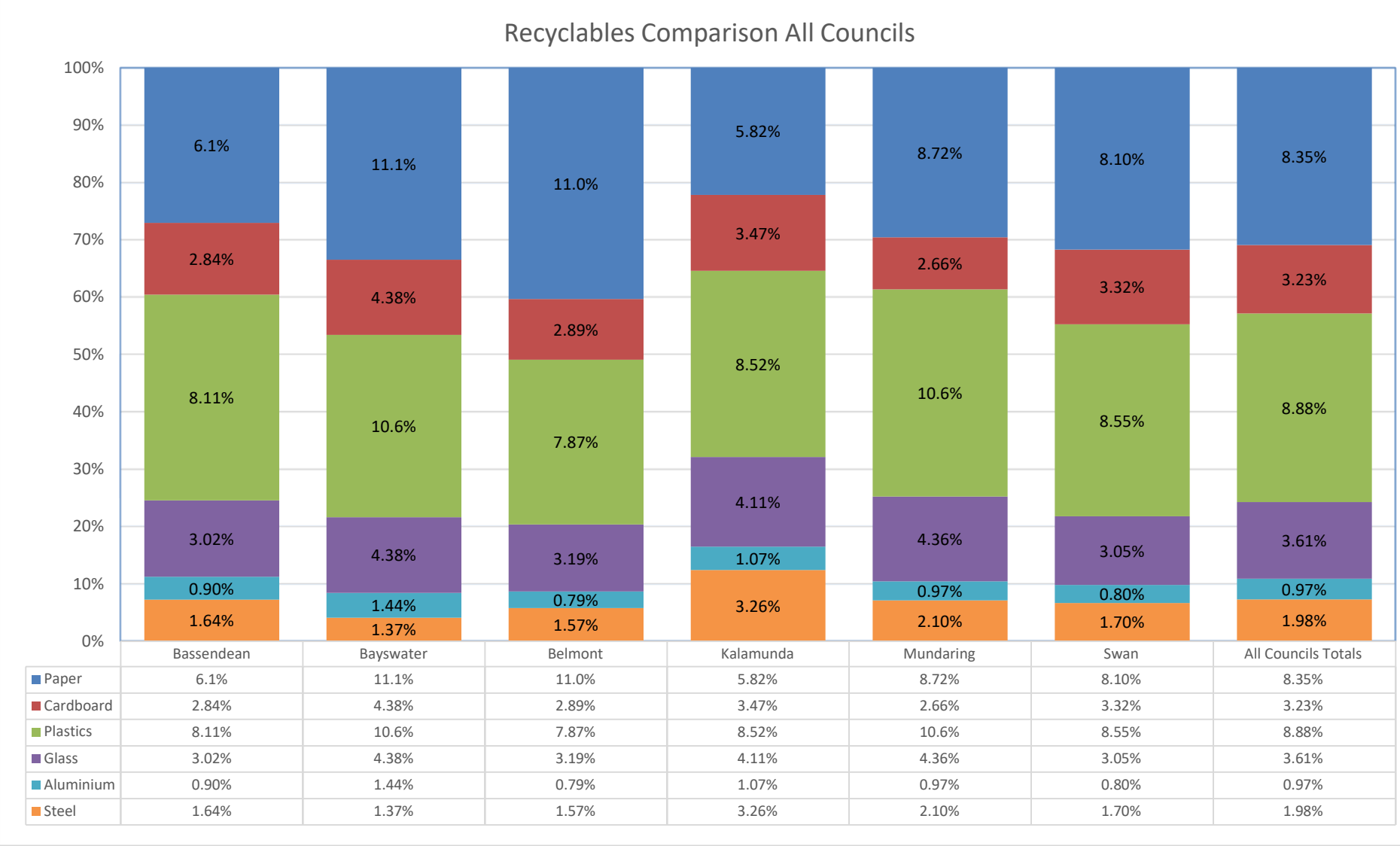


Figure 7 All Councils Breakdown of Recyclable Component

The figures above give a representation of all councils combined data results. Plastics at 8.88% is the most recyclable item across all councils to be placed into the waste stream for disposal. This is closely followed by Paper 8.35%, then Glass 3.61%, Cardboard 3.23%, Steel 1.98% and Aluminium at 0.97%.

The figure below gives a detailed breakdown comparison of the recyclables within each council in the Waste.



	Bassendean	Bayswater	Belmont	Kalamunda	Mundaring	Swan	All Councils Totals
Paper	6.1%	11.1%	11.0%	5.82%	8.72%	8.10%	8.35%
Cardboard	2.84%	4.38%	2.89%	3.47%	2.66%	3.32%	3.23%
Plastics	8.11%	10.6%	7.87%	8.52%	10.6%	8.55%	8.88%
Glass	3.02%	4.38%	3.19%	4.11%	4.36%	3.05%	3.61%
Aluminium	0.90%	1.44%	0.79%	1.07%	0.97%	0.80%	0.97%
Steel	1.64%	1.37%	1.57%	3.26%	2.10%	1.70%	1.98%

Figure 8 Recyclables Comparison All Councils

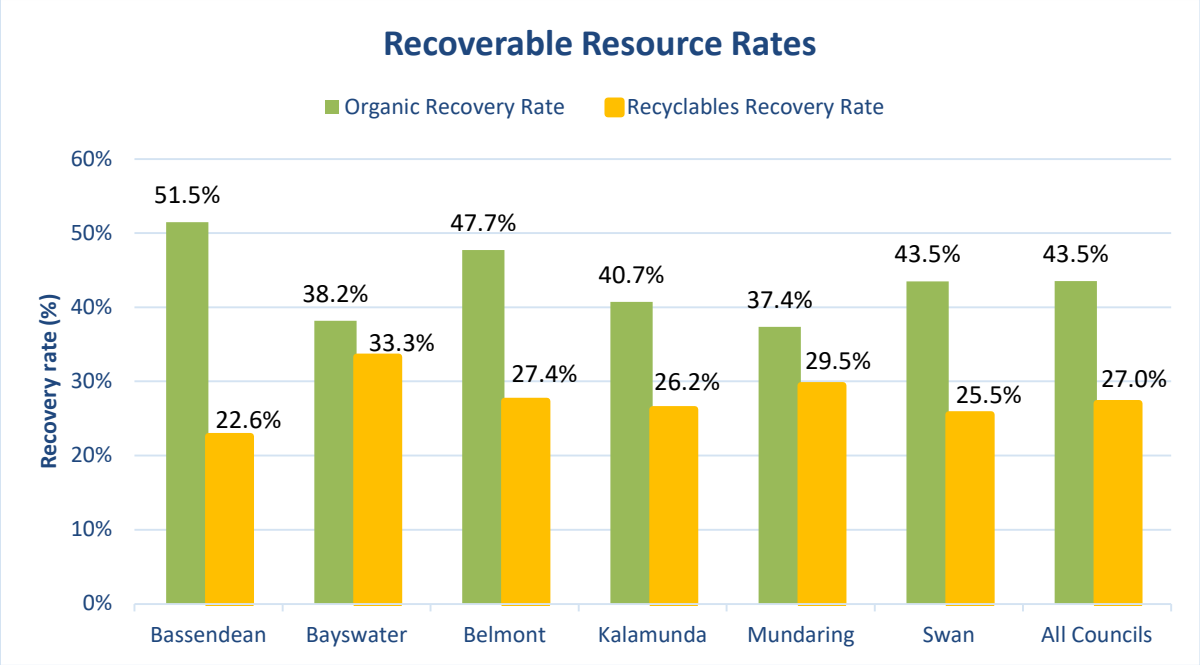


Figure 9 Resource Recovery Rates

An assessment was carried out on the theoretical recovery of recoverable resources for the waste streams on the recyclables, food waste and garden waste including putrescible waste, but excluding packaged food waste. Calculations are based on organic material going to a composting facility and recyclables to a Waste facility instead of going to a landfill. The maximum recovery rate possible based on this audit is 70.6% for all councils combined. A total of 43.5% of waste material found in the audit samples are classed as compostable; this means that potentially 27% of the waste stream can be recovered as recyclables, with just 29.4% not suitable for Waste or composting.

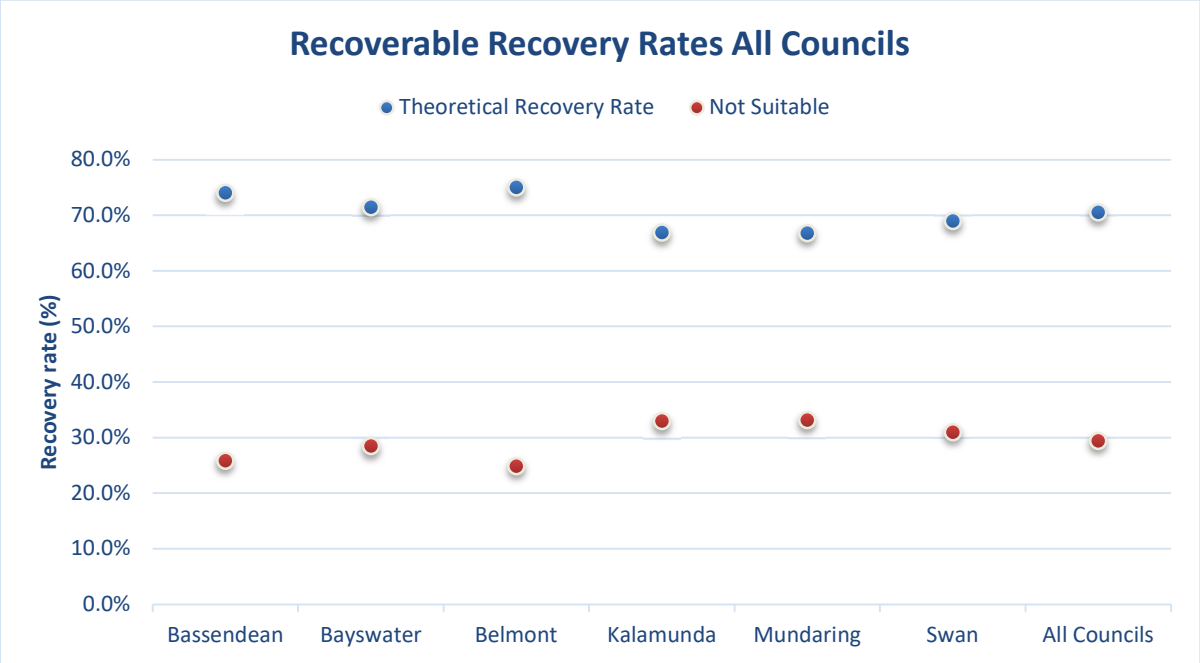


Figure 10 Resource Recovery Rates All Councils

5.1.4 Container Deposit Scheme (CDS), for each council

Container Deposit Scheme (CDS), for each council, of the total weight and counts for the following audited;

Summary Weights	Town of Bassendean		City of Bayswater		City of Belmont		City of Kalamunda		Shire of Mundaring		City of Swan		All Councils	
	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Recyclable Cardboard	3.63 kg	66	6.35 kg	35	3.81 kg	71	3.38 kg	43	4.72 kg	66	6.90 kg	60	28.8 kg	341
PET#1	5.91 kg	130	1.73 kg	62	5.96 kg	183	6.40 kg	182	3.60 kg	90	6.48 kg	110	30.1 kg	757
HDPE#2	0.22 kg	3	1.52 kg	28	1.16 kg	6	0.46 kg	11	0.54 kg	9	2.65 kg	17	6.55 kg	74
Glass	23.8 kg	64	41.7 kg	115	34.2 kg	107	52.3 kg	130	31.9 kg	84	50.7 kg	95	234.5 kg	595
Aluminium Cans	5.09 kg	235	4.15 kg	223	3.60 kg	204	5.82 kg	310	3.14 kg	198	6.10 kg	176	27.9 kg	1346
Total	**38.6 kg**	**498**	**55.4 kg**	**463**	**48.7 kg**	**571**	**68.4 kg**	**676**	**43.9 kg**	**447**	**72.8 kg**	**458**	**327.8 kg**	**3113**

Table 9 KPI –Container Deposit Scheme (CDS) Weight and Counts for each Council

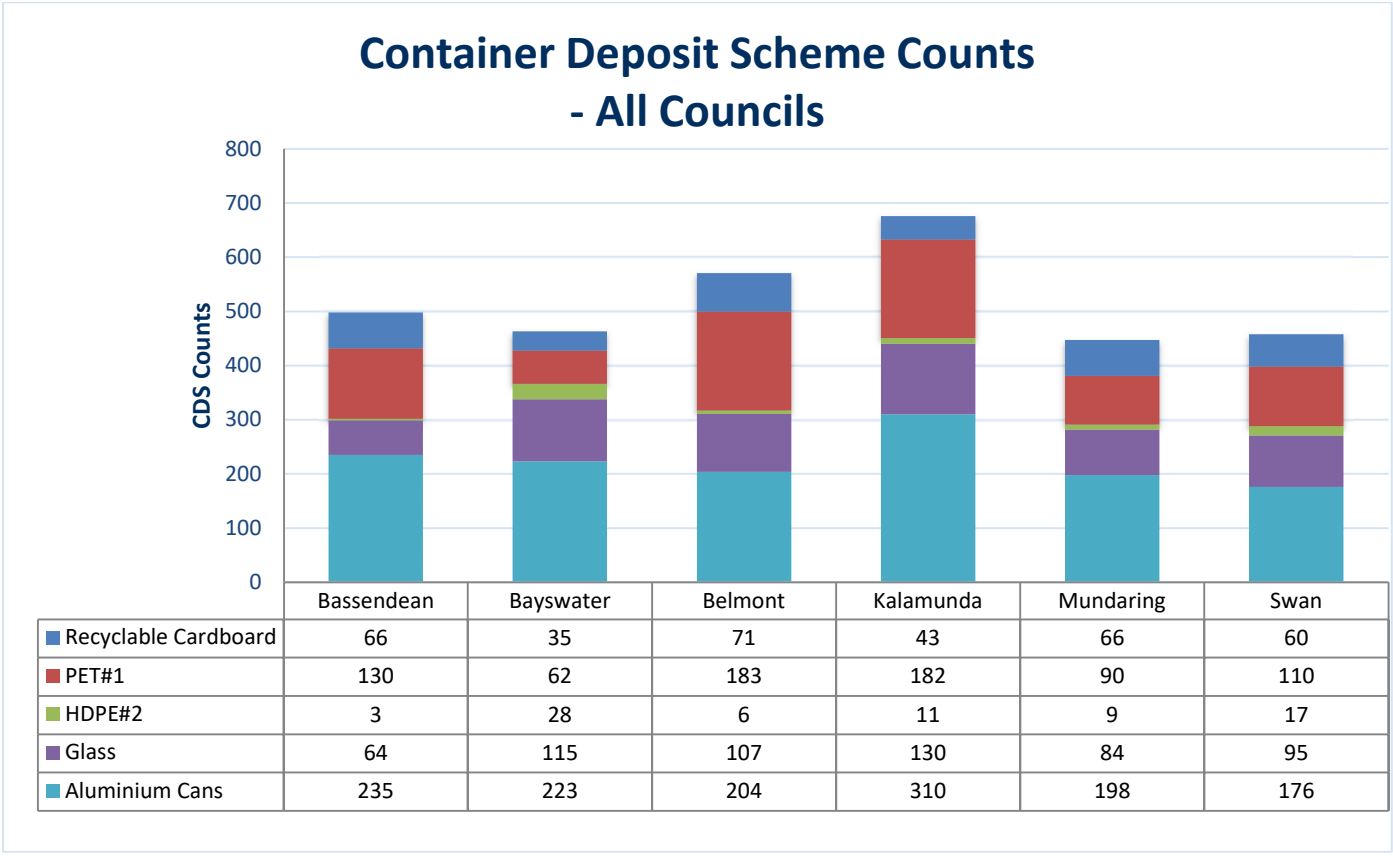
Container Deposit Scheme (CDS), for each council, per household audited;

Container Deposit Scheme (CDS) disposed by per household / by week (Weight)	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan	All Councils
Total Kilograms collected	38.6 kg	55.4 kg	48.7 kg	68.4 kg	43.9 kg	72.8 kg	327.8 kg
Number of Samples Presented	100	100	100	100	100	100	600
kilograms per household / sample week	.386 kg	.554 kg	.487 kg	.684 kg	.439 kg	.728 kg	.546 kg
kilograms per household / per year	20.1 kg	28.8 kg	25.3 kg	35.6 kg	22.8 kg	37.9 kg	28.4 kg

Table 10 KPI –Container Deposit Scheme (CDS) per household by Weight for each Council

Container Deposit Scheme (CDS) generated by per household / by week (Counts)	Town of Bassendean	City of Bayswater	City of Belmont	City of Kalamunda	Shire of Mundaring	City of Swan	All Councils
Total CDS Items	498	463	571	676	447	458	3113
Number of Samples Presented	100	100	100	100	100	100	600
Average per household / sample week	5.0	4.6	5.7	6.8	4.5	4.6	5.2
Estimated Average per household / per year	259	241	297	352	232	238	270

Table 11 KPI – KPI –Container Deposit Scheme (CDS) per household by Count for each Council



	Bassendean	Bayswater	Belmont	Kalamunda	Mundaring	Swan
Recyclable Cardboard	66	35	71	43	66	60
PET#1	130	62	183	182	90	110
HDPE#2	3	28	6	11	9	17
Glass	64	115	107	130	84	95
Aluminium Cans	235	223	204	310	198	176

Figure 11 Container Deposit Scheme Counts - All Councils

6 Conclusions

6.1 Comparison of Council Results

The purpose of these audits was to identify the potential recovery rates for Food Organics Garden Organics material and number of potential collection of containers for the Containers Deposit Scheme. Neither council provided any sample area with educational material or notification of the audits.

The main comparisons between all six councils are: Across all councils, there was an average of 27% recyclables collected and 73% non-recyclables. Within the non-recyclables 43.5% can be consider as food waste and garden waste (FOGO) material with 29.4% remaining non-compostable.

The City of Bayswater had the lowest kilograms per bin collected at 10.7kg while the City of Swan had the highest at 18.3kg per bin. The results showed an average over all councils 14.6kg per household per week could be collected.

Based of the data, the City of Swan generated more recyclables per household/week with 4.7kg per bin as compared to Town of Bassendean with the lowest at 3.1kg per household/week. Although, Town of Bassendean showed to have produced the highest green waste at 5.42kg per household/week, with the City of Bayswater at the lowest 1.0kg. The City of Swan had the most Food waste generated per household/week with 3.77kg and the Town of Bassendean with 1.75kg at the smallest.

Percentage wise the City of Bayswater presented the highest recyclables recovered with 33.3% while the Town of Bassendean had the lowest at 22.6%. The City of Bayswater had the highest Paper 11.1%, Cardboard 4.4%, Plastics 10.6%, Glass 4.4% and Aluminium 1.44% recorded between the councils while City of Kalamunda had the highest Steel 3.26%.

Abbreviations

MGB - Mobile Garbage Bin

MSW – Municipal Solid Waste

REC – Recyclables

FOGO – Food Organics Garden Organics

SMRC – Southern Metropolitan Regional Council

WCF - Waste Composting Facility

EMRC – Eastern Metropolitan Regional Council

CDS - Container Deposit Scheme

Glossary

Hazardous - component of the waste stream which by its characteristics poses a threat or risk to public health, safety or the environment (includes substances which are toxic, infectious, mutagenic, carcinogenic, teratogenic, explosive, flammable, corrosive, oxidising and radioactive. Hazardous wastes are generally unsuitable for landfill disposal and should only be accepted within landfills after appropriate treatment and/or in accordance with specific licence conditions or with specific, written approval from the Director, Environmental Management Division

Pathogenic infectious - disposable nappies, incontinence pads and sanitary napkins (not otherwise classified as biomedical wastes due to the presence of infectious material)

Putrescible - component of the waste stream likely to become putrid - including wastes that contain organic materials such as food wastes or wastes of animal or vegetable origin, which readily bio-degrade within the environment of a landfill

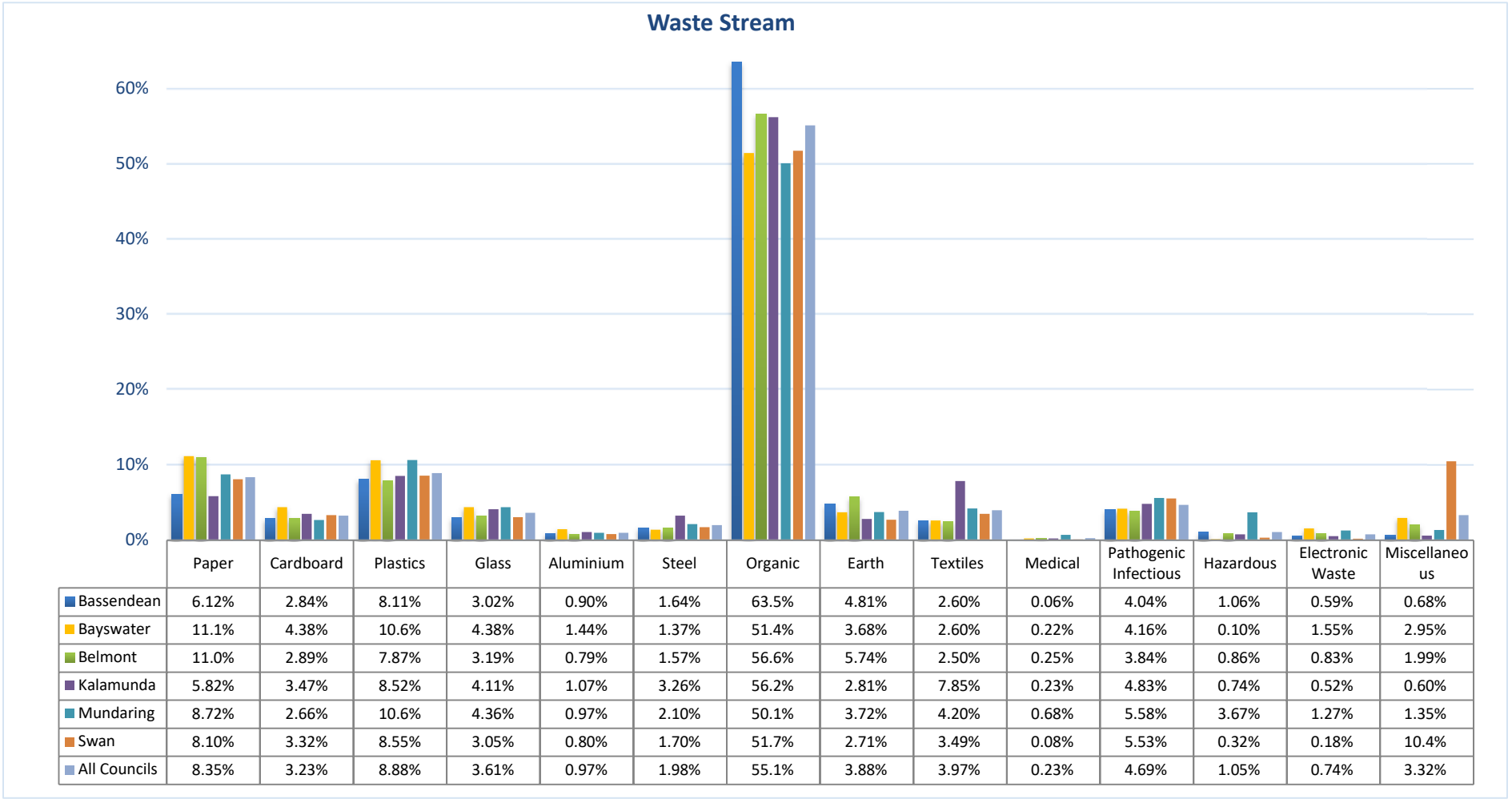
Recovery Rate – percentage of material collected in a waste a stream that is diverted from landfill in practice by a processing or Waste facility

Appendix 1

Stream Comparison Graphs

7.1 All Councils Waste Stream Comparison Graphs

The following graphs give a detailed representation of the totals of Waste streams together from all councils.

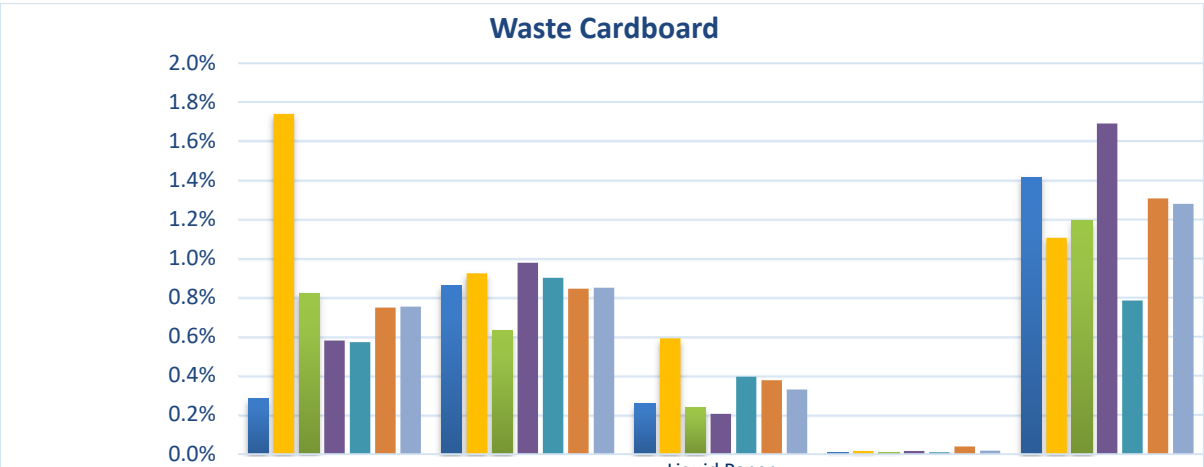


	Paper	Cardboard	Plastics	Glass	Aluminium	Steel	Organic	Earth	Textiles	Medical	Pathogenic Infectious	Hazardous	Electronic Waste	Miscellaneous
Bassendean	6.12%	2.84%	8.11%	3.02%	0.90%	1.64%	63.5%	4.81%	2.60%	0.06%	4.04%	1.06%	0.59%	0.68%
Bayswater	11.1%	4.38%	10.6%	4.38%	1.44%	1.37%	51.4%	3.68%	2.60%	0.22%	4.16%	0.10%	1.55%	2.95%
Belmont	11.0%	2.89%	7.87%	3.19%	0.79%	1.57%	56.6%	5.74%	2.50%	0.25%	3.84%	0.86%	0.83%	1.99%
Kalamunda	5.82%	3.47%	8.52%	4.11%	1.07%	3.26%	56.2%	2.81%	7.85%	0.23%	4.83%	0.74%	0.52%	0.60%
Mundaring	8.72%	2.66%	10.6%	4.36%	0.97%	2.10%	50.1%	3.72%	4.20%	0.68%	5.58%	3.67%	1.27%	1.35%
Swan	8.10%	3.32%	8.55%	3.05%	0.80%	1.70%	51.7%	2.71%	3.49%	0.08%	5.53%	0.32%	0.18%	10.4%
All Councils	8.35%	3.23%	8.88%	3.61%	0.97%	1.98%	55.1%	3.88%	3.97%	0.23%	4.69%	1.05%	0.74%	3.32%

Figure 12 All Councils Waste Streams

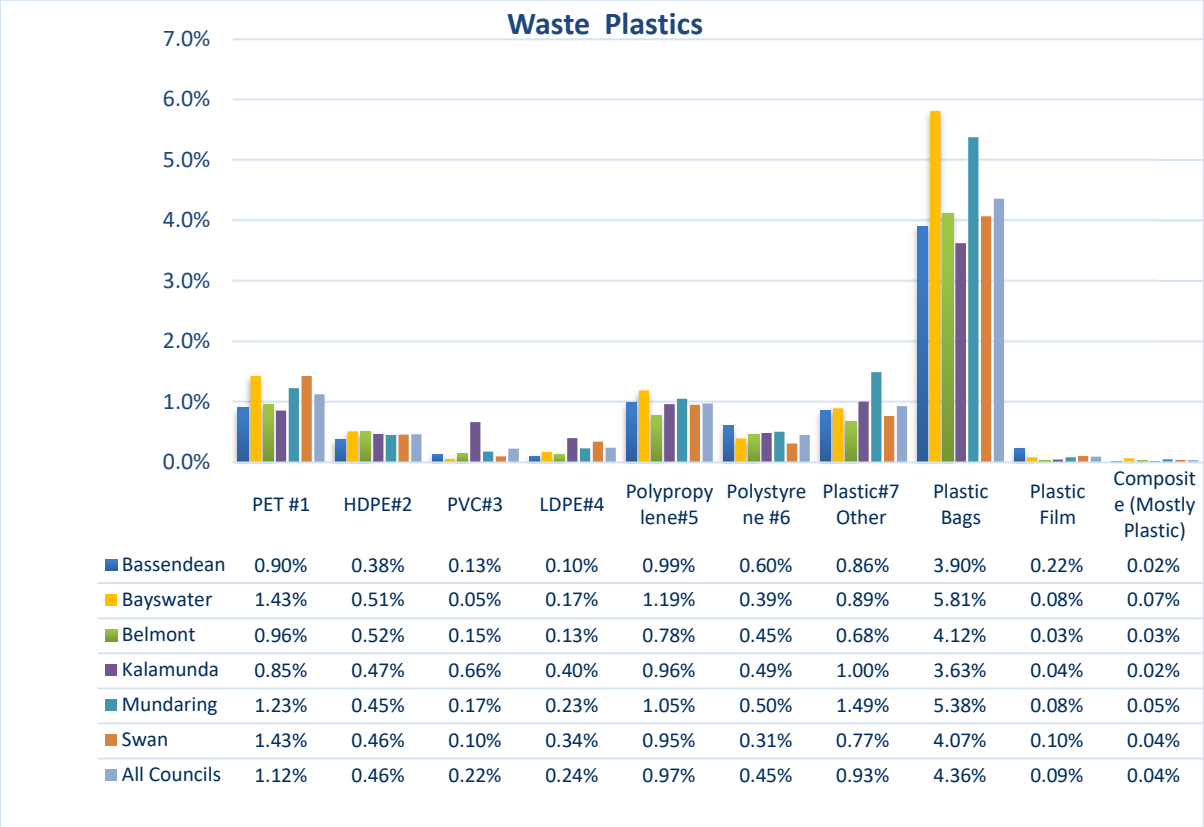
	Newspaper	Glossy Paper	Office Paper	Coloured Paper	Composite Paper	Other Paper
Bassendean	0.24%	0.45%	0.25%	0.00%	0.00%	5.17%
Bayswater	0.50%	0.70%	0.40%	0.02%	0.32%	9.21%
Belmont	0.85%	4.19%	0.15%	0.01%	0.05%	5.77%
Kalamunda	0.18%	0.84%	0.27%	0.00%	0.01%	4.53%
Mundaring	0.28%	0.64%	0.35%	0.03%	0.03%	7.38%
Swan	0.15%	1.85%	0.27%	0.01%	0.01%	5.81%
All Councils	0.36%	1.56%	0.27%	0.01%	0.06%	6.09%

Figure 13 All Councils Waste Paper



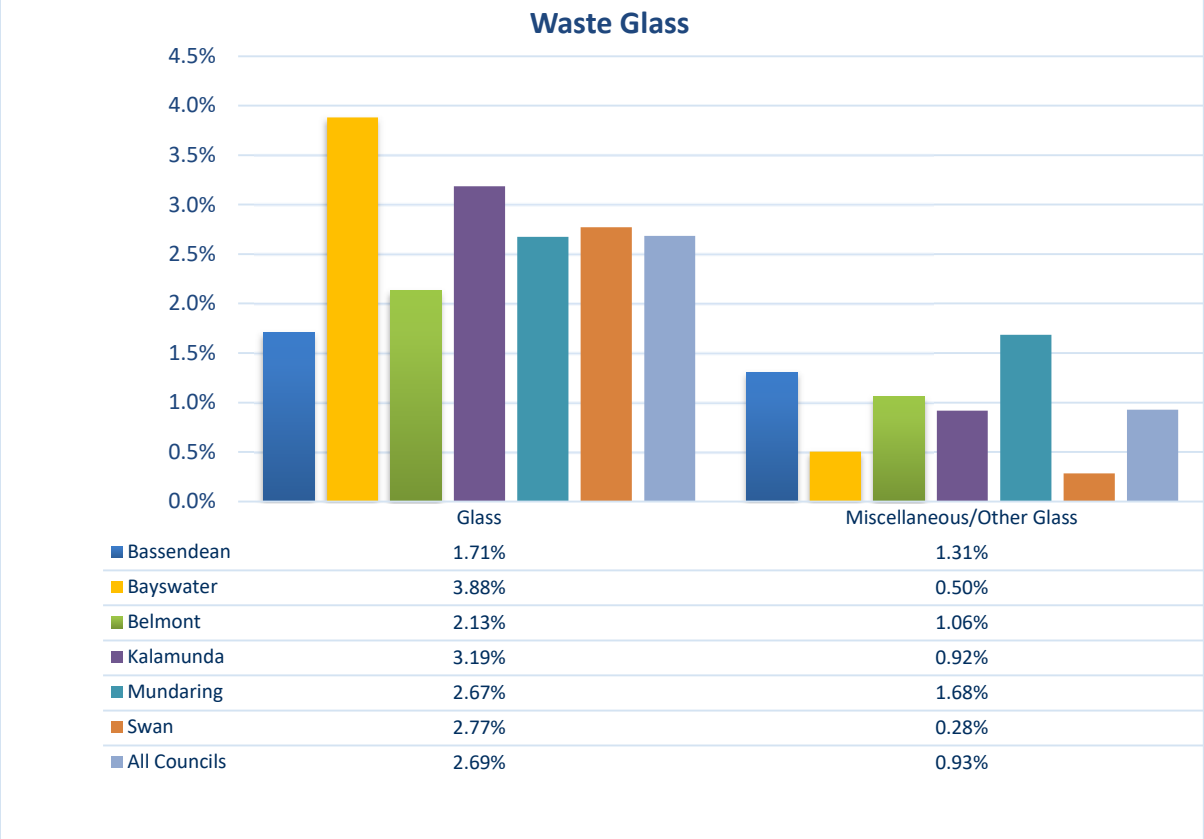
	Corrugated Cardboard	Flat Cardboard	Liquid Paper Board Foil Lined and Other	Composite cardboard	Other Cardboard
Bassendean	0.28%	0.86%	0.26%	0.01%	1.42%
Bayswater	1.74%	0.92%	0.59%	0.02%	1.11%
Belmont	0.82%	0.63%	0.24%	0.01%	1.19%
Kalamunda	0.58%	0.98%	0.21%	0.02%	1.69%
Mundaring	0.57%	0.90%	0.40%	0.01%	0.78%
Swan	0.75%	0.85%	0.38%	0.04%	1.31%
All Councils	0.75%	0.85%	0.33%	0.02%	1.28%

Figure 14 All Councils Waste Cardboard



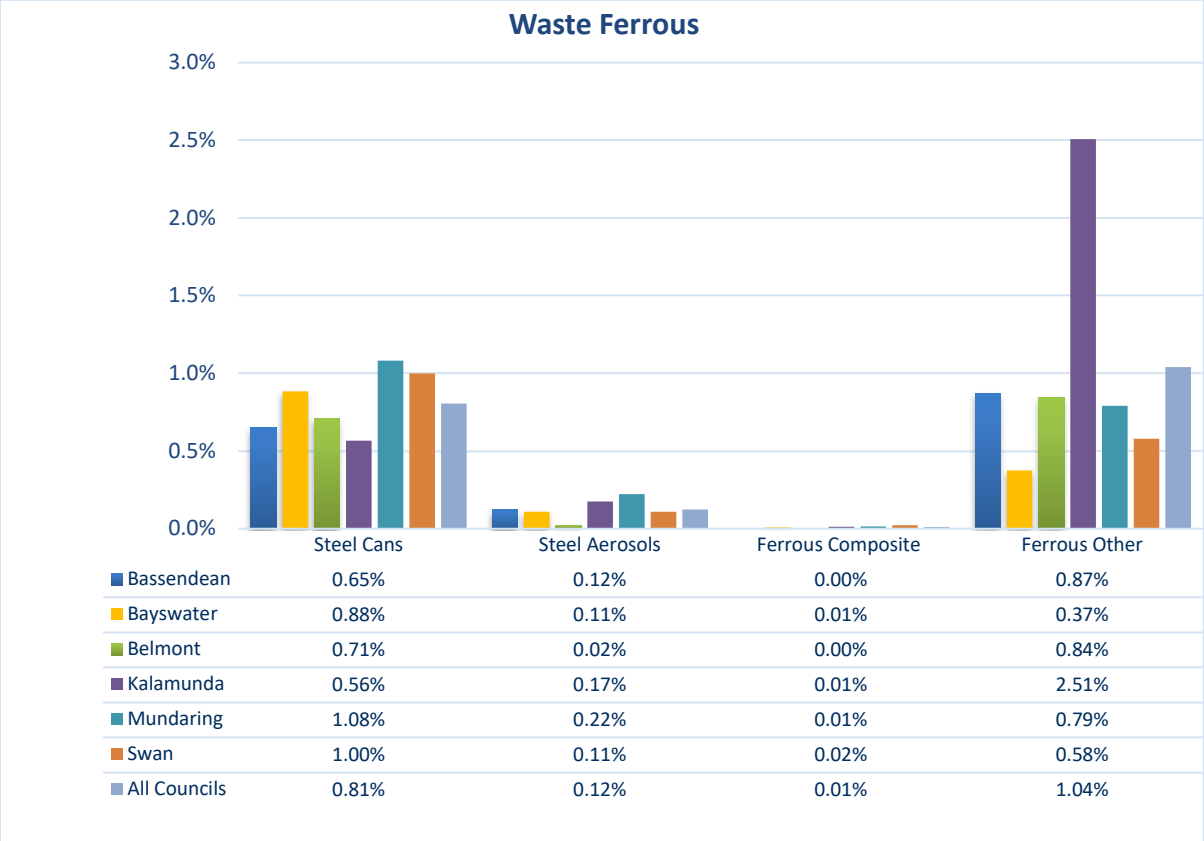
	PET #1	HDPE#2	PVC#3	LDPE#4	Polypropylene#5	Polystyrene #6	Plastic#7 Other	Plastic Bags	Plastic Film	Composite (Mostly Plastic)
Bassendean	0.90%	0.38%	0.13%	0.10%	0.99%	0.60%	0.86%	3.90%	0.22%	0.02%
Bayswater	1.43%	0.51%	0.05%	0.17%	1.19%	0.39%	0.89%	5.81%	0.08%	0.07%
Belmont	0.96%	0.52%	0.15%	0.13%	0.78%	0.45%	0.68%	4.12%	0.03%	0.03%
Kalamunda	0.85%	0.47%	0.66%	0.40%	0.96%	0.49%	1.00%	3.63%	0.04%	0.02%
Mundaring	1.23%	0.45%	0.17%	0.23%	1.05%	0.50%	1.49%	5.38%	0.08%	0.05%
Swan	1.43%	0.46%	0.10%	0.34%	0.95%	0.31%	0.77%	4.07%	0.10%	0.04%
All Councils	1.12%	0.46%	0.22%	0.24%	0.97%	0.45%	0.93%	4.36%	0.09%	0.04%

Figure 15 All Councils Waste Plastics



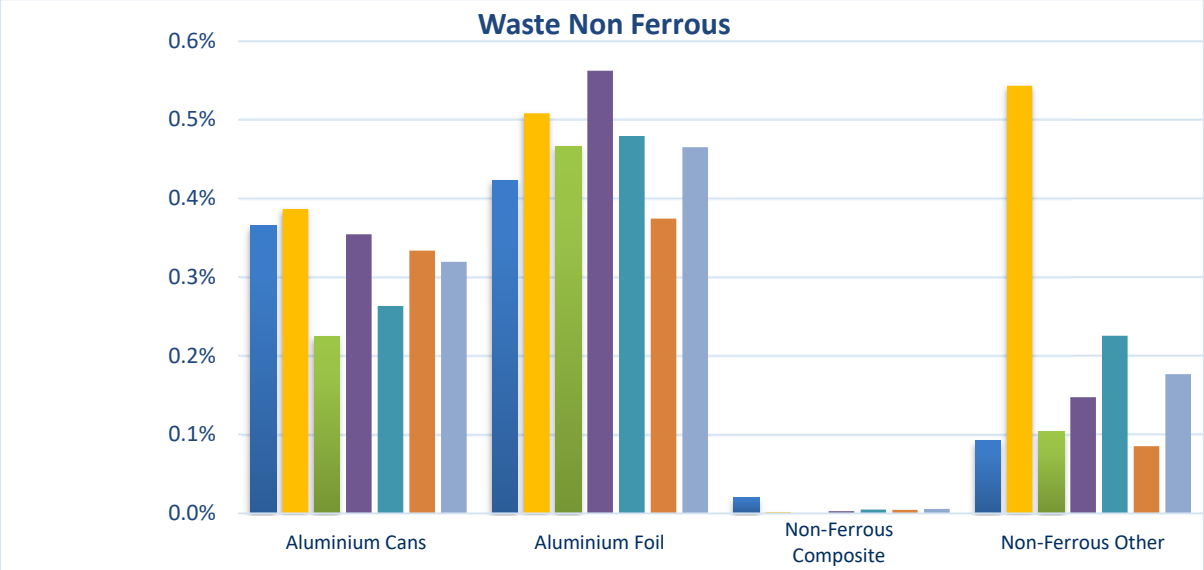
	Glass	Miscellaneous/Other Glass
Bassendean	1.71%	1.31%
Bayswater	3.88%	0.50%
Belmont	2.13%	1.06%
Kalamunda	3.19%	0.92%
Mundaring	2.67%	1.68%
Swan	2.77%	0.28%
All Councils	2.69%	0.93%

Figure 16 All Councils Waste Glass



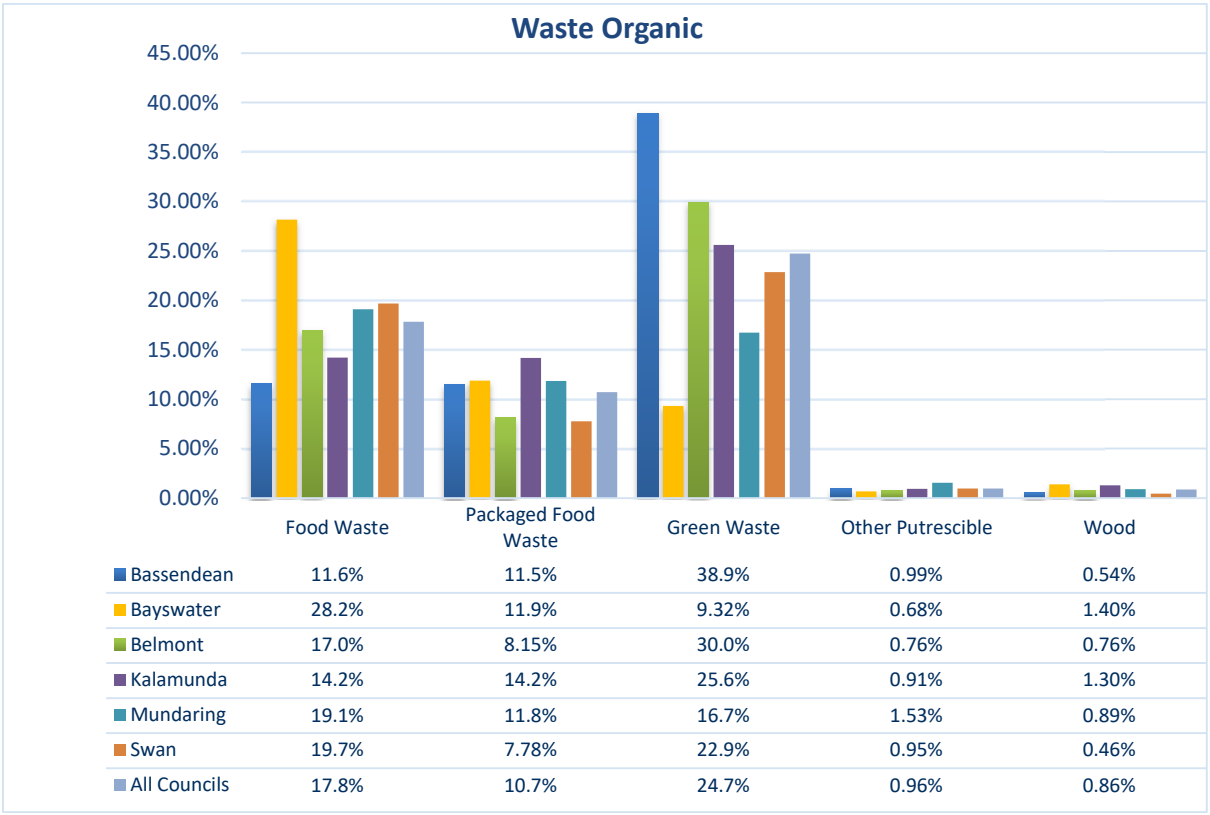
	Steel Cans	Steel Aerosols	Ferrous Composite	Ferrous Other
Bassendean	0.65%	0.12%	0.00%	0.87%
Bayswater	0.88%	0.11%	0.01%	0.37%
Belmont	0.71%	0.02%	0.00%	0.84%
Kalamunda	0.56%	0.17%	0.01%	2.51%
Mundaring	1.08%	0.22%	0.01%	0.79%
Swan	1.00%	0.11%	0.02%	0.58%
All Councils	0.81%	0.12%	0.01%	1.04%

Figure 17 All Councils Waste Ferrous



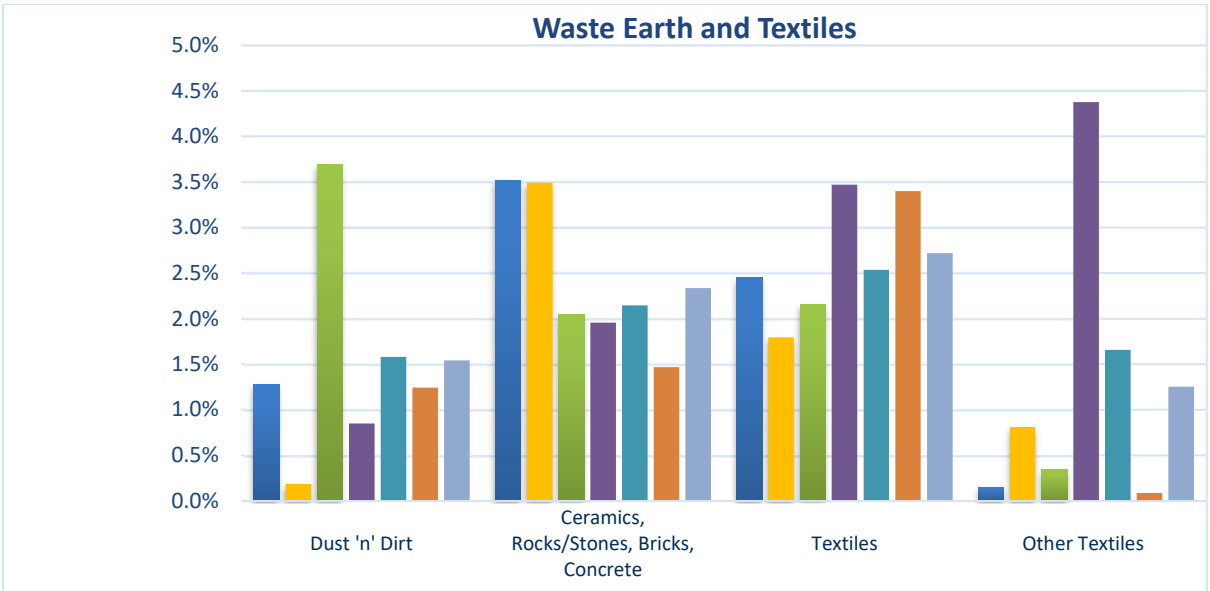
	Aluminium Cans	Aluminium Foil	Non-Ferrous Composite	Non-Ferrous Other
Bassendean	0.37%	0.42%	0.02%	0.09%
Bayswater	0.39%	0.51%	0.00%	0.54%
Belmont	0.22%	0.47%	0.00%	0.10%
Kalamunda	0.35%	0.56%	0.00%	0.15%
Mundaring	0.26%	0.48%	0.00%	0.23%
Swan	0.33%	0.37%	0.00%	0.08%
All Councils	0.32%	0.47%	0.01%	0.18%

Figure 18 All Councils Waste Non Ferrous



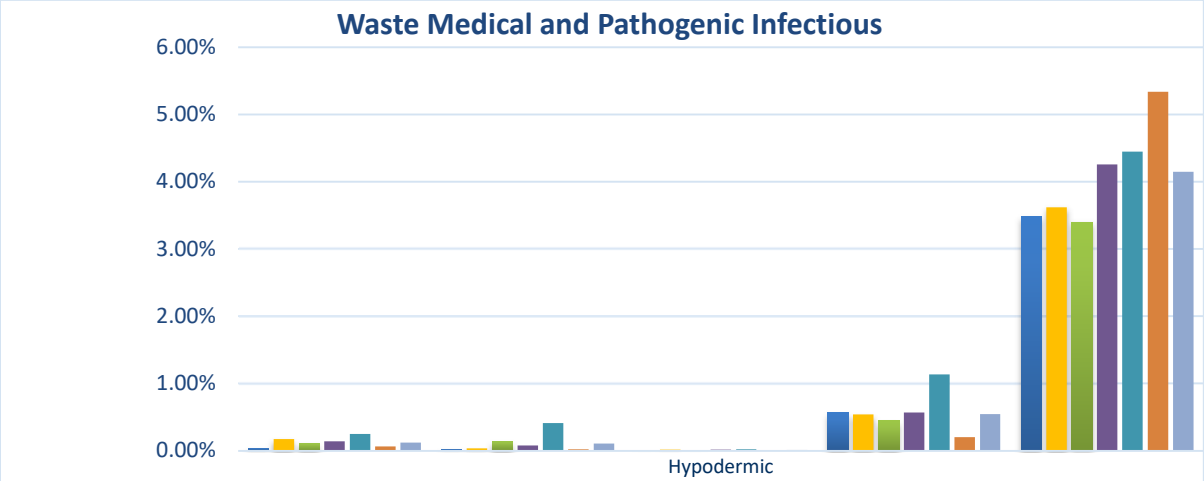
	Food Waste	Packaged Food Waste	Green Waste	Other Putrescible	Wood
Bassendean	11.6%	11.5%	38.9%	0.99%	0.54%
Bayswater	28.2%	11.9%	9.32%	0.68%	1.40%
Belmont	17.0%	8.15%	30.0%	0.76%	0.76%
Kalamunda	14.2%	14.2%	25.6%	0.91%	1.30%
Mundaring	19.1%	11.8%	16.7%	1.53%	0.89%
Swan	19.7%	7.78%	22.9%	0.95%	0.46%
All Councils	17.8%	10.7%	24.7%	0.96%	0.86%

Figure 19 All Councils Waste Organic



	Dust 'n' Dirt	Ceramics, Rocks/Stones, Bricks, Concrete	Textiles	Other Textiles
Bassendean	1.28%	3.52%	2.45%	0.15%
Bayswater	0.19%	3.49%	1.79%	0.81%
Belmont	3.69%	2.05%	2.15%	0.35%
Kalamunda	0.85%	1.96%	3.47%	4.38%
Mundaring	1.58%	2.15%	2.54%	1.66%
Swan	1.24%	1.47%	3.40%	0.09%
All Councils	1.54%	2.33%	2.72%	1.26%

Figure 20 All Councils Waste Earth

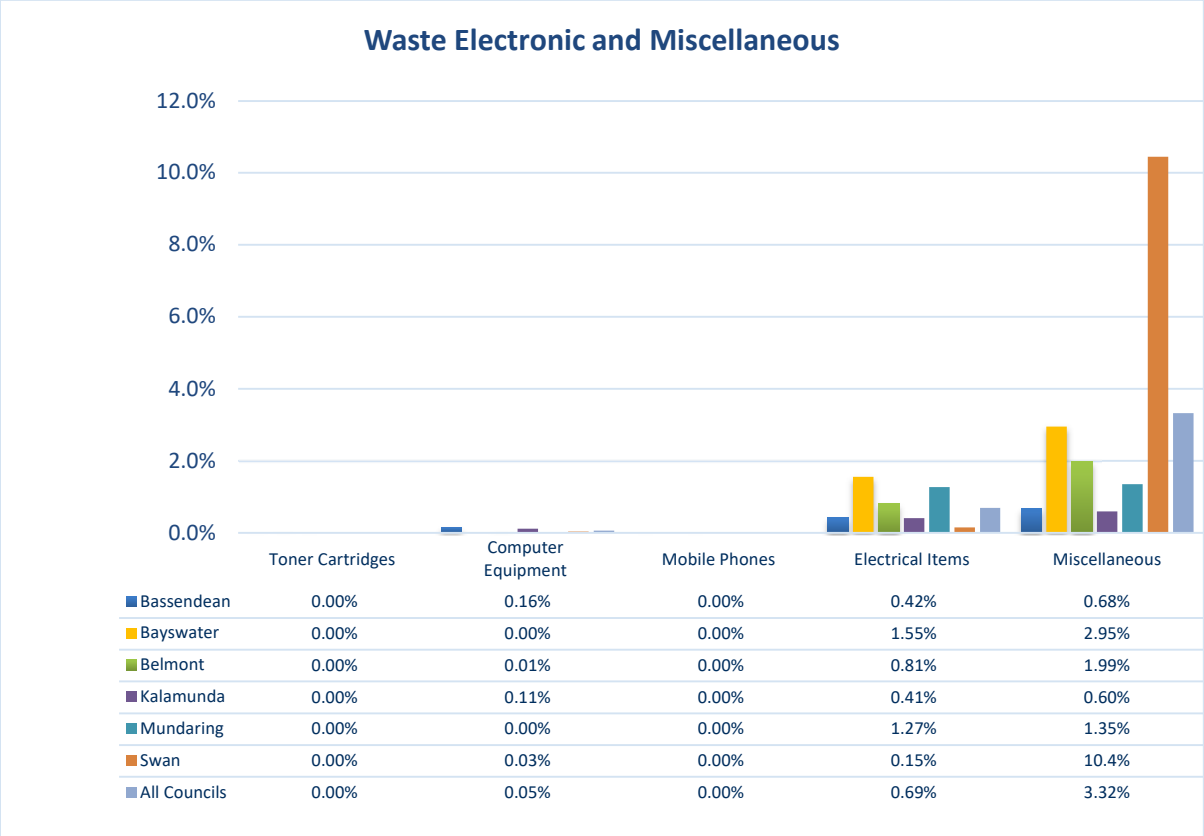


	Pharmaceuticals	Medical Waste	Hypodermic Syringes / Epi Pens	Sanitary / Hygiene	Nappies
Bassendean	0.04%	0.02%	0.00%	0.57%	3.48%
Bayswater	0.17%	0.03%	0.01%	0.54%	3.62%
Belmont	0.11%	0.14%	0.00%	0.44%	3.40%
Kalamunda	0.14%	0.08%	0.01%	0.57%	4.26%
Mundaring	0.25%	0.41%	0.02%	1.13%	4.45%
Swan	0.06%	0.02%	0.00%	0.20%	5.34%
All Councils	0.12%	0.11%	0.01%	0.54%	4.15%

Figure 21 All Councils Waste Medical and Pathogenic Infectious

	Chemicals	Paint	Batteries Household	Batteries Other	Fluorescent Tubes/Light Bulbs	Oil Household, Motor & Other	Building Material	Hazardous Other
Bassendean	0.00%	0.00%	0.11%	0.00%	0.01%	0.06%	0.01%	0.87%
Bayswater	0.01%	0.00%	0.05%	0.00%	0.03%	0.00%	0.00%	0.01%
Belmont	0.00%	0.00%	0.04%	0.00%	0.02%	0.29%	0.13%	0.39%
Kalamunda	0.00%	0.01%	0.05%	0.00%	0.02%	0.00%	0.00%	0.68%
Mundaring	0.00%	0.01%	0.15%	0.02%	0.02%	0.00%	0.00%	3.48%
Swan	0.00%	0.15%	0.05%	0.00%	0.02%	0.00%	0.04%	0.05%
All Councils	0.00%	0.03%	0.07%	0.00%	0.02%	0.06%	0.03%	0.83%

Figure 22 All Councils Waste Hazardous



	Toner Cartridges	Computer Equipment	Mobile Phones	Electrical Items	Miscellaneous
Bassendean	0.00%	0.16%	0.00%	0.42%	0.68%
Bayswater	0.00%	0.00%	0.00%	1.55%	2.95%
Belmont	0.00%	0.01%	0.00%	0.81%	1.99%
Kalamunda	0.00%	0.11%	0.00%	0.41%	0.60%
Mundaring	0.00%	0.00%	0.00%	1.27%	1.35%
Swan	0.00%	0.03%	0.00%	0.15%	10.4%
All Councils	0.00%	0.05%	0.00%	0.69%	3.32%

Figure 23 All Councils Waste Electronic and Miscellaneous

7.2 Bassendean Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste stream in Bassendean.

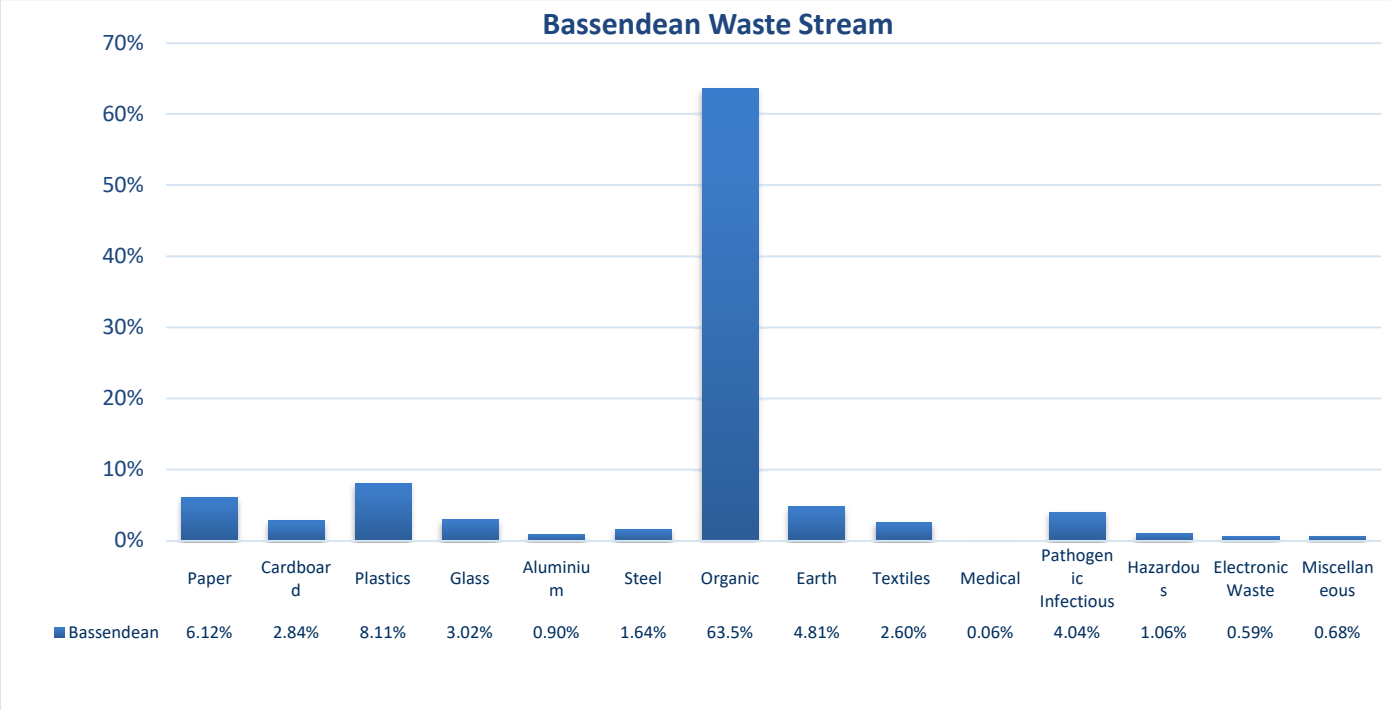


Figure 24 Bassendean Waste Stream

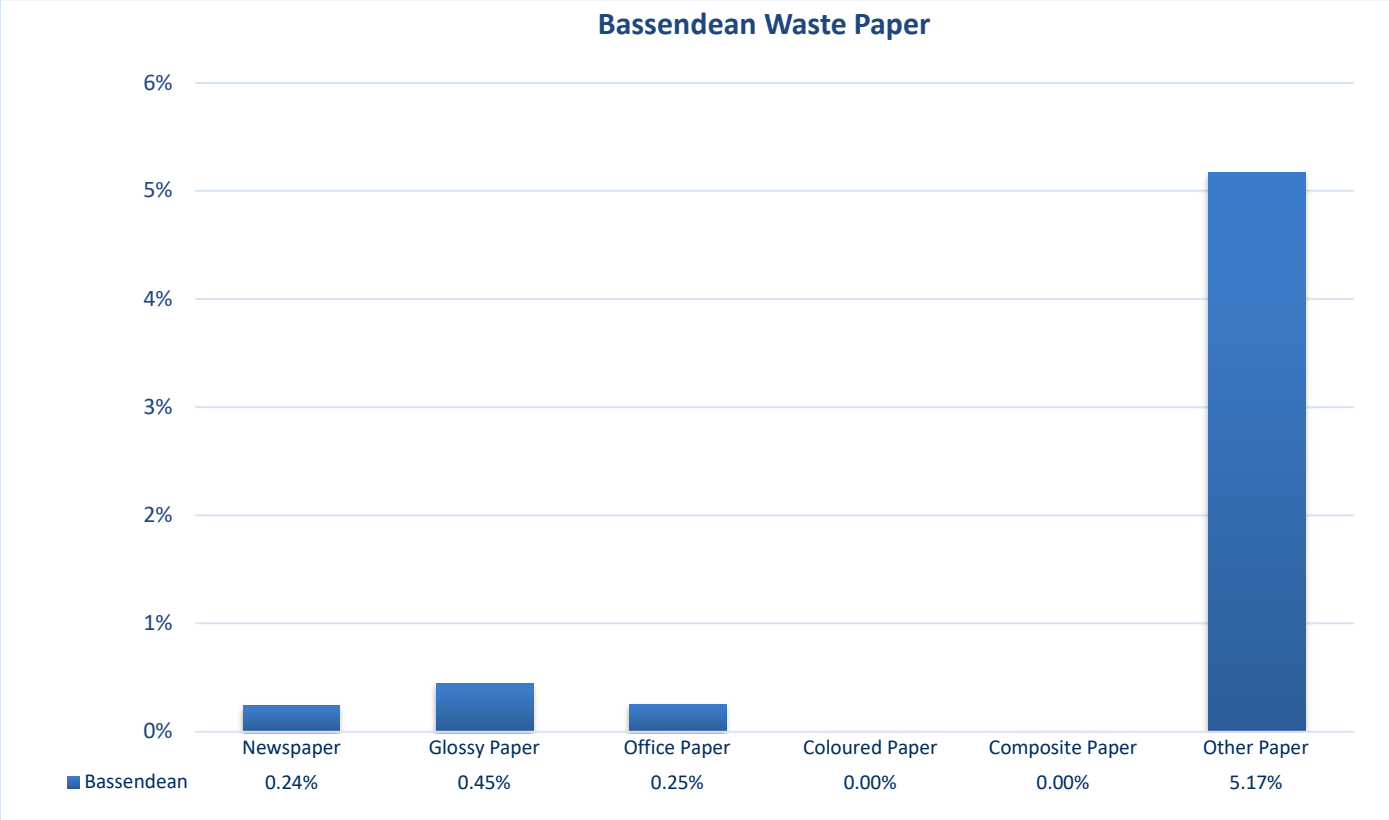


Figure 25 Bassendean Waste Paper

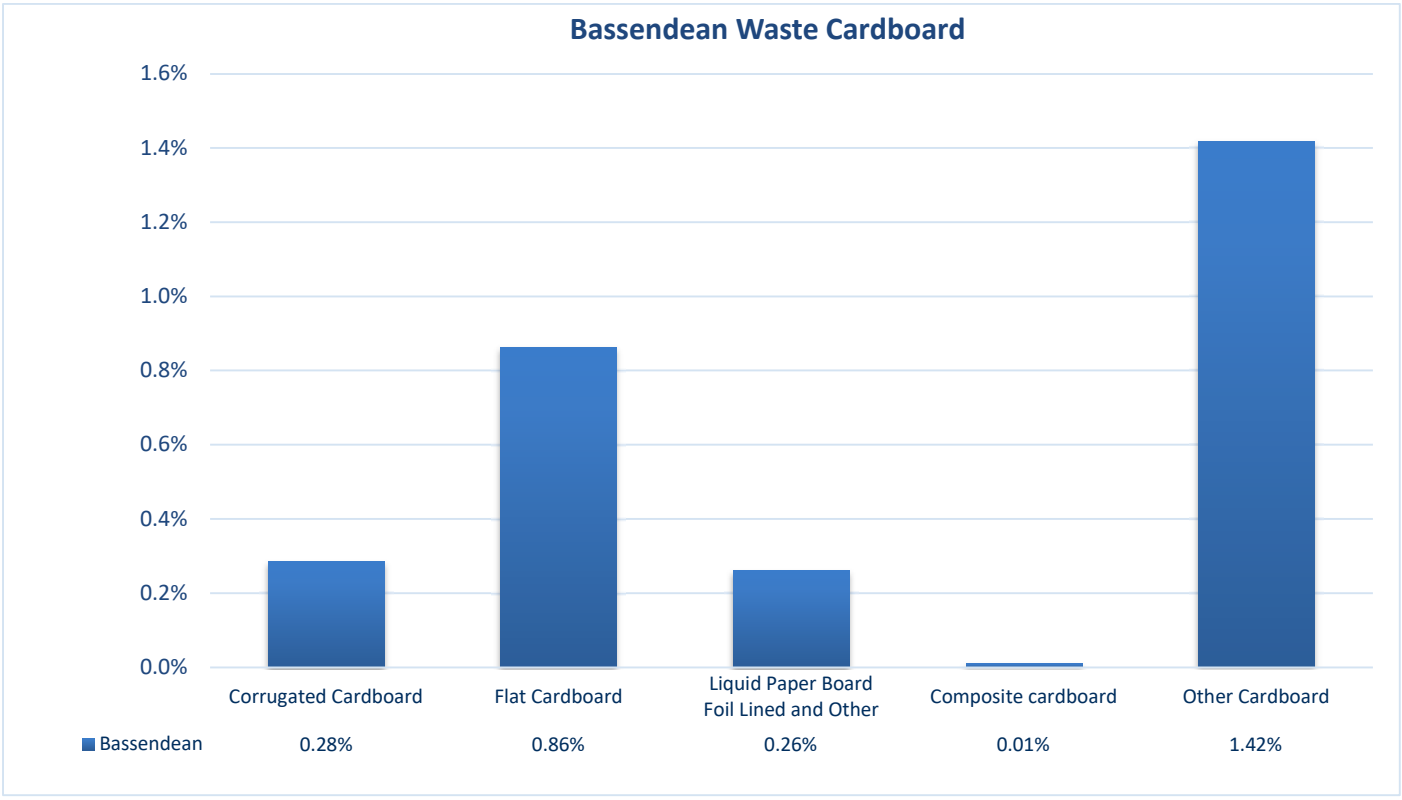


Figure 26 Bassendean Waste Cardboard

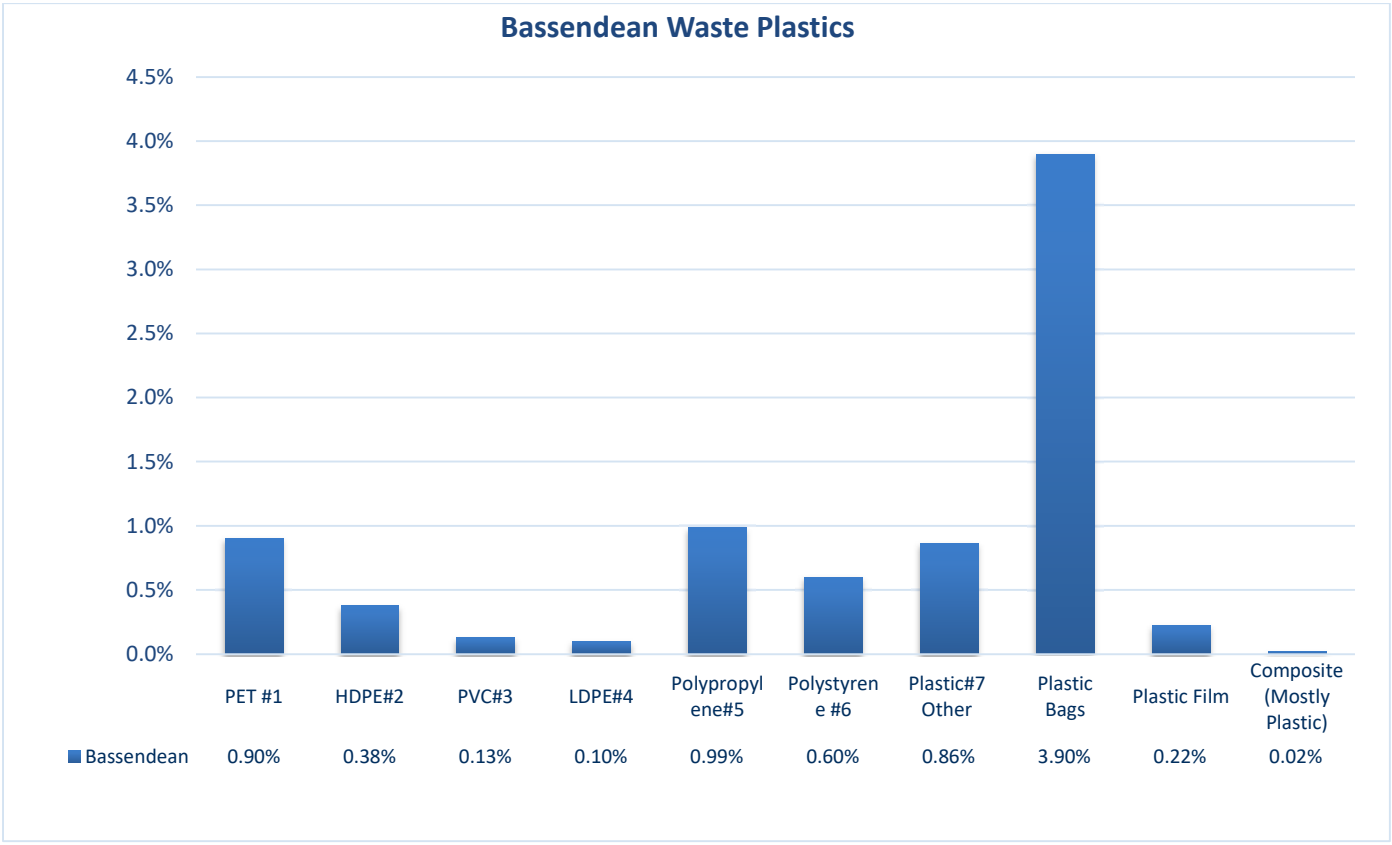


Figure 27 Bassendean Waste Plastics

Figure 28 Bassendean Waste Glass

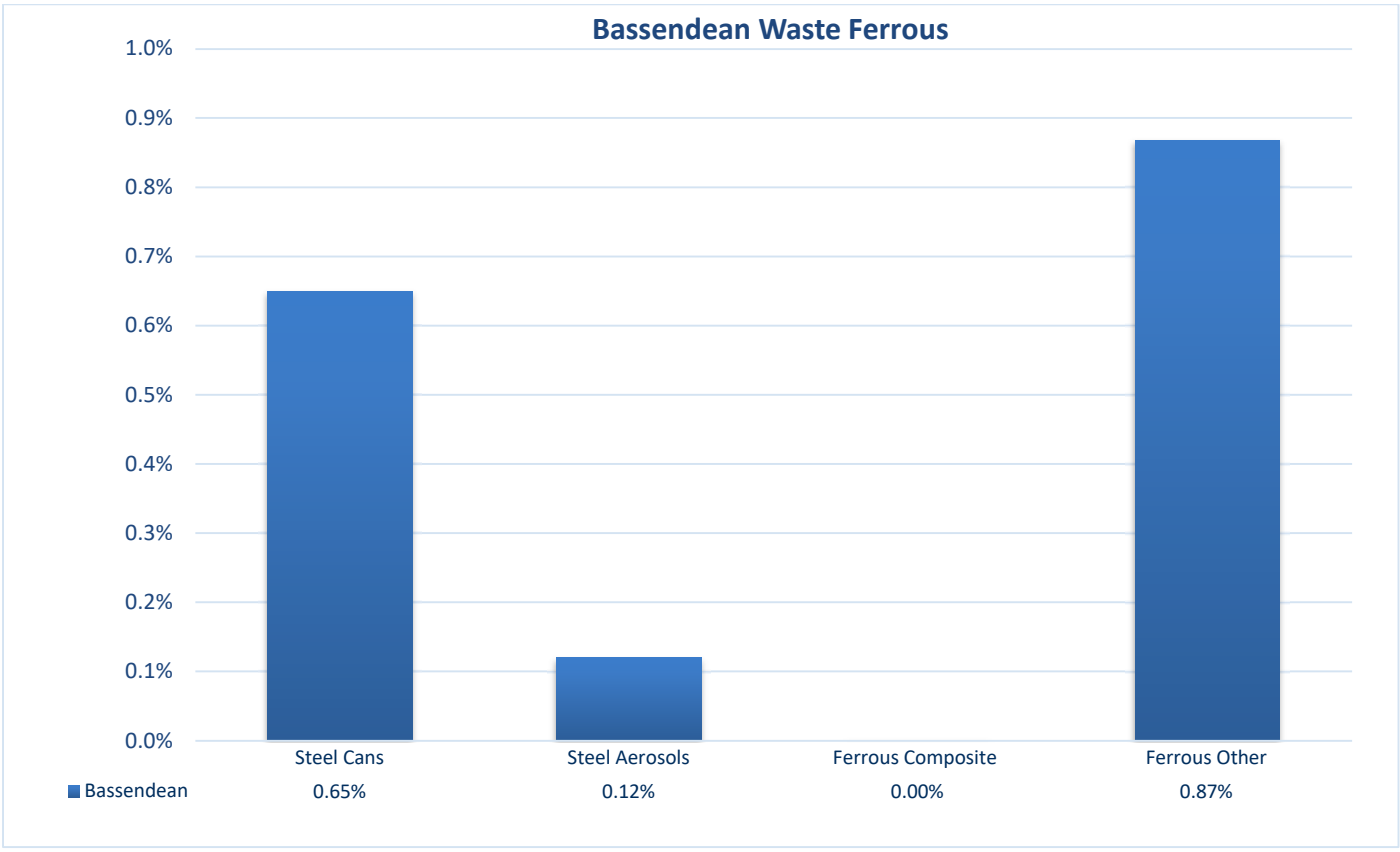


Figure 29 Bassendean Waste Ferrous

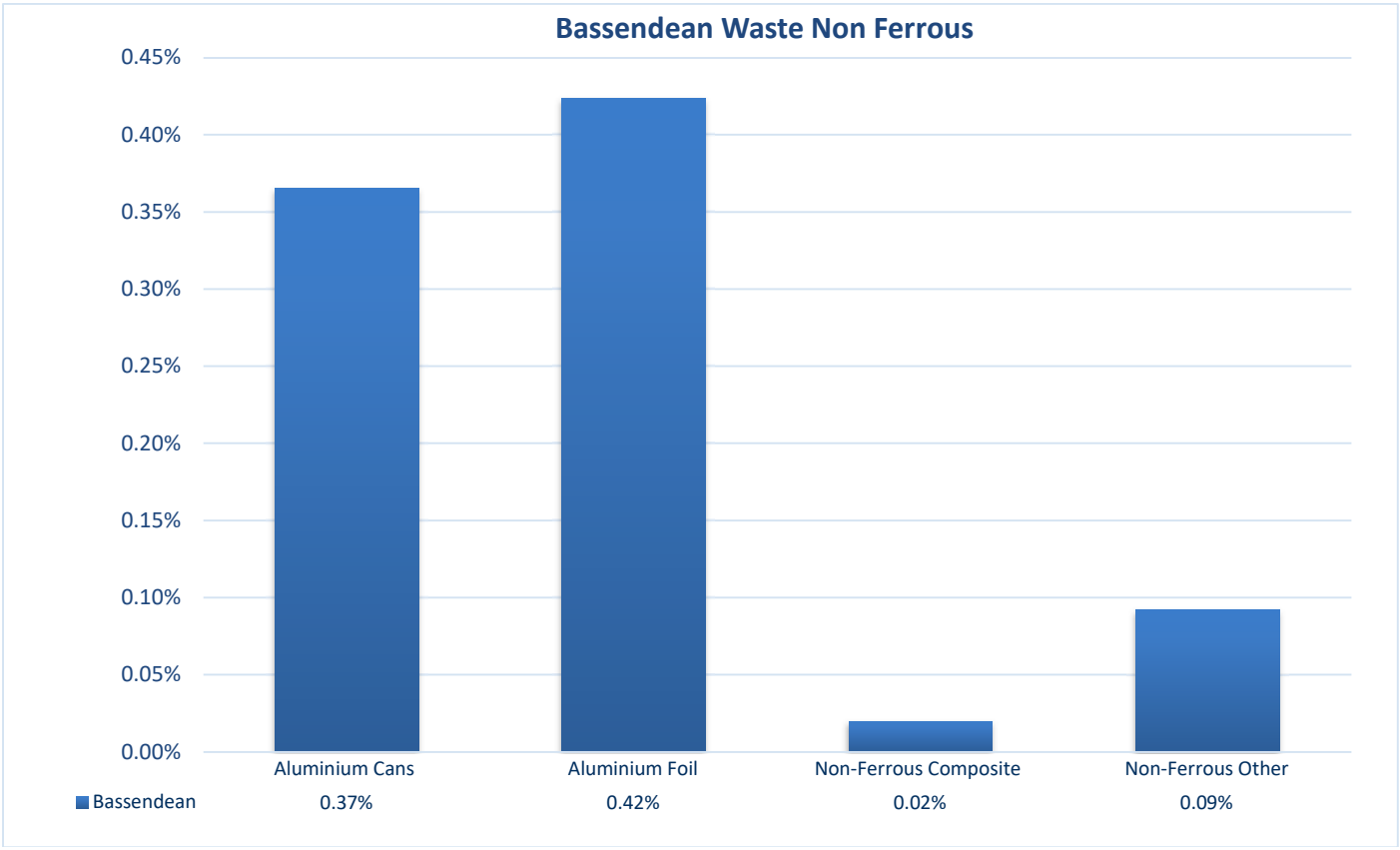


Figure 30 Bassendean Waste Non-Ferrous

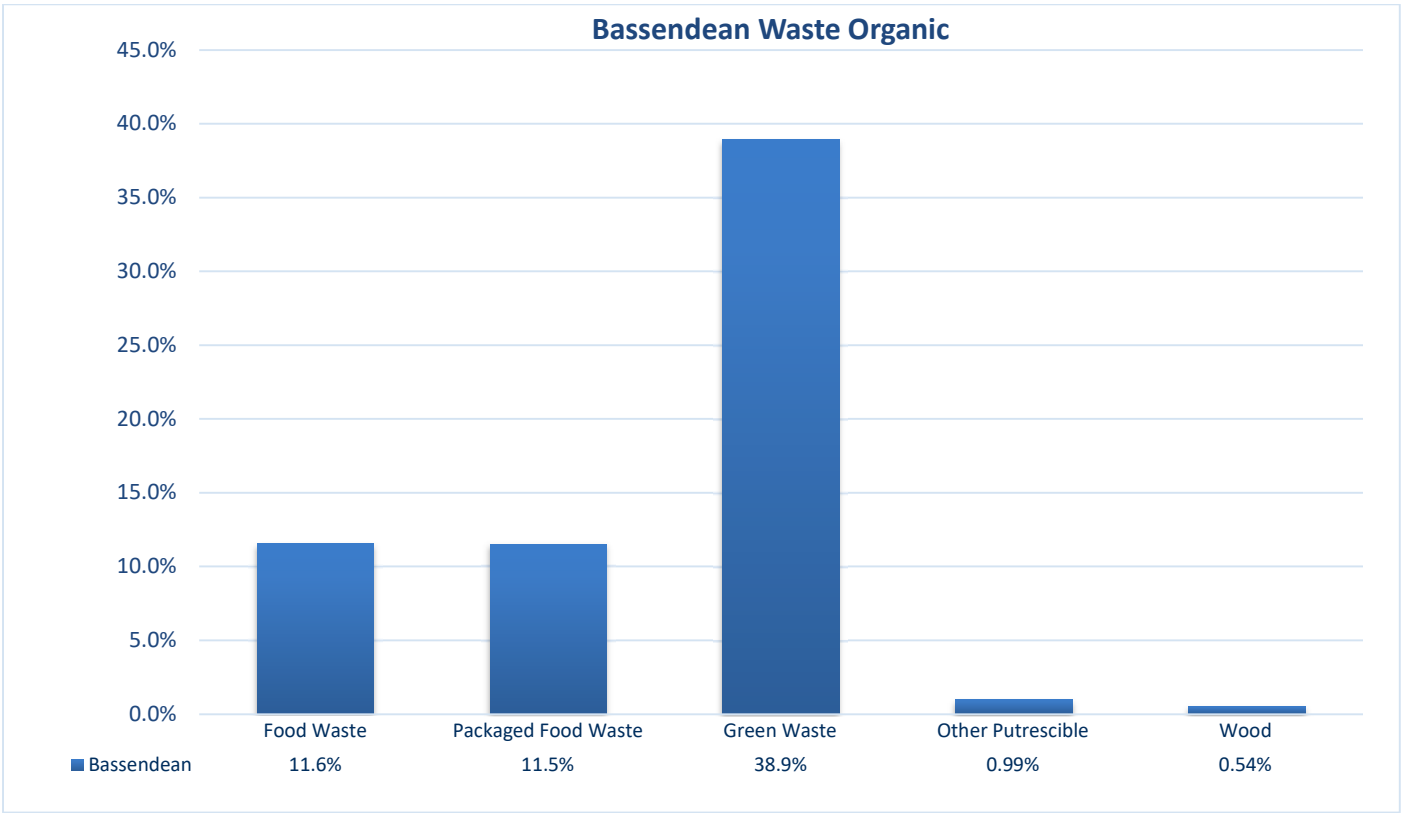


Figure 31 Bassendean Waste Organic

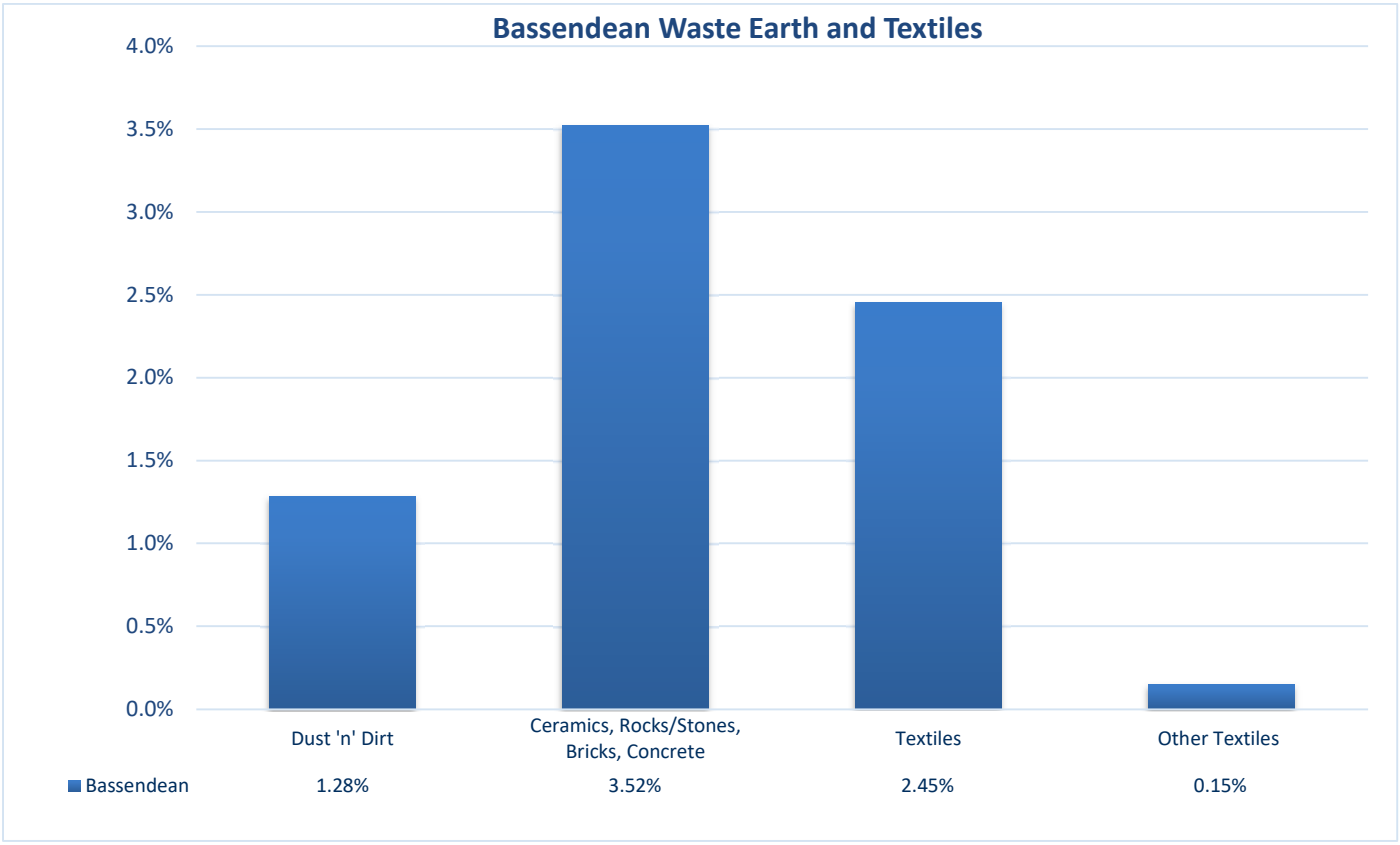


Figure 32 Bassendean Waste Earth

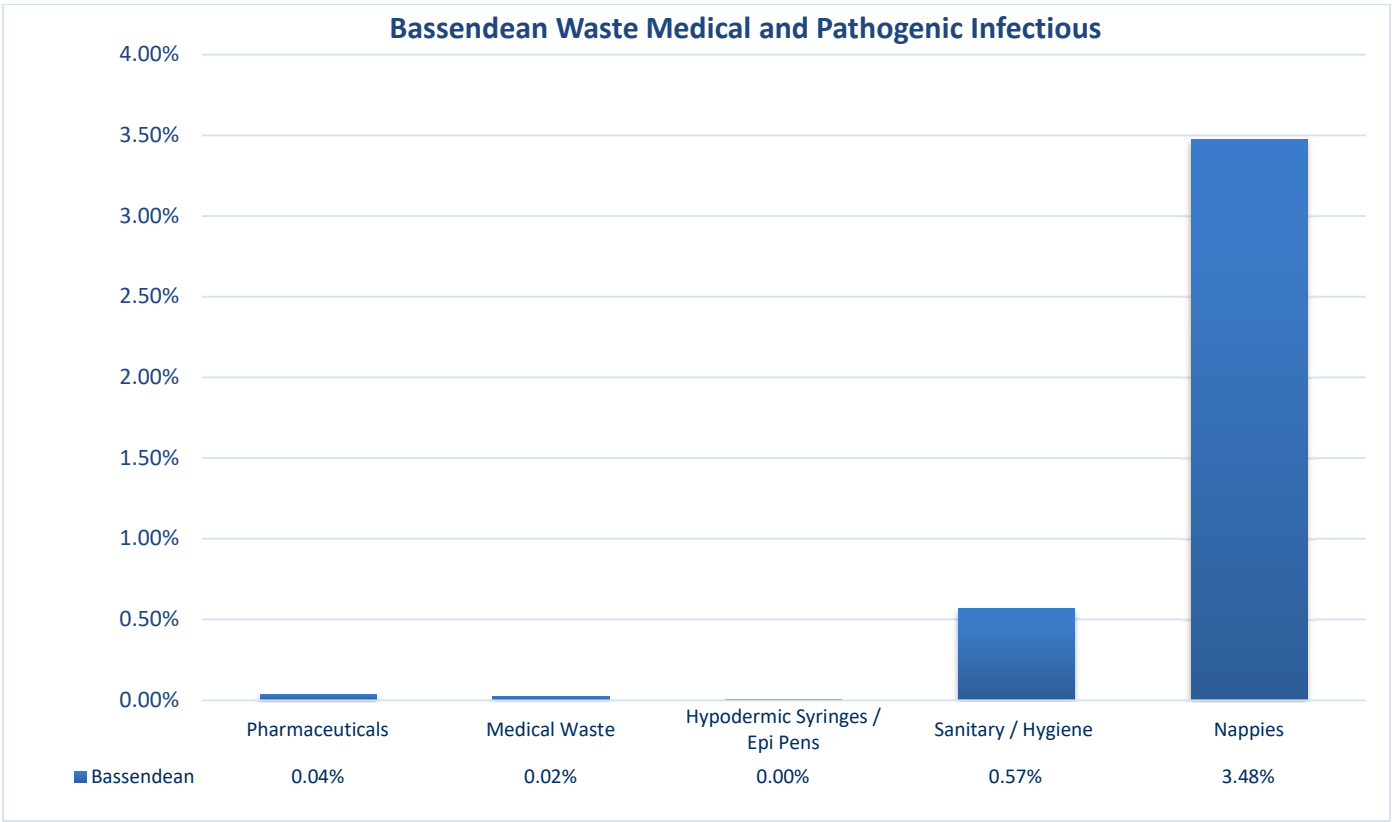


Figure 33 Bassendean Waste Medical and Pathogenic Infectious

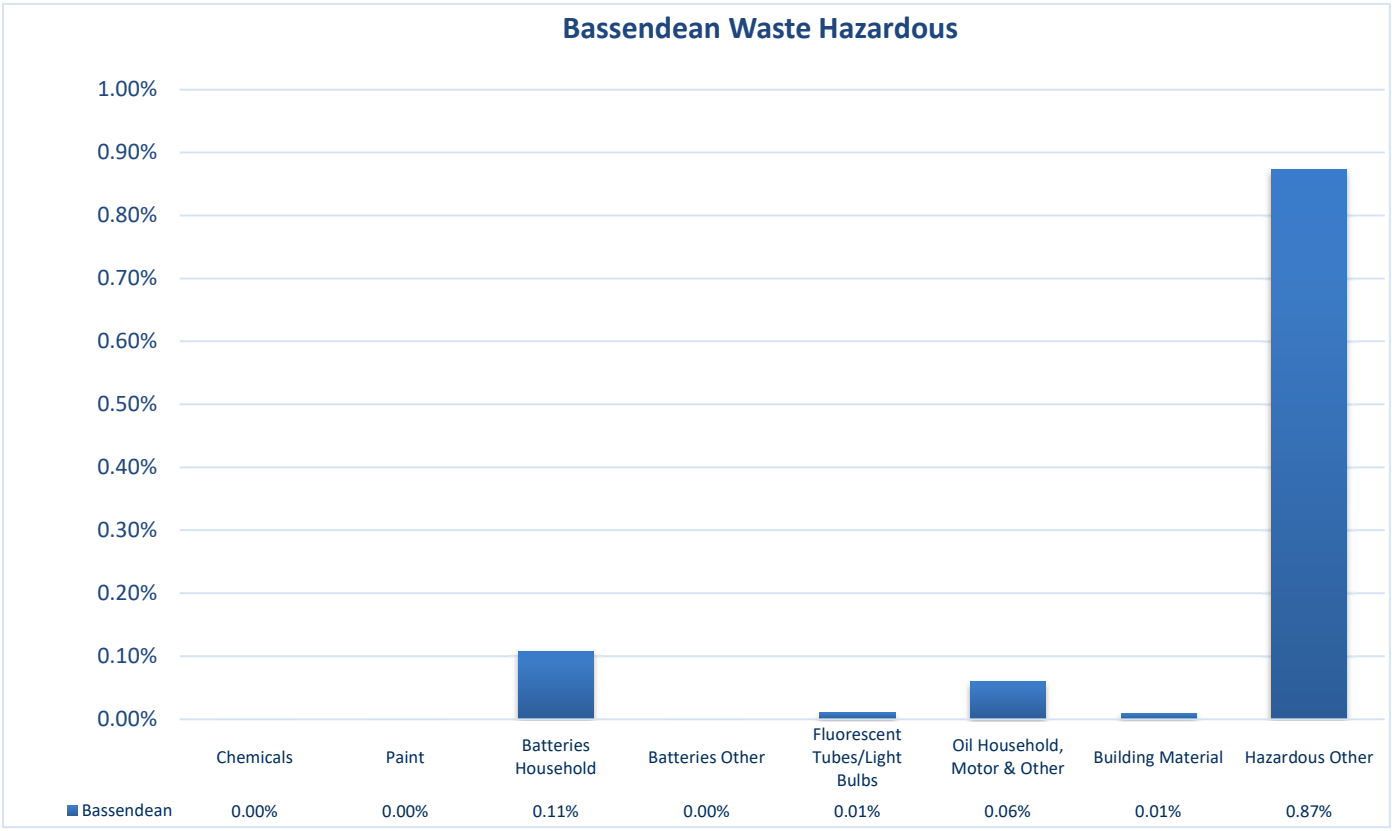


Figure 34 Bassendean Waste Hazardous

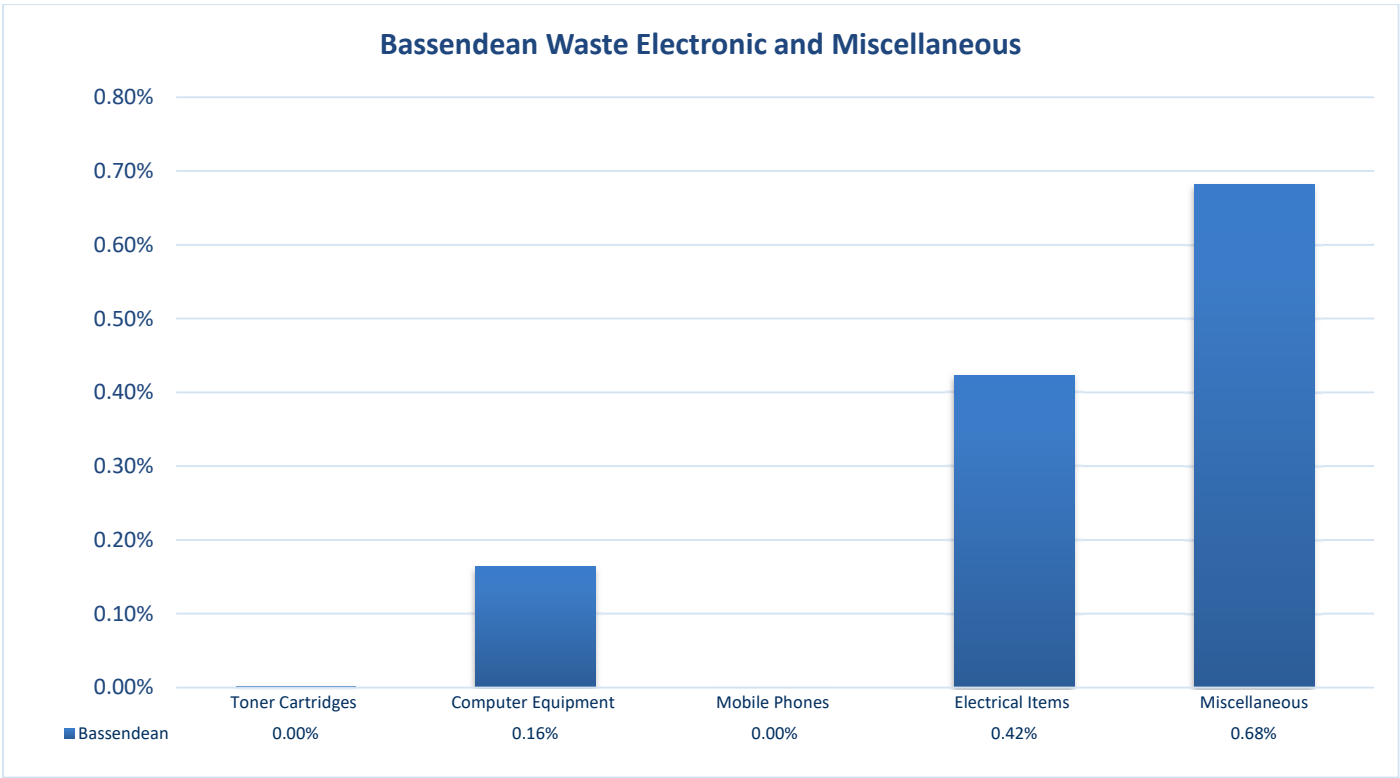


Figure 35 Bassendean Waste Electronic and Miscellaneous

Table 12 Bassendean Waste Summary Table

EMRC Waste Audit		
	Bassendean	
Recyclables	Net Weight	Percentage of Weight
Paper	85.1 kg	6.12%
Cardboard	39.5 kg	2.84%
Plastics	112.8 kg	8.11%
Glass	42.0 kg	3.02%
Aluminium	12.5 kg	0.90%
Steel	22.8 kg	1.64%
Recyclables Total		
	314.8 kg	22.6%
Non-Recyclables		
Organic	884.5 kg	63.5%
Earth	66.9 kg	4.81%
Textiles	36.2 kg	2.60%
Medical	0.90 kg	0.06%
Pathogenic Infectious	56.3 kg	4.04%
Hazardous	14.8 kg	1.06%
Electronic Waste	8.20 kg	0.59%
Miscellaneous	9.49 kg	0.68%
Non-Recyclables Total		
	1,077.2 kg	77.4%
Summary		
Total Recyclables	314.8 kg	22.6%
Total Non-Recyclables	1,077.2 kg	77.4%
	1,392.0 kg	**100%**

7.3 Bayswater Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste streams in Bayswater.

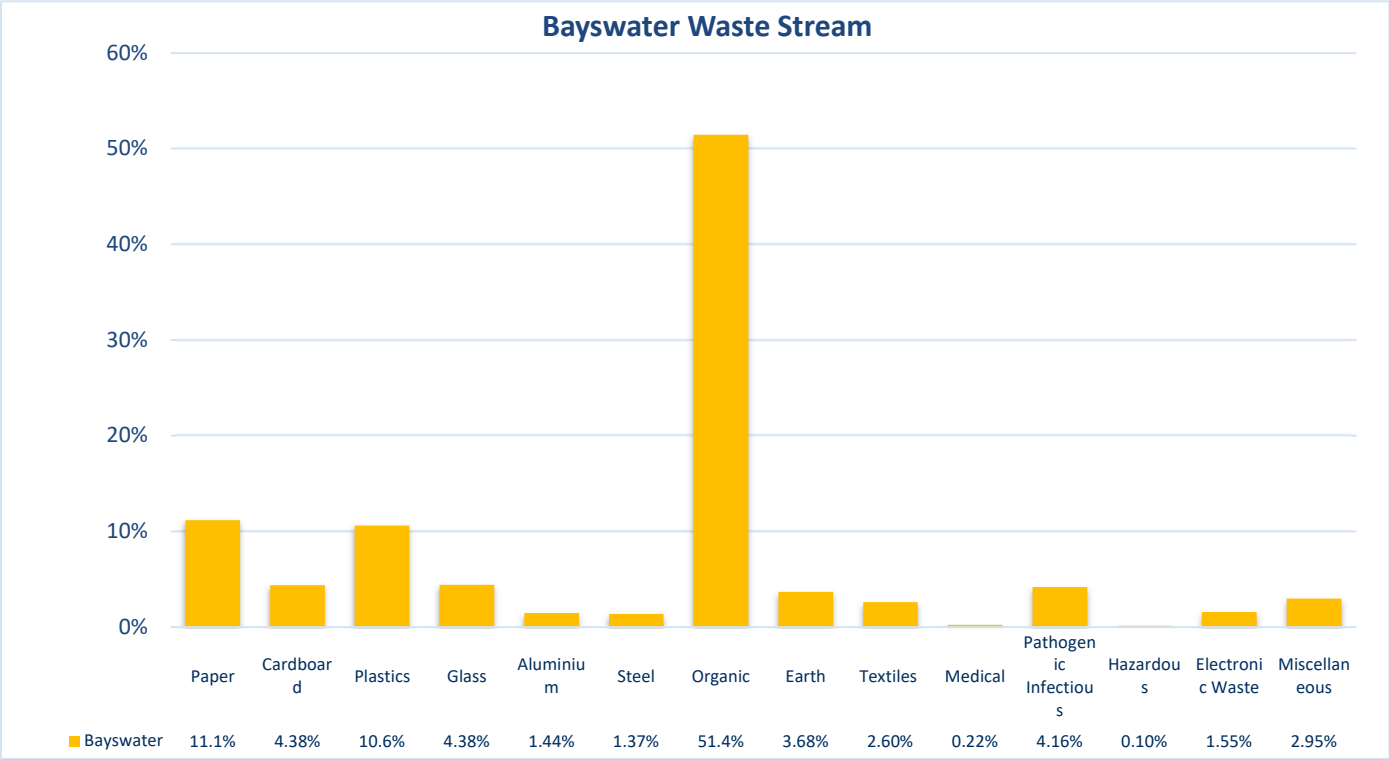


Figure 36 Bayswater Waste Stream

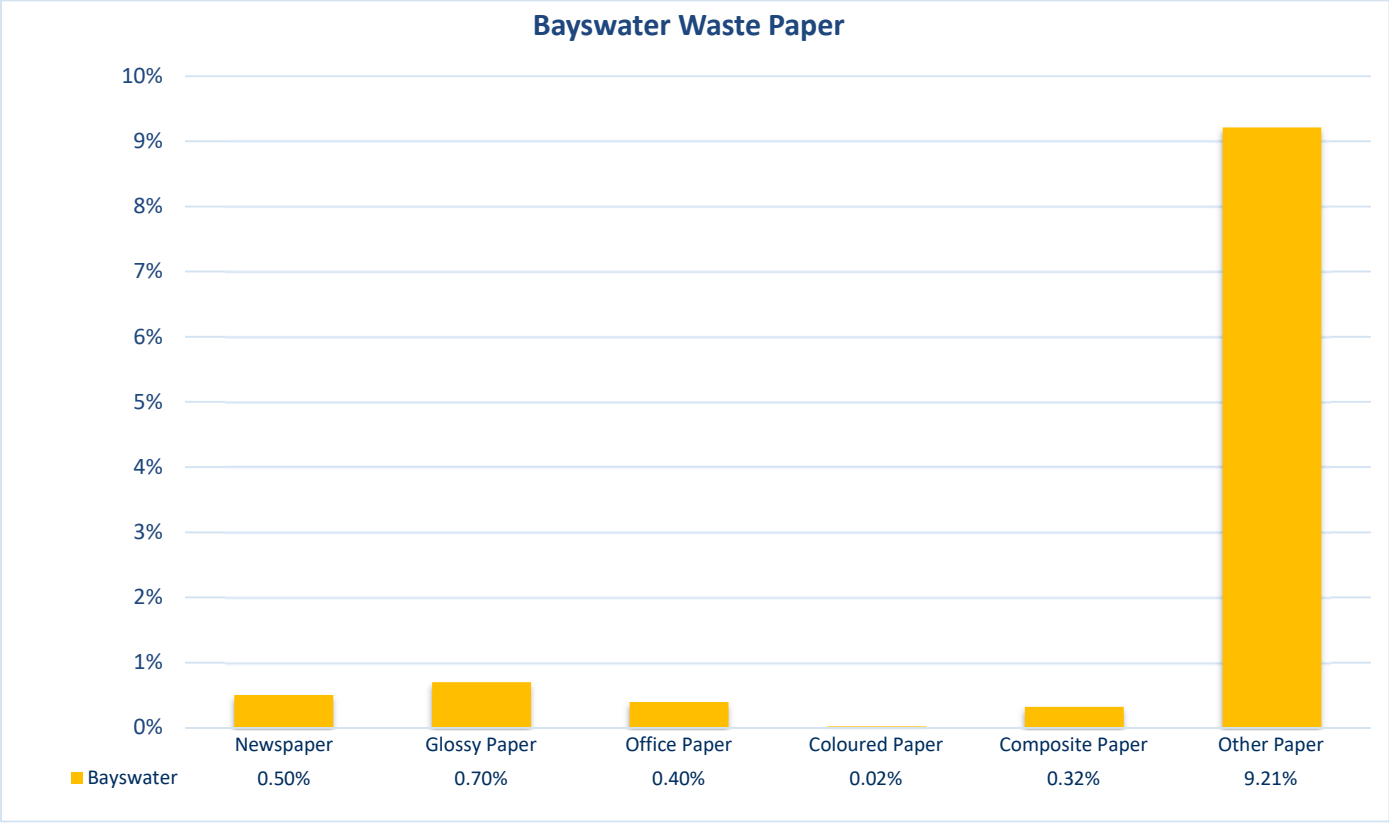


Figure 37 Bayswater Waste Paper

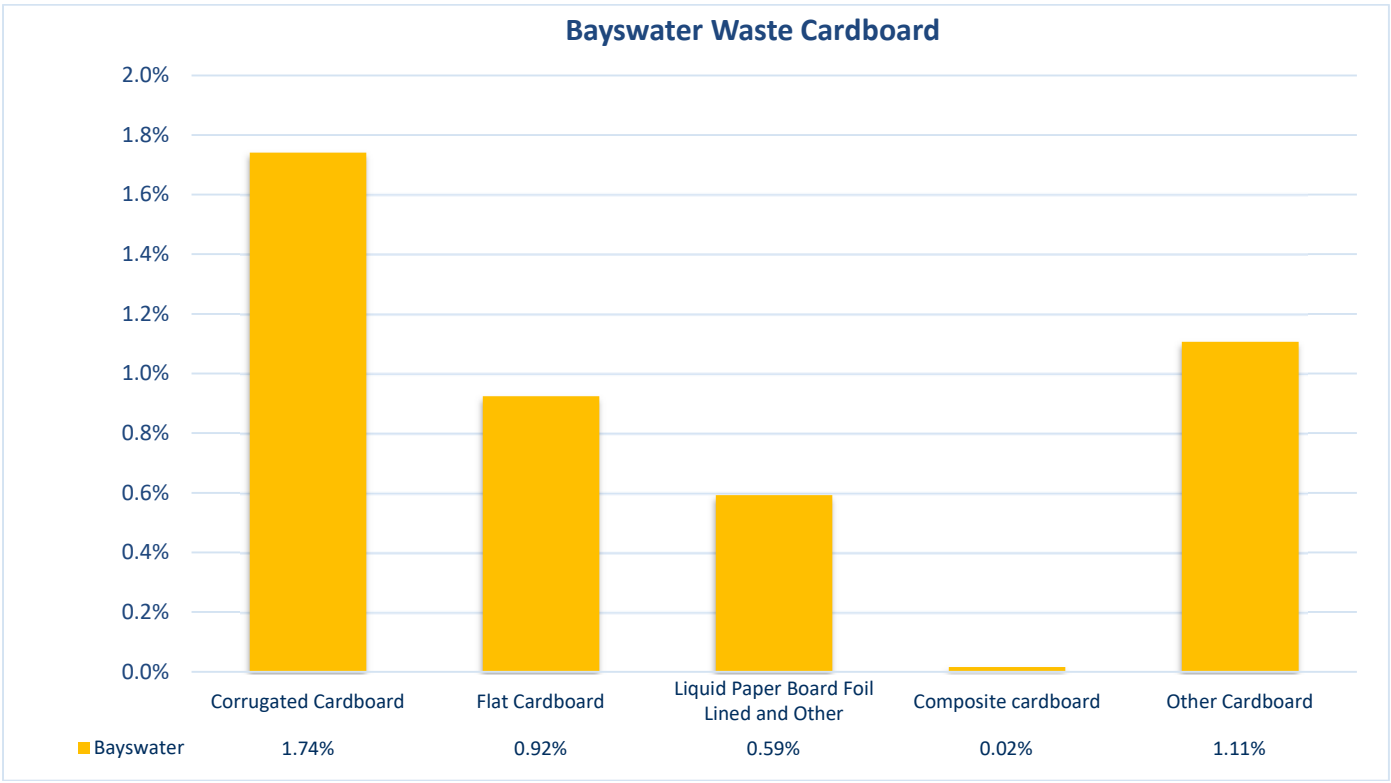


Figure 38 Bayswater Waste Cardboard

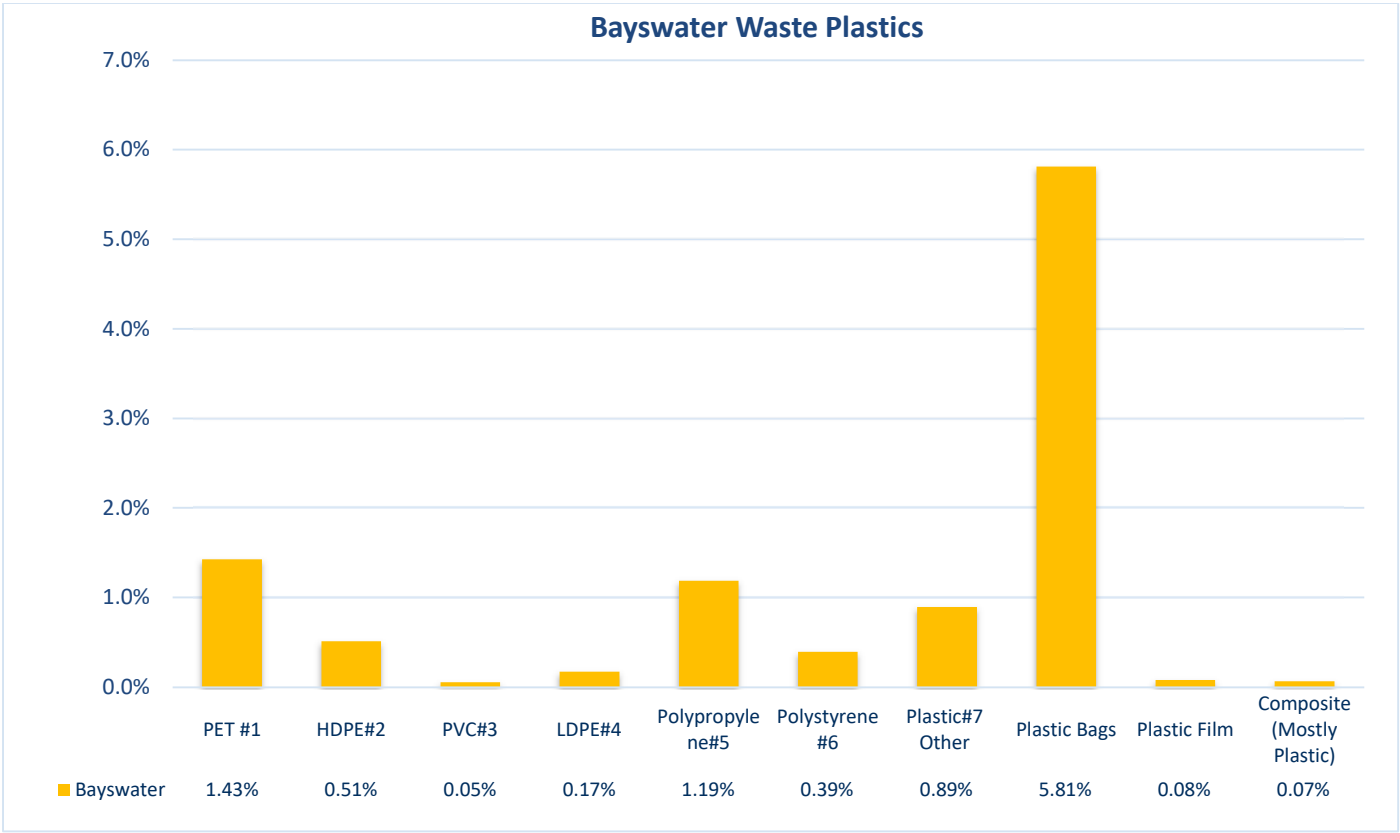


Figure 39 Bayswater Waste Plastics

Figure 40 Bayswater Waste Glass

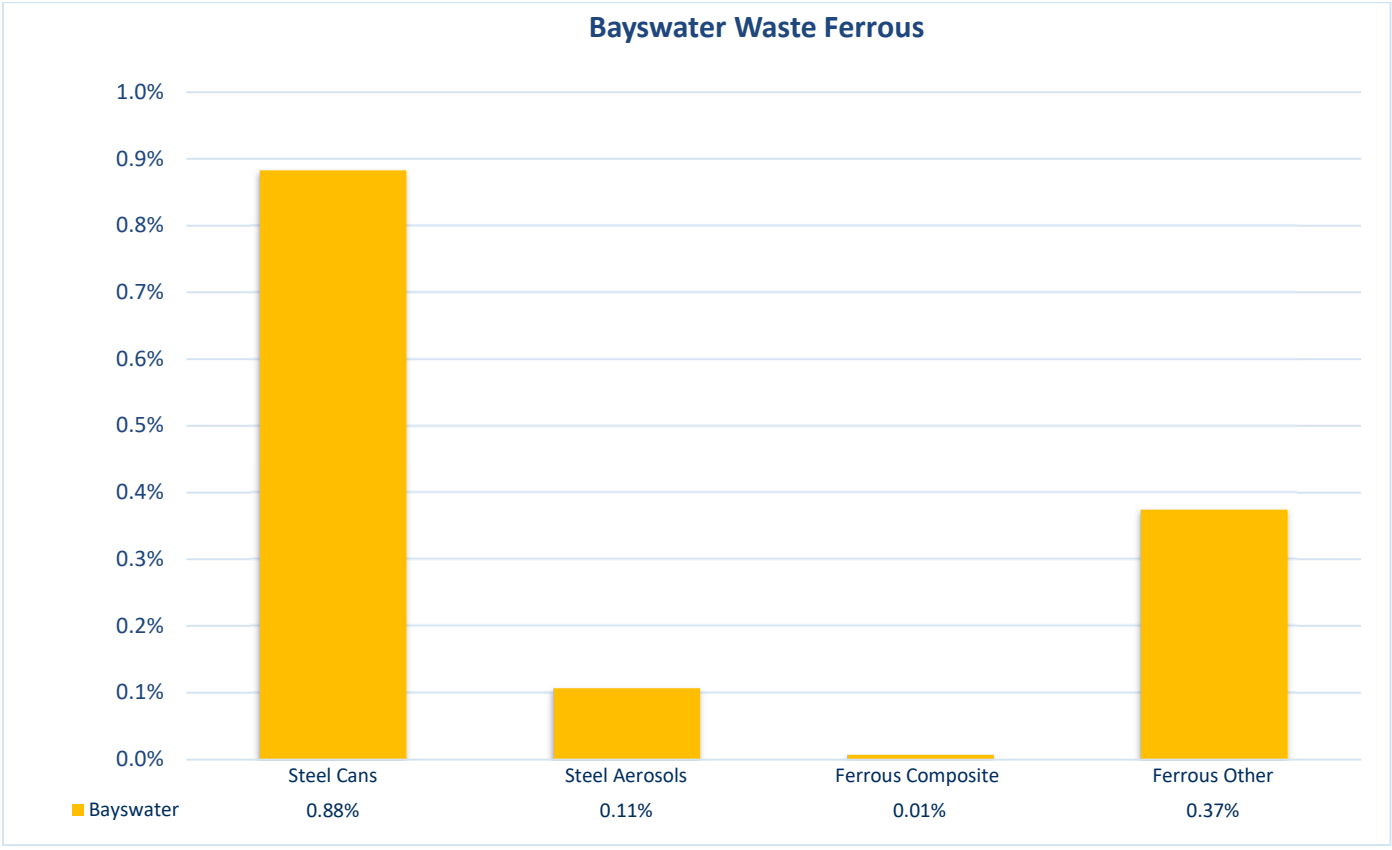


Figure 41 Bayswater Waste Ferrous

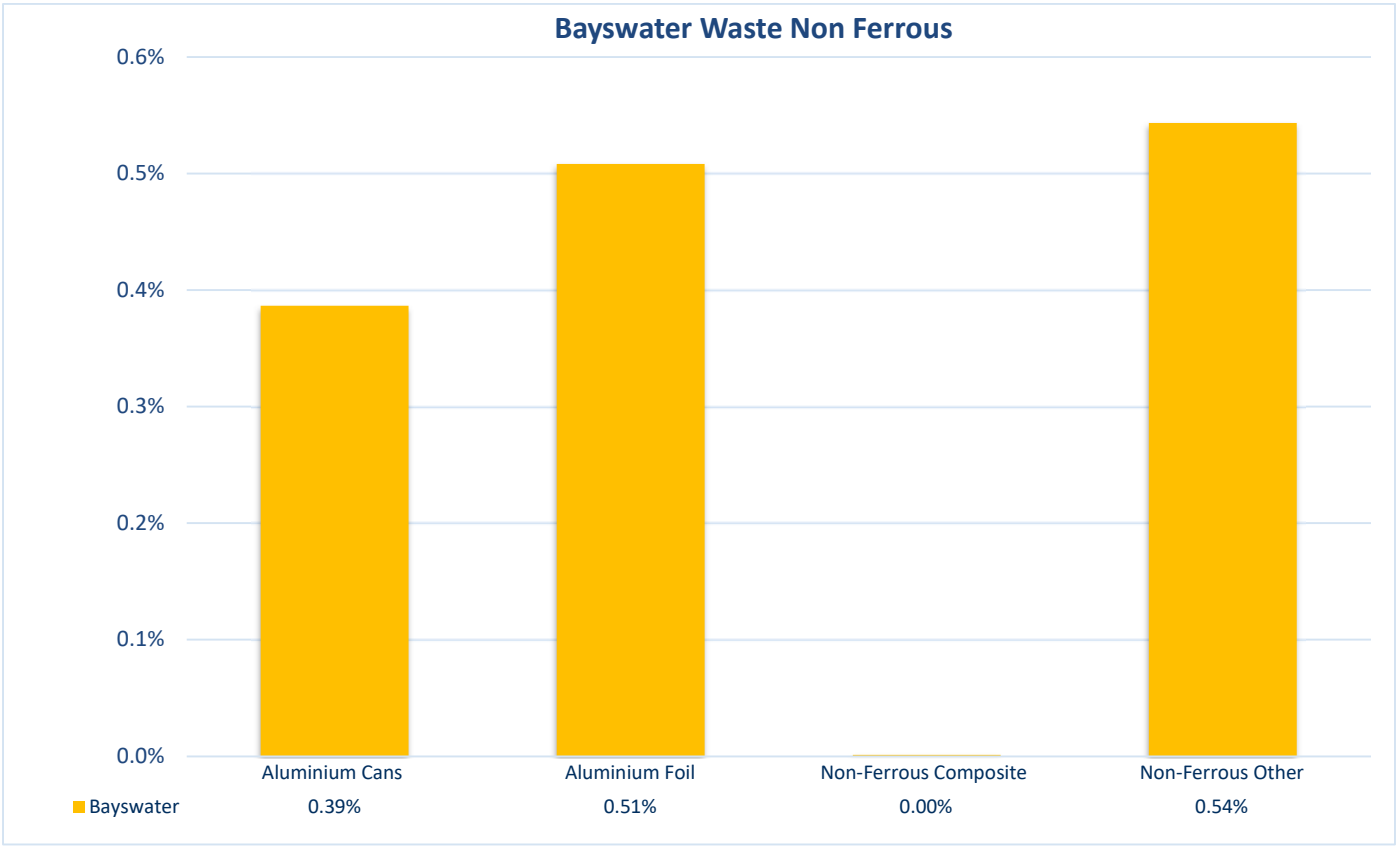


Figure 42 Bayswater Waste Non Ferrous

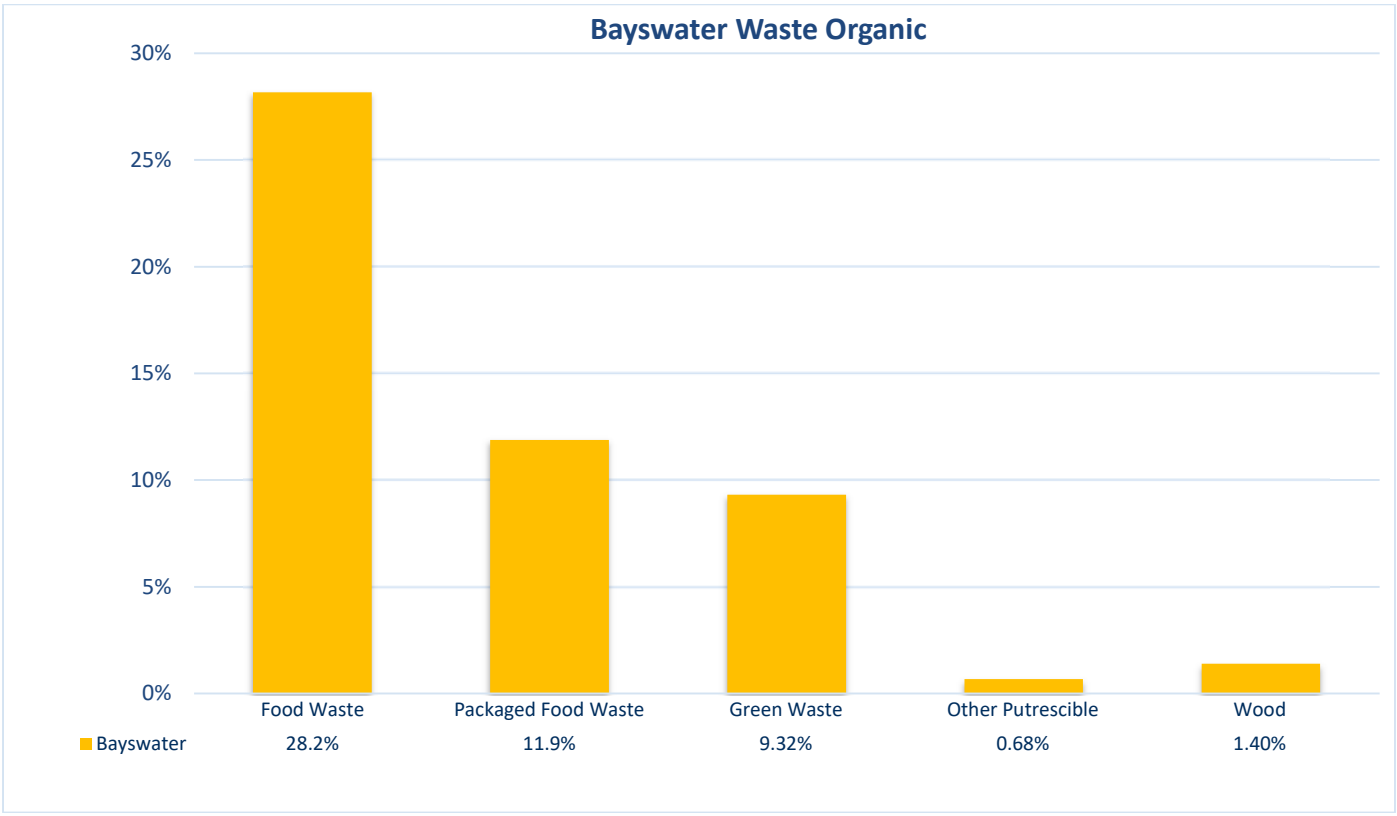


Figure 43 Bayswater Waste Organic

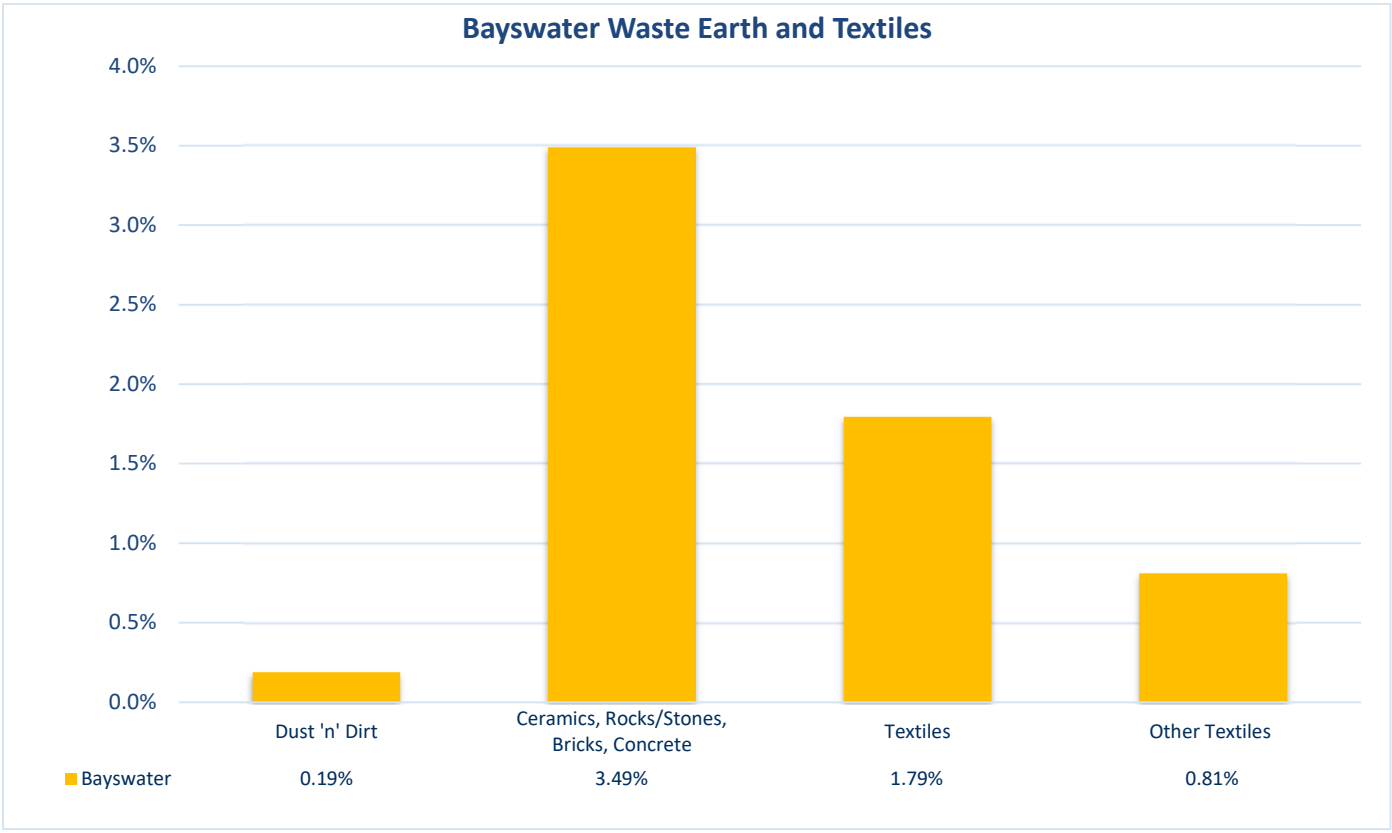


Figure 44 Bayswater Waste Earth and Textiles

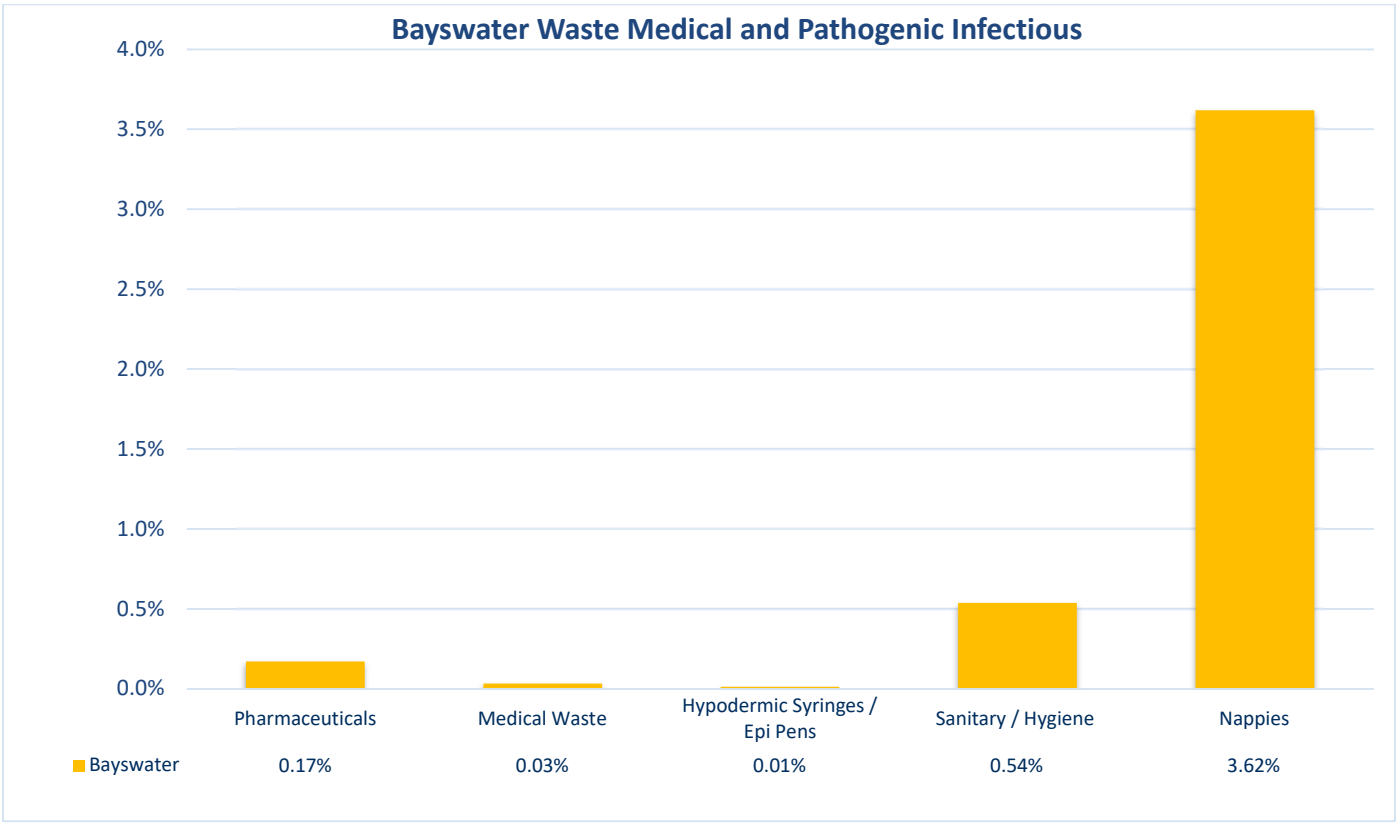


Figure 45 Bayswater Waste Medical and Pathogenic Infectious

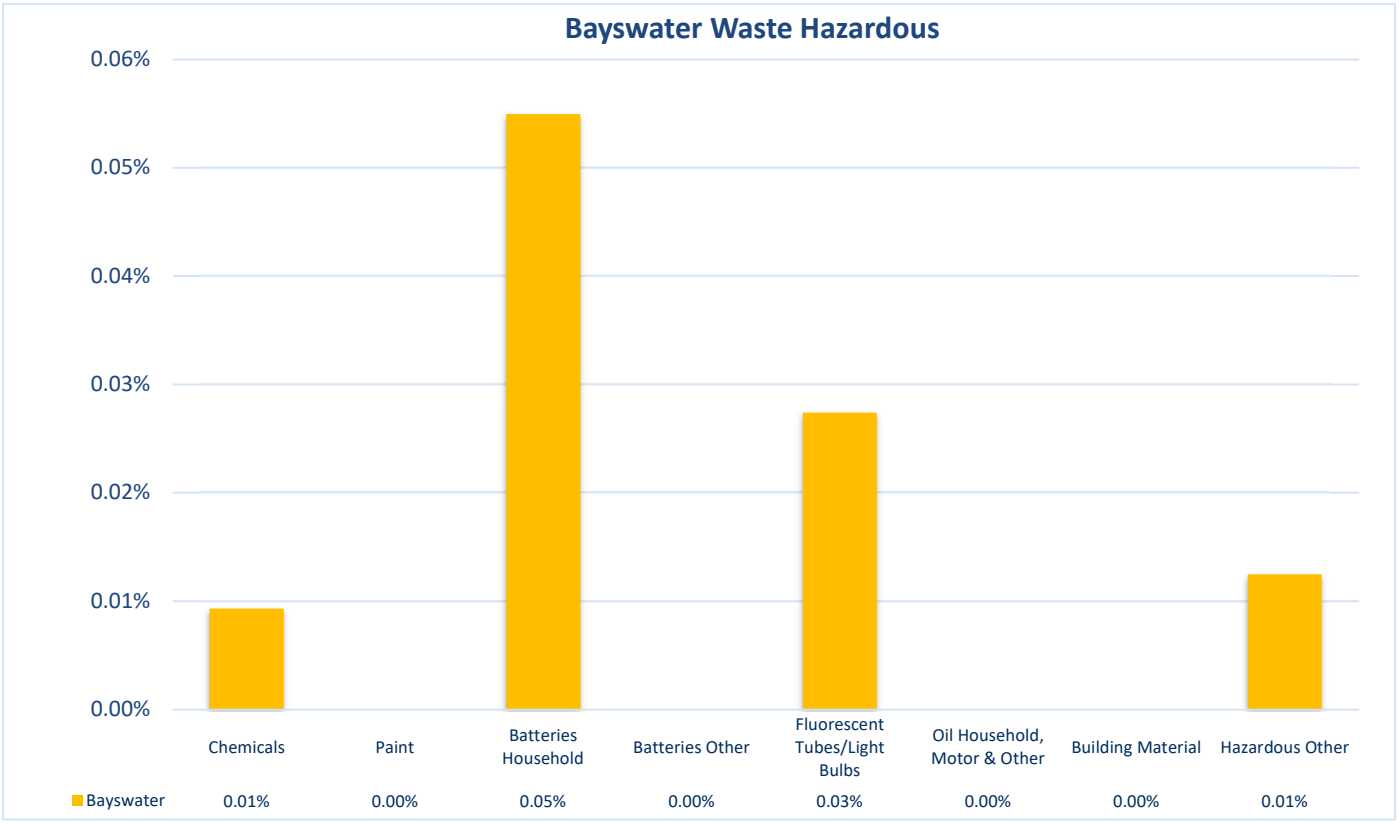


Figure 46 Bayswater Waste Hazardous

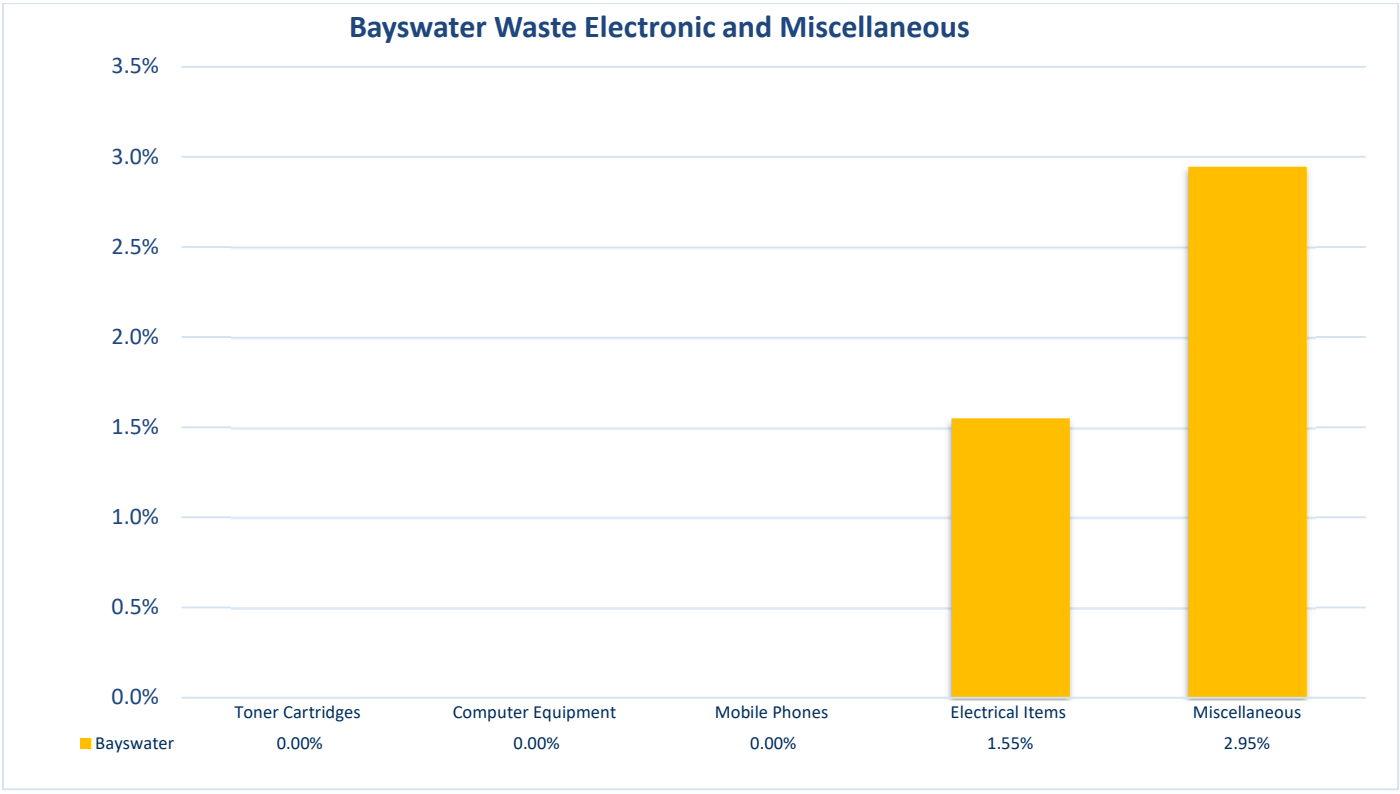


Figure 47 Bayswater Waste Electronic and Miscellaneous

Table 13 Bayswater Waste Summary Table

EMRC Waste Audit		
	Bayswater	
Recyclables	Net Weight	Percentage of Weight
Paper	119.7 kg	11.1%
Cardboard	47.0 kg	4.38%
Plastics	113.7 kg	10.6%
Glass	47.1 kg	4.38%
Aluminium	15.4 kg	1.44%
Steel	14.7 kg	1.37%
Recyclables Total		
	357.6 kg	33.3%
Non-Recyclables		
Organic	552.1 kg	51.4%
Earth	39.5 kg	3.68%
Textiles	28.0 kg	2.60%
Medical	2.32 kg	0.22%
Pathogenic Infectious	44.6 kg	4.16%
Hazardous	1.12 kg	0.10%
Electronic Waste	16.6 kg	1.55%
Miscellaneous	31.6 kg	2.95%
Non-Recyclables Total		
	715.8 kg	66.7%
Summary		
Total Recyclables	357.6 kg	33.3%
Total Non-Recyclables	715.8 kg	66.7%
	1,073.4 kg	**100%**

7.4 Belmont Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste streams in Belmont.

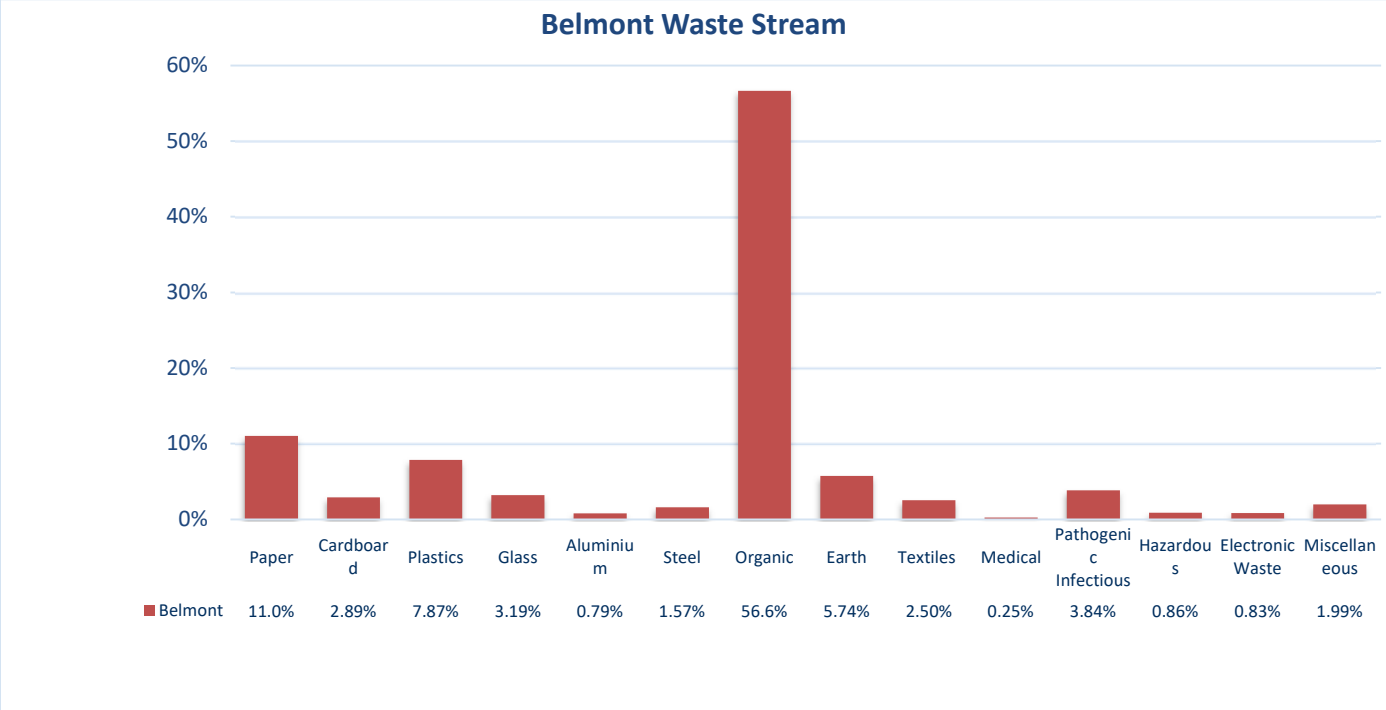


Figure 48 Belmont Waste Stream

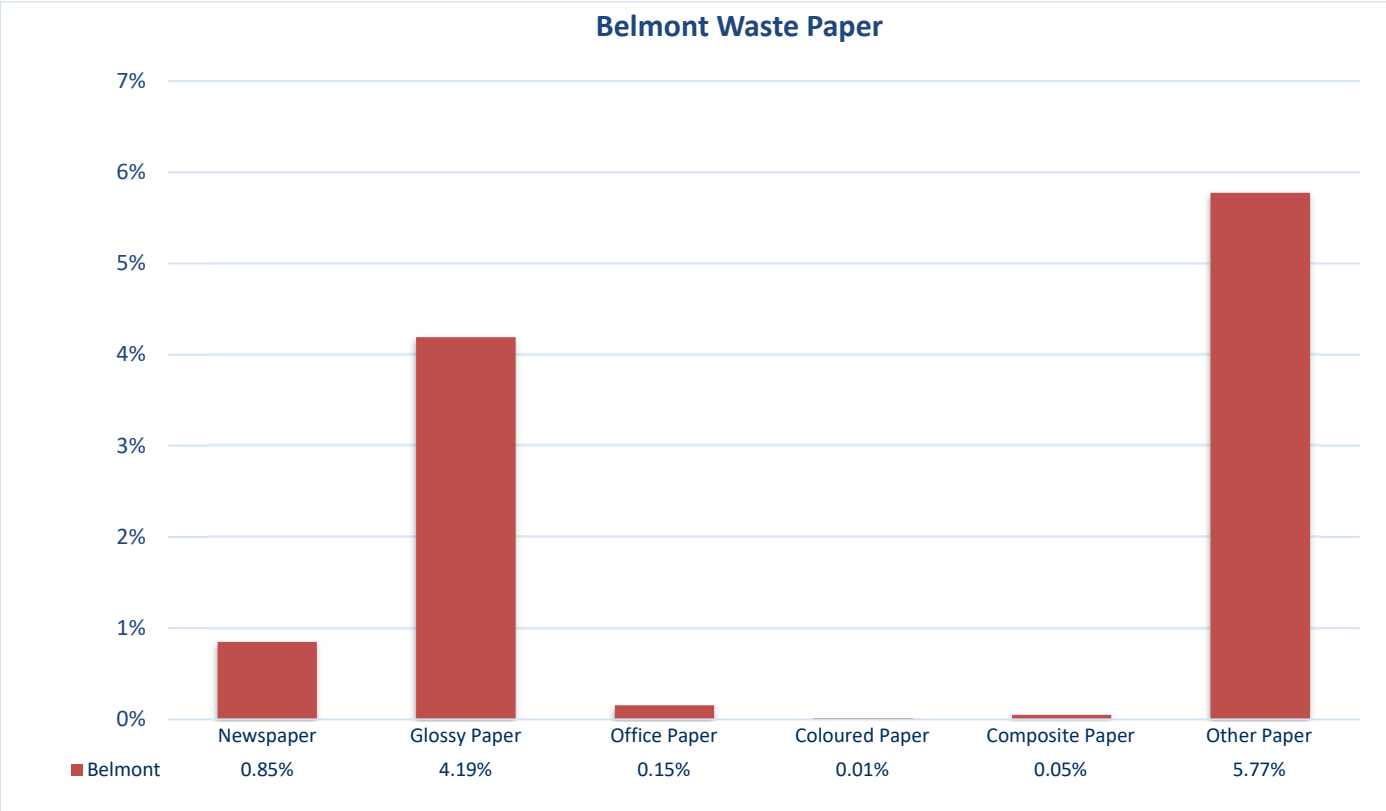


Figure 49 Belmont Waste Paper

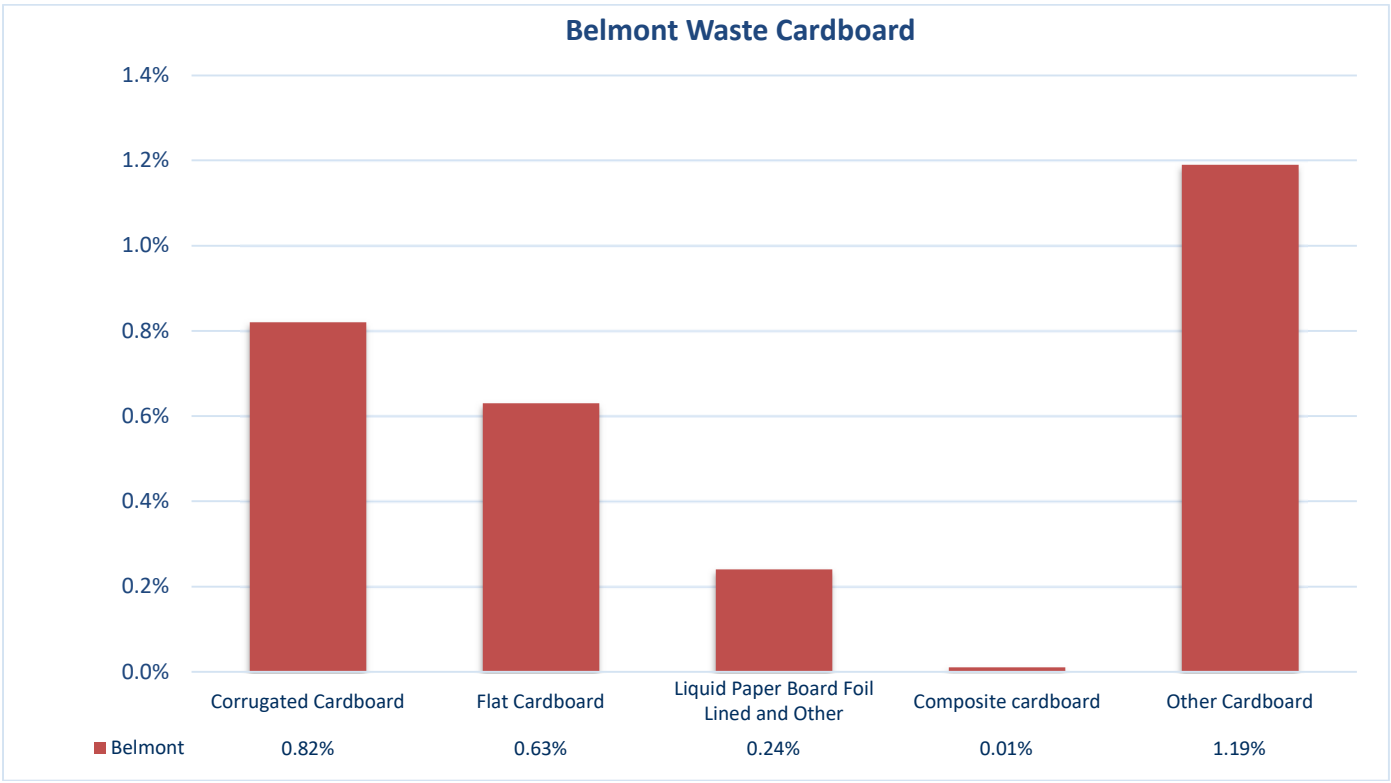


Figure 50 Belmont Waste Cardboard

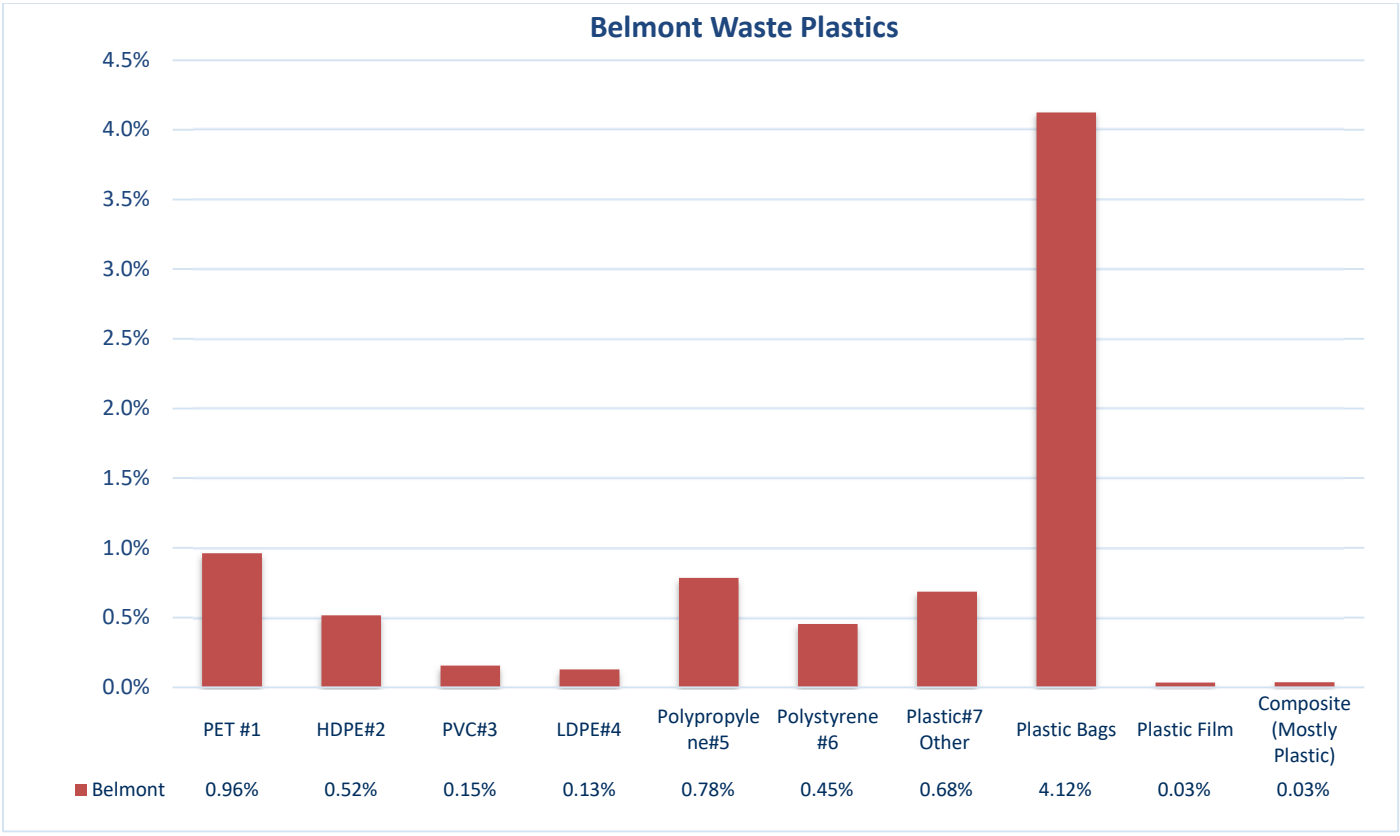


Figure 51 Belmont Waste Plastics

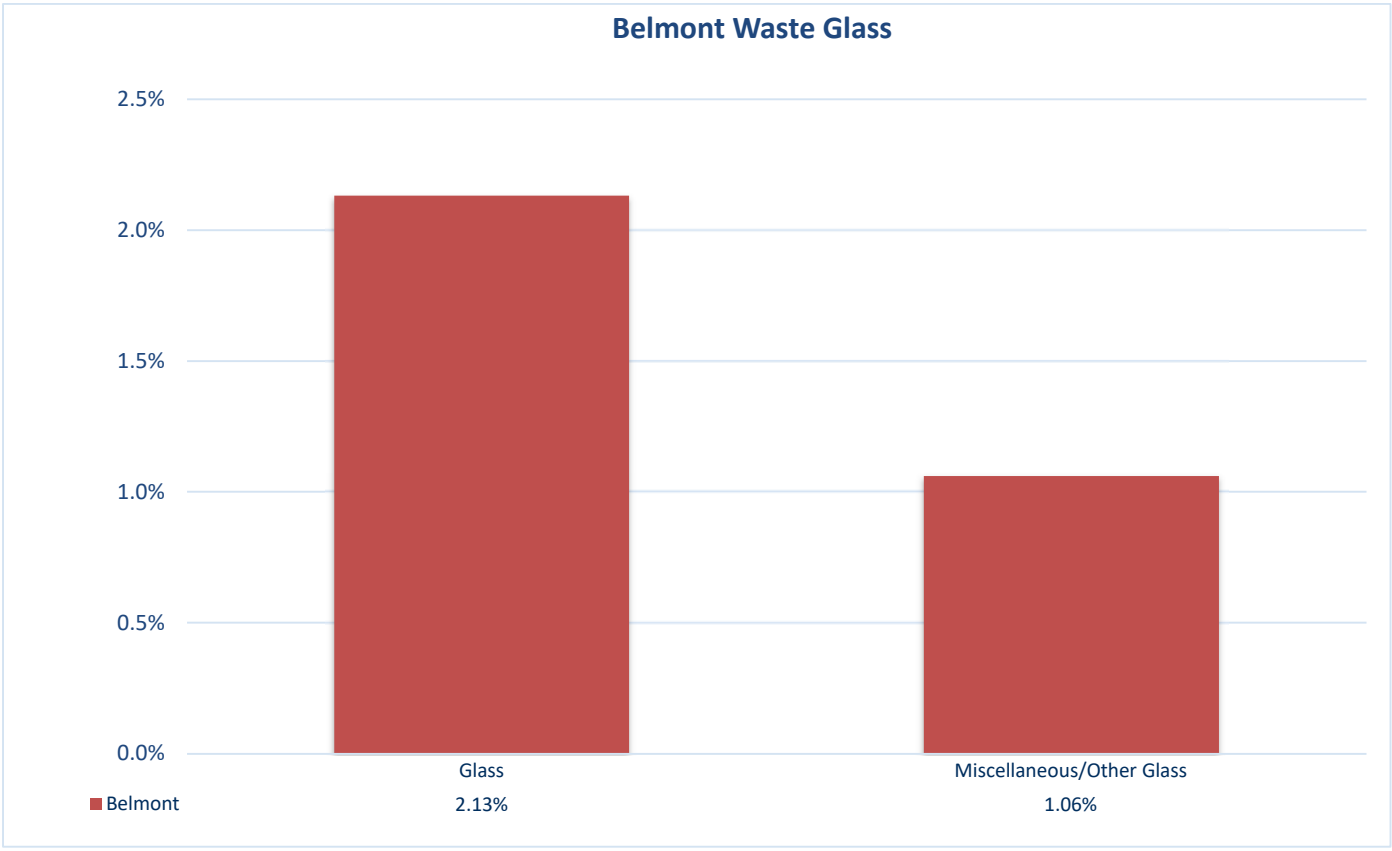


Figure 52 Belmont Waste Glass

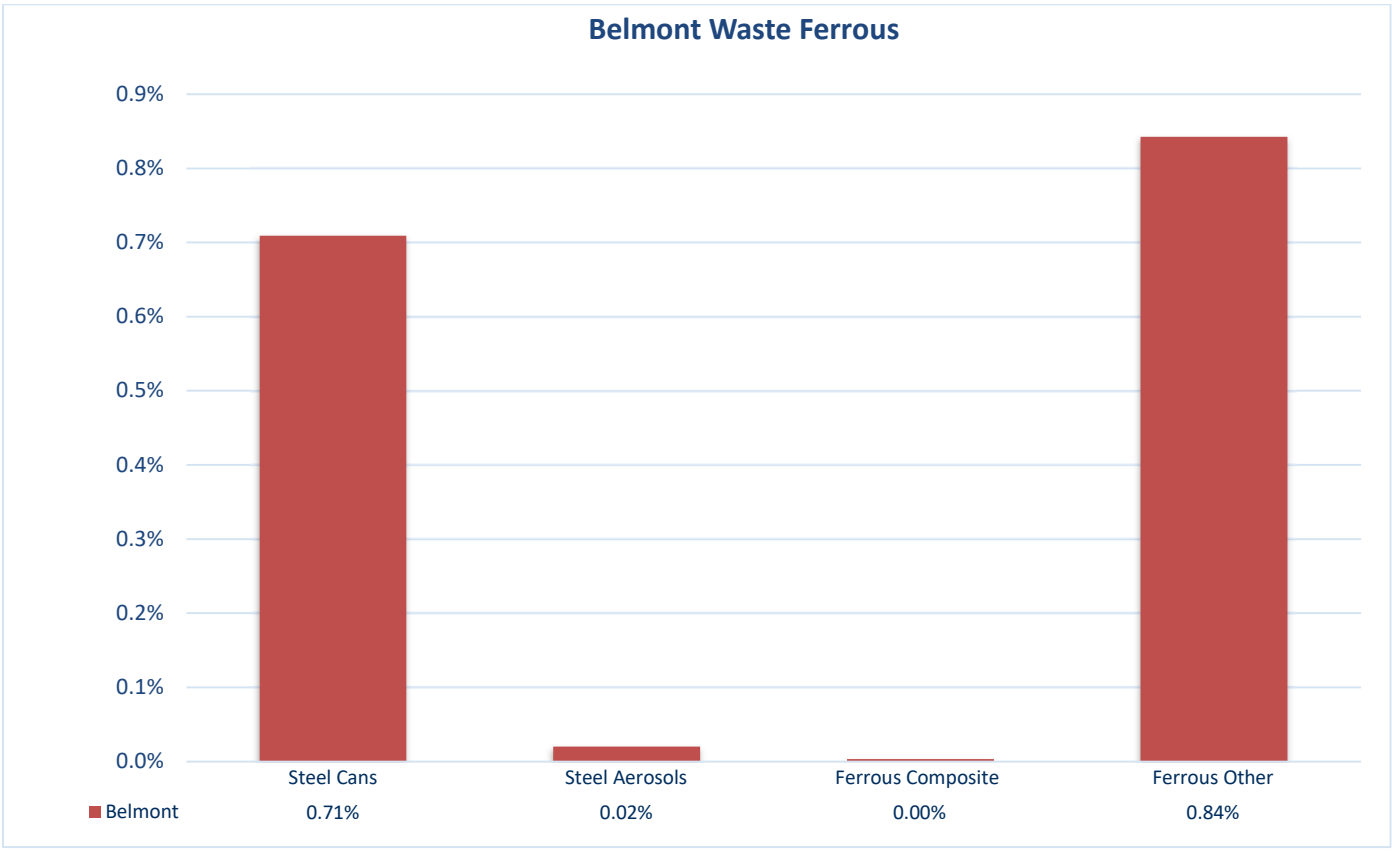


Figure 53 Belmont Waste Ferrous

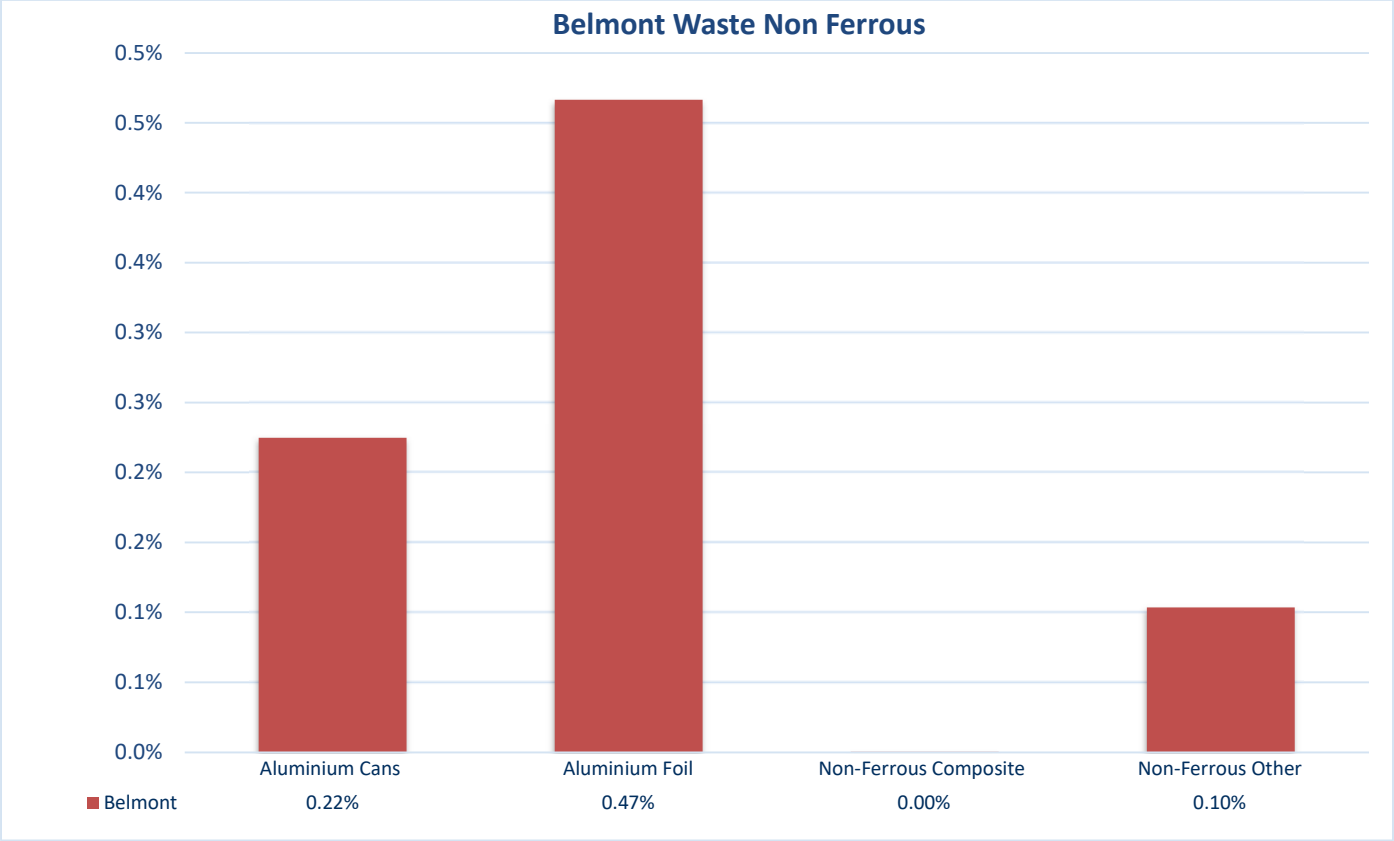


Figure 54 Belmont Waste Non Ferrous

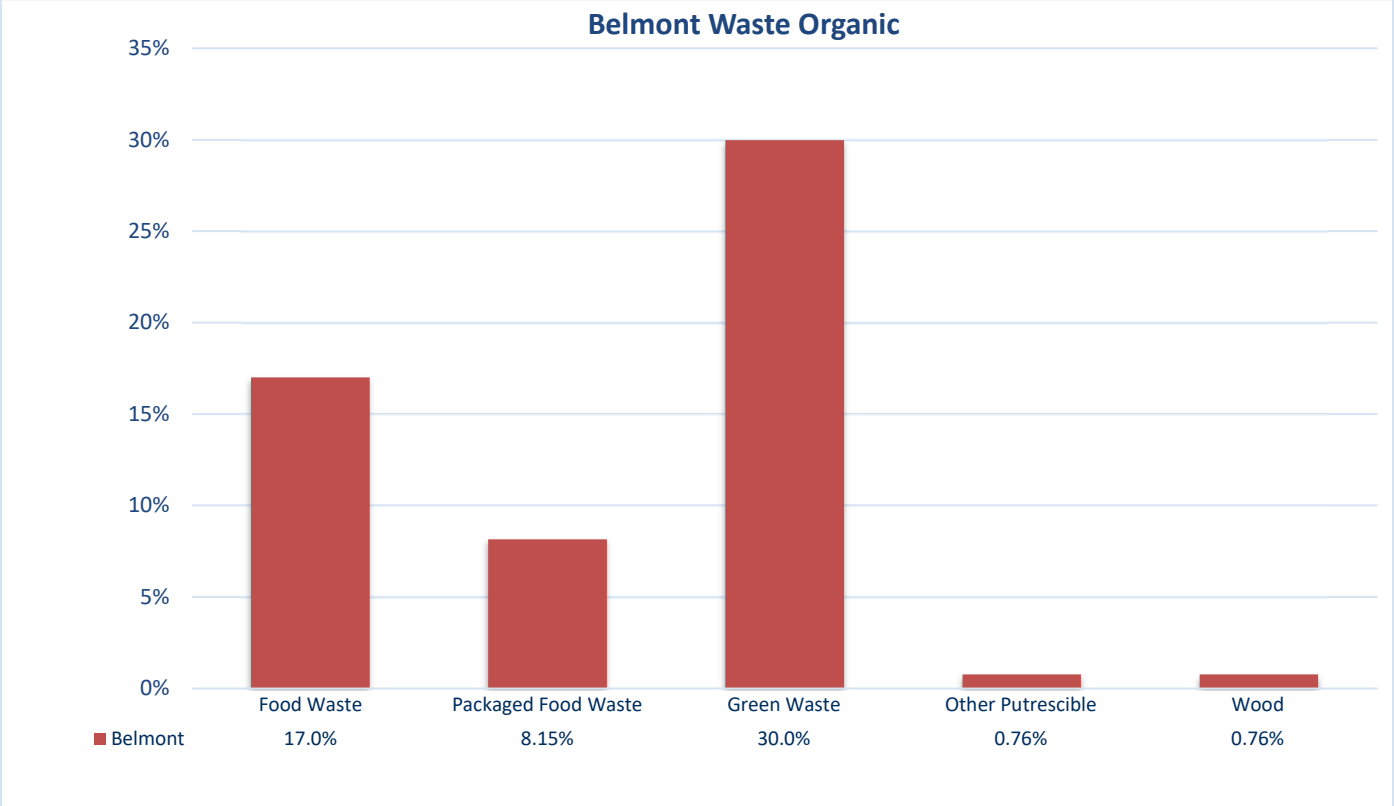


Figure 55 Belmont Waste Organic

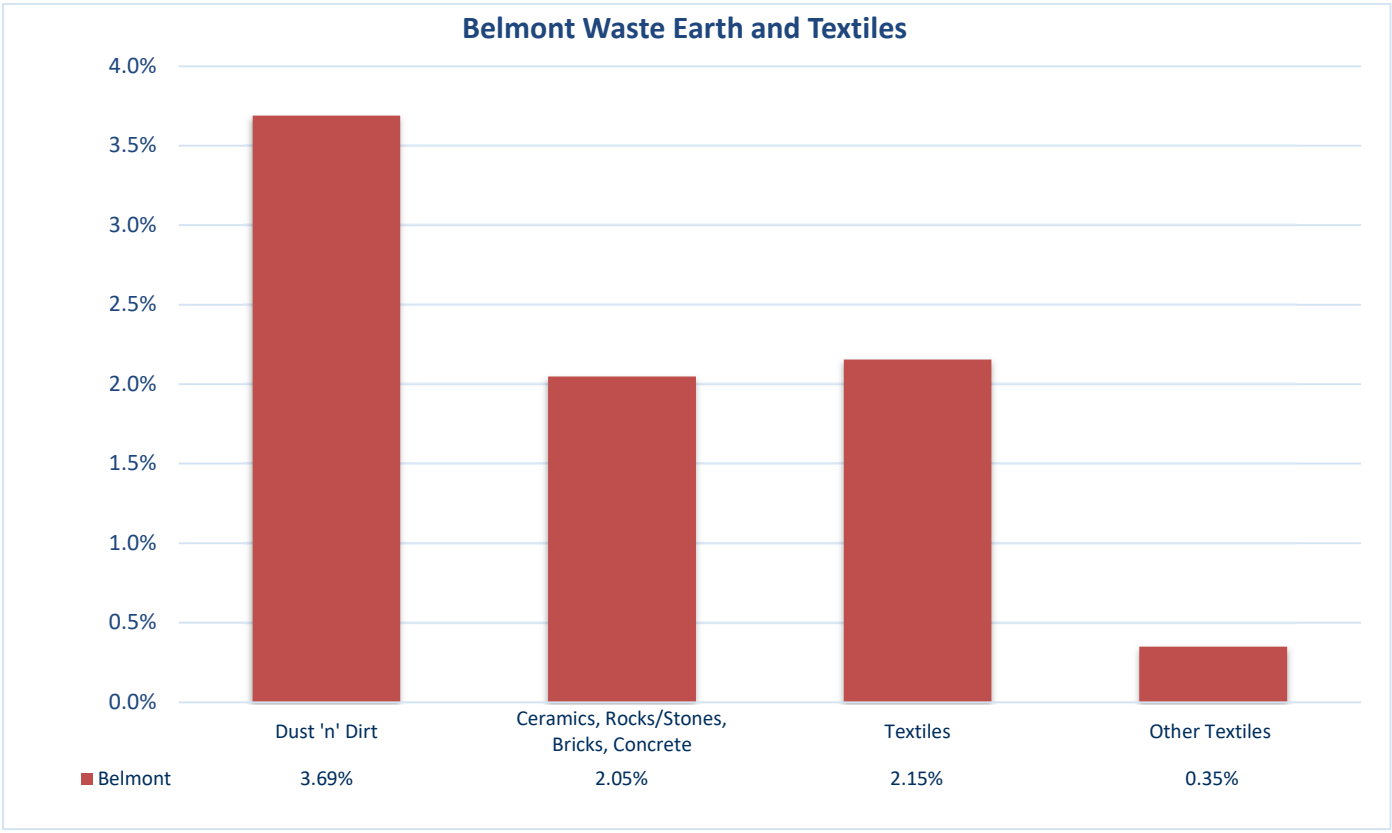


Figure 56 Belmont Waste Earth and Textiles

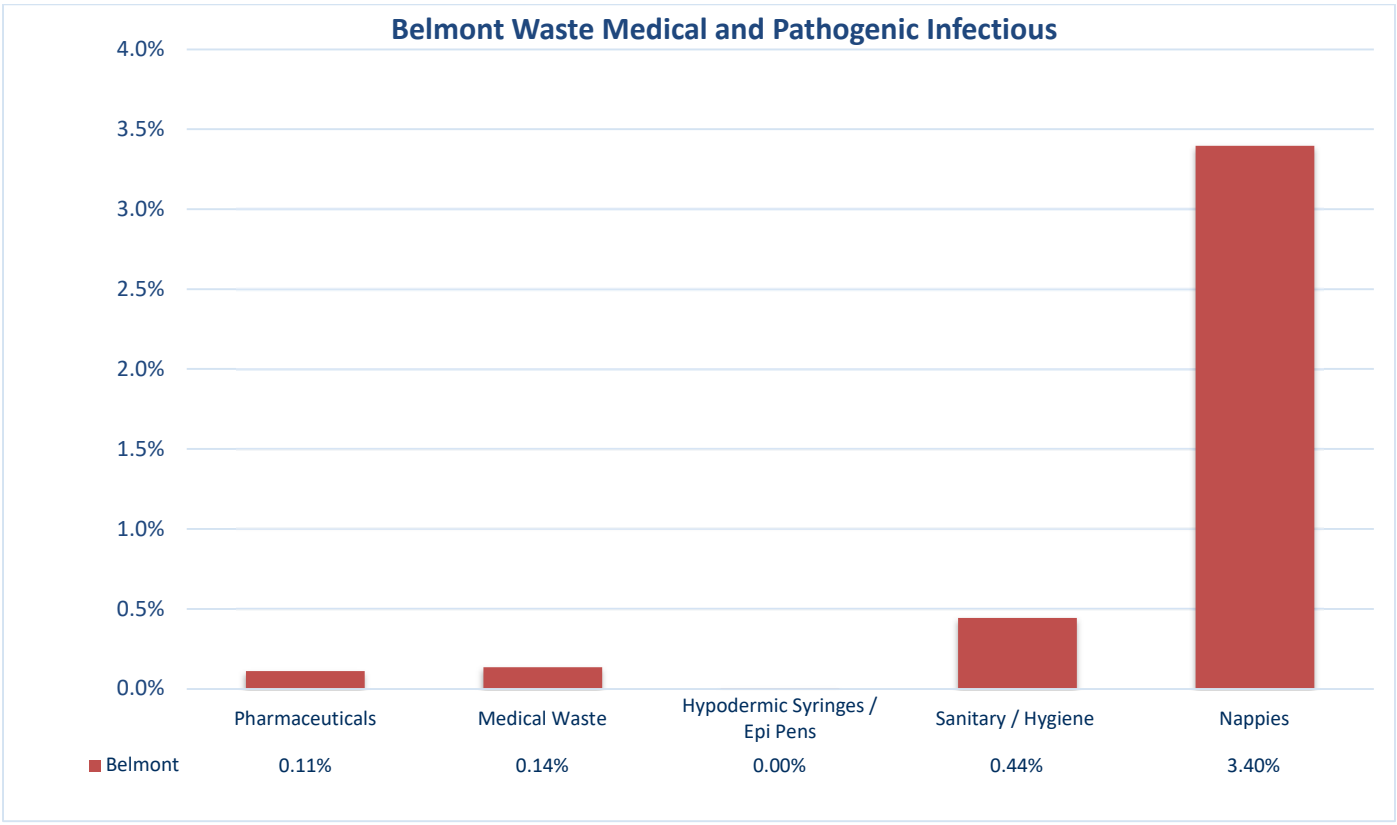


Figure 57 Belmont Waste Medical and Pathogenic Infectious

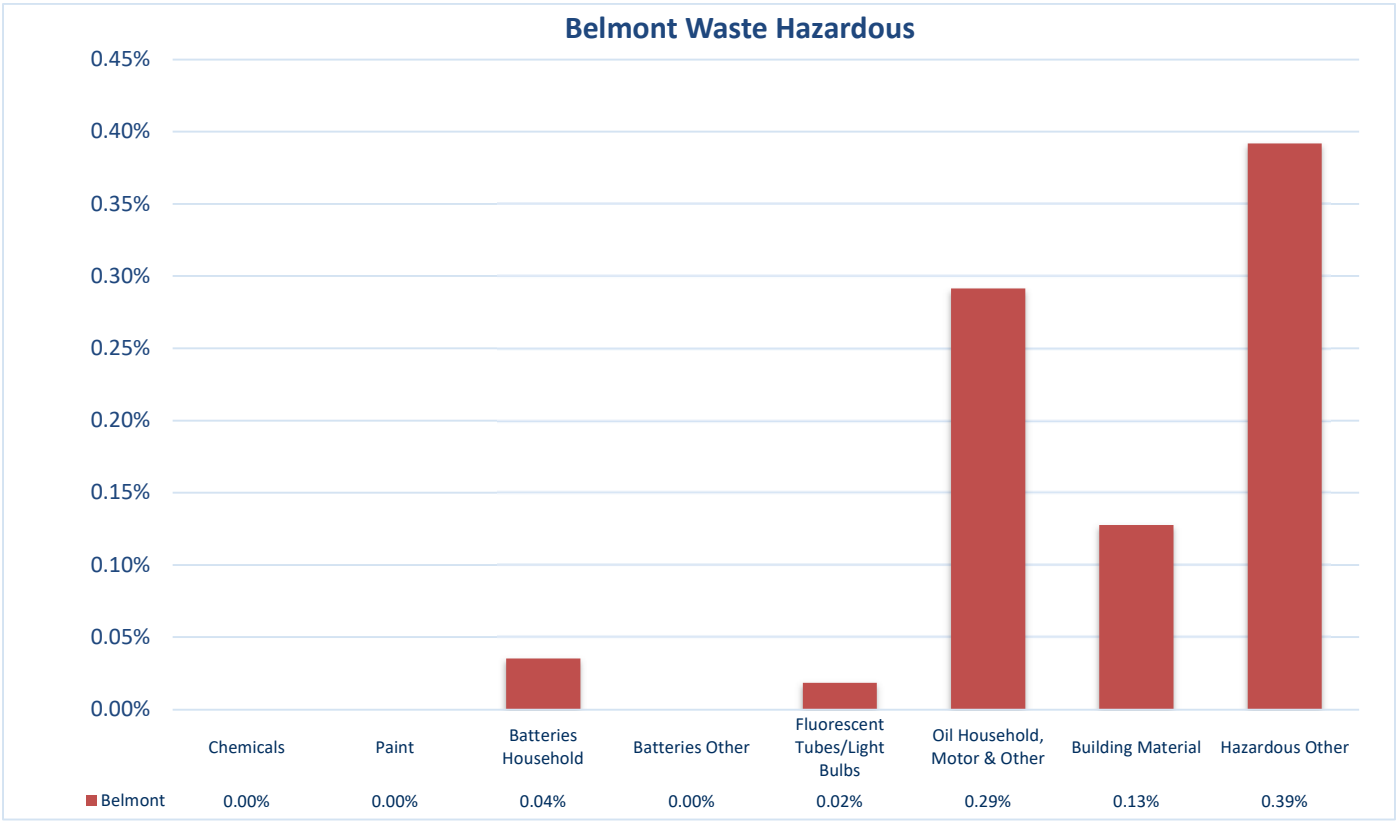


Figure 58 Belmont Waste Hazardous

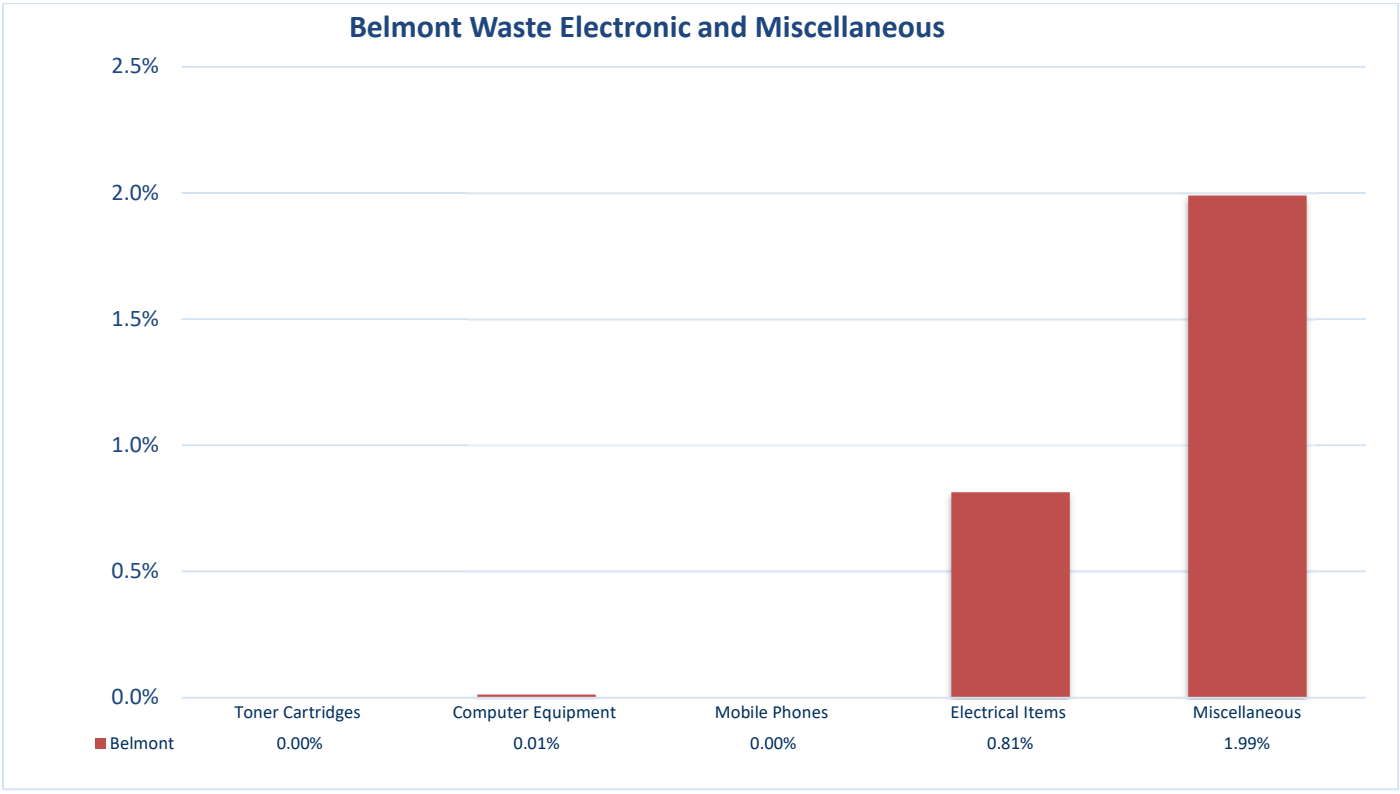


Figure 59 Belmont Waste Electronic and Miscellaneous

Table 14 Belmont Waste Summary Table

EMRC Waste Audit		
	Belmont	
Recyclables	Net Weight	Percentage of Weight
Paper	176.8 kg	11.0%
Cardboard	46.4 kg	2.89%
Plastics	126.2 kg	7.87%
Glass	51.2 kg	3.19%
Aluminium	12.7 kg	0.79%
Steel	25.3 kg	1.57%
Recyclables Total		
	438.6 kg	27.4%
Non-Recyclables		
Organic	908.1 kg	56.6%
Earth	92.0 kg	5.74%
Textiles	40.2 kg	2.50%
Medical	4.02 kg	0.25%
Pathogenic Infectious	61.6 kg	3.84%
Hazardous	13.9 kg	0.86%
Electronic Waste	13.2 kg	0.83%
Miscellaneous	31.9 kg	1.99%
Non-Recyclables Total		
	1,164.9 kg	72.6%
Summary		
Total Recyclables	438.6 kg	27.4%
Total Non-Recyclables	1,164.9 kg	72.6%
	1,603.4 kg	**100%**

7.5 Kalamunda Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste streams in Kalamunda.

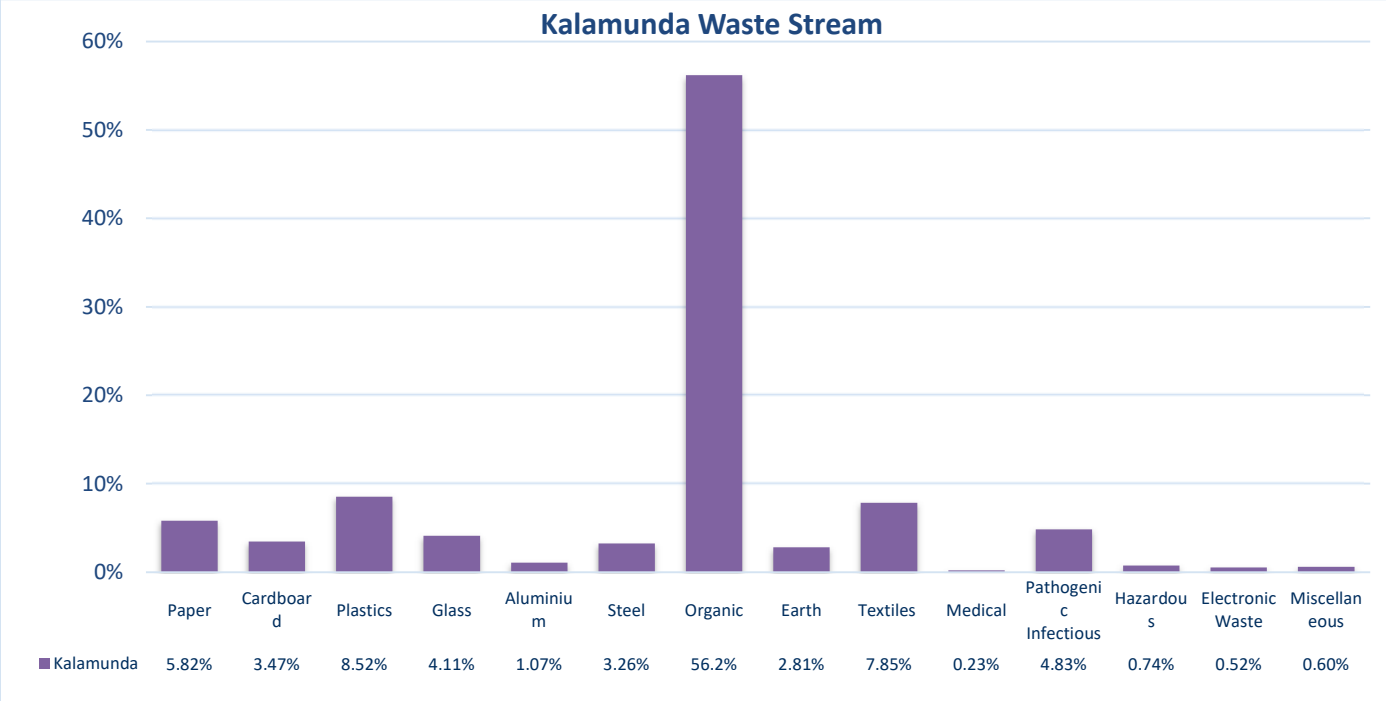


Figure 60 Kalamunda Waste Stream

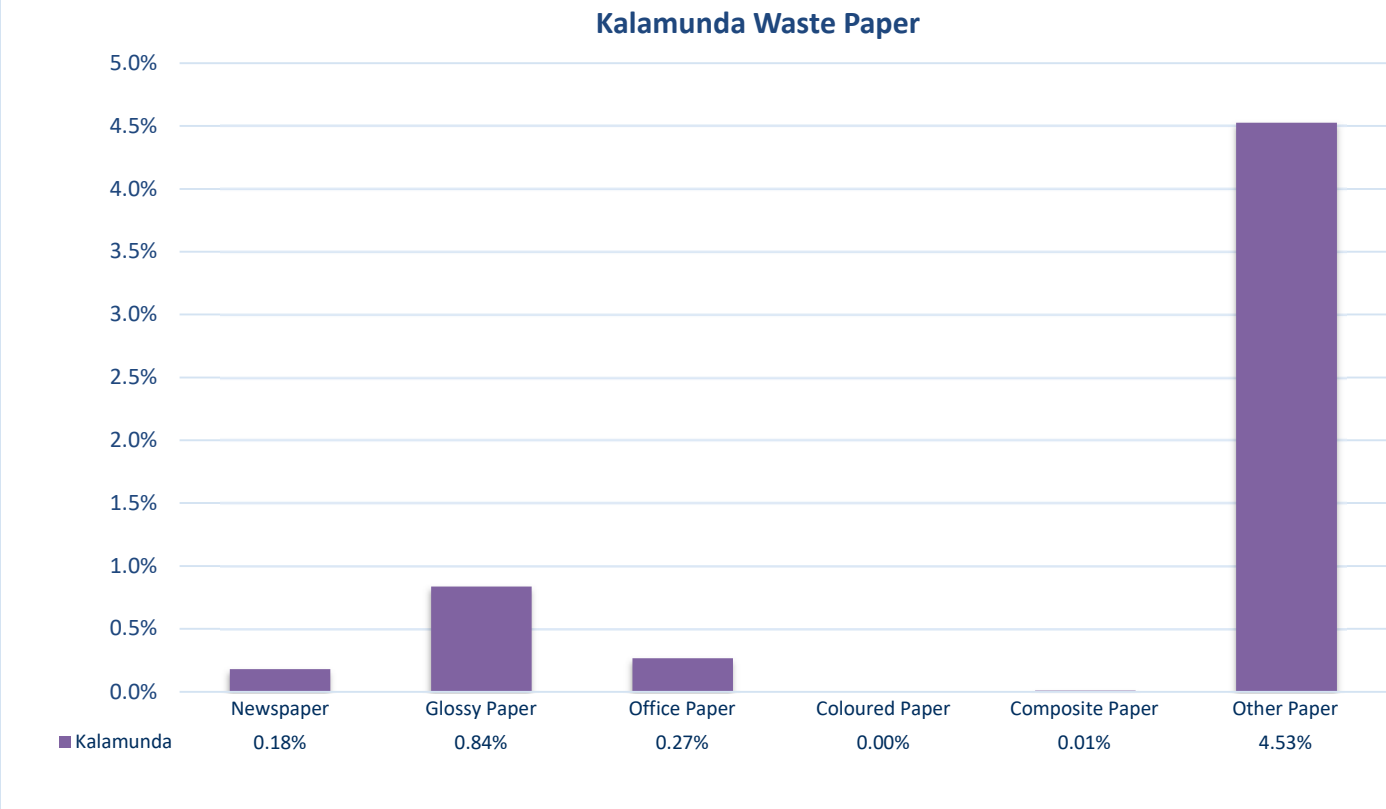


Figure 61 Kalamunda Waste Paper

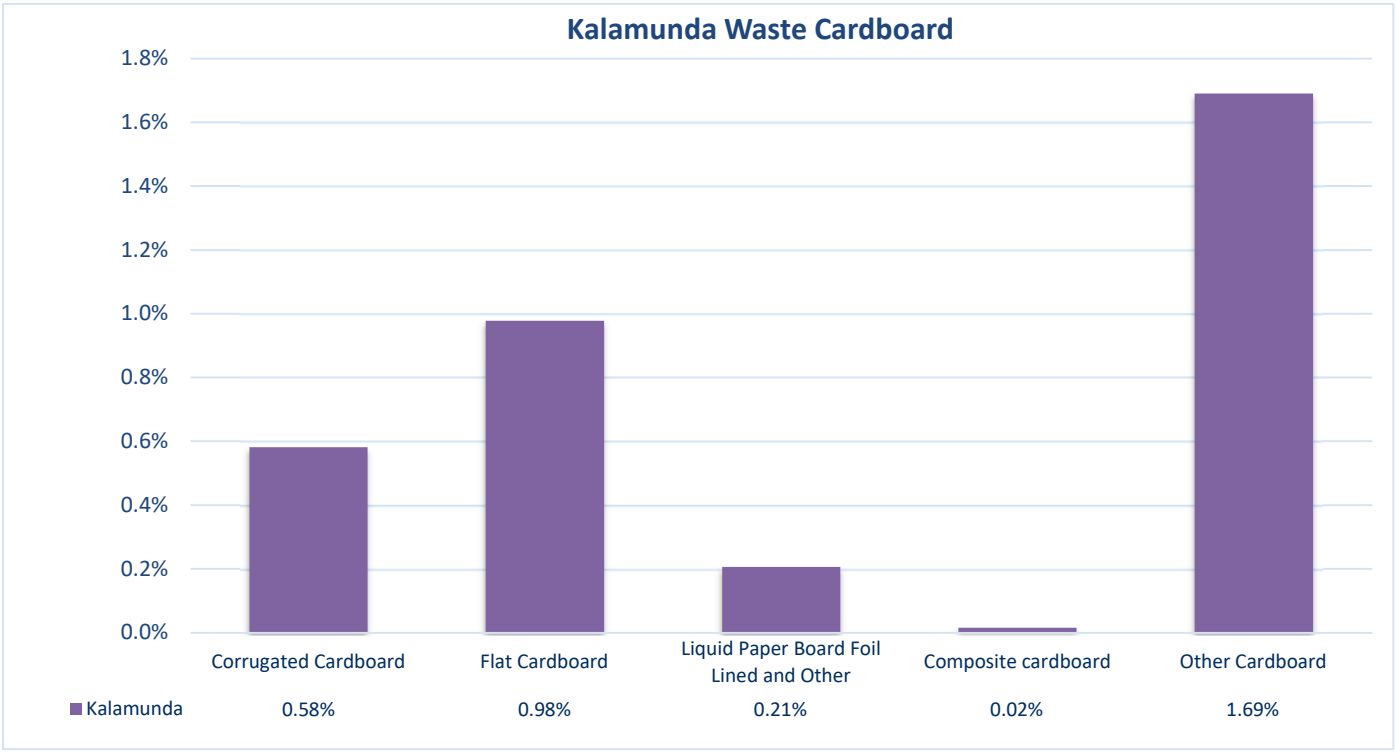


Figure 62 Kalamunda Waste Cardboard

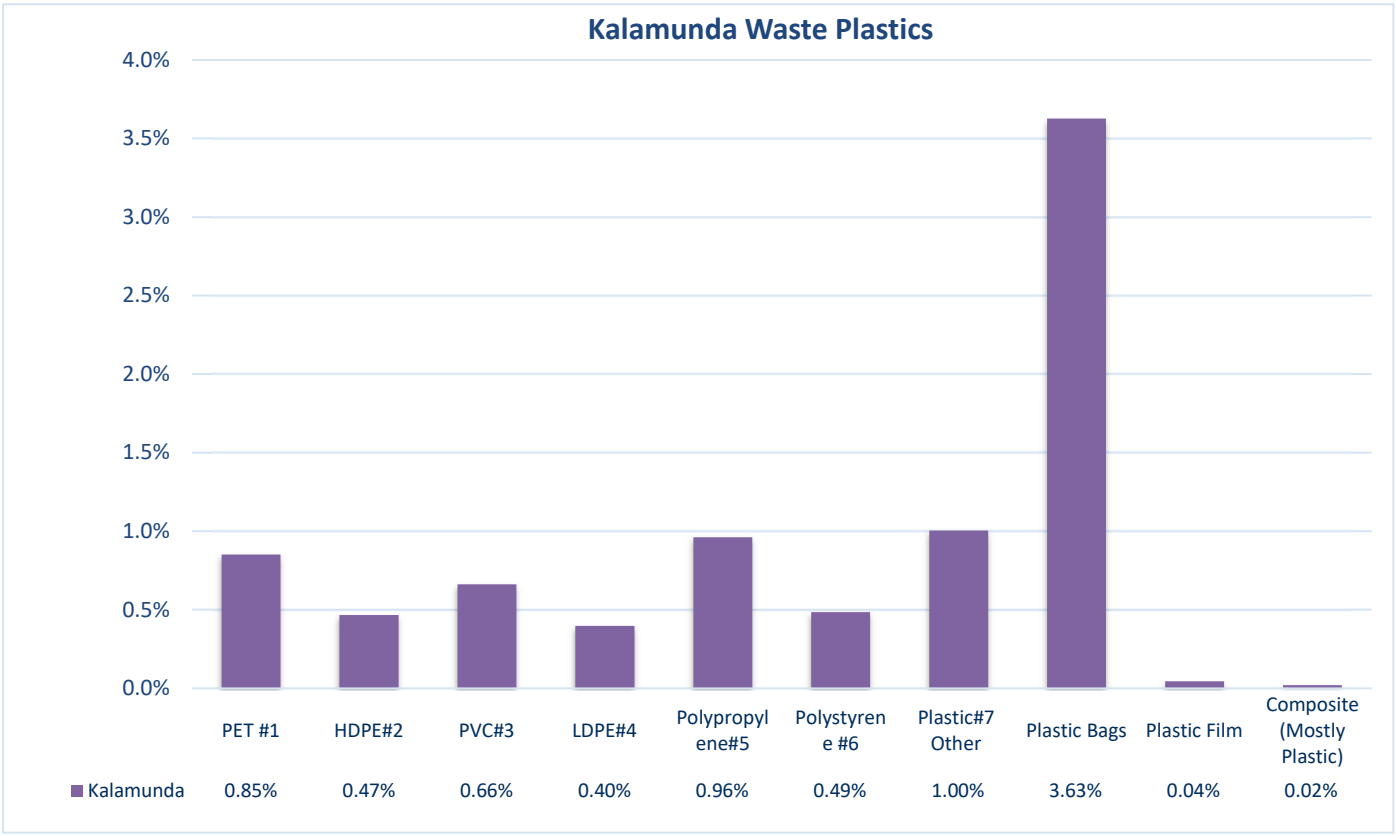


Figure 63 Kalamunda Waste Plastics

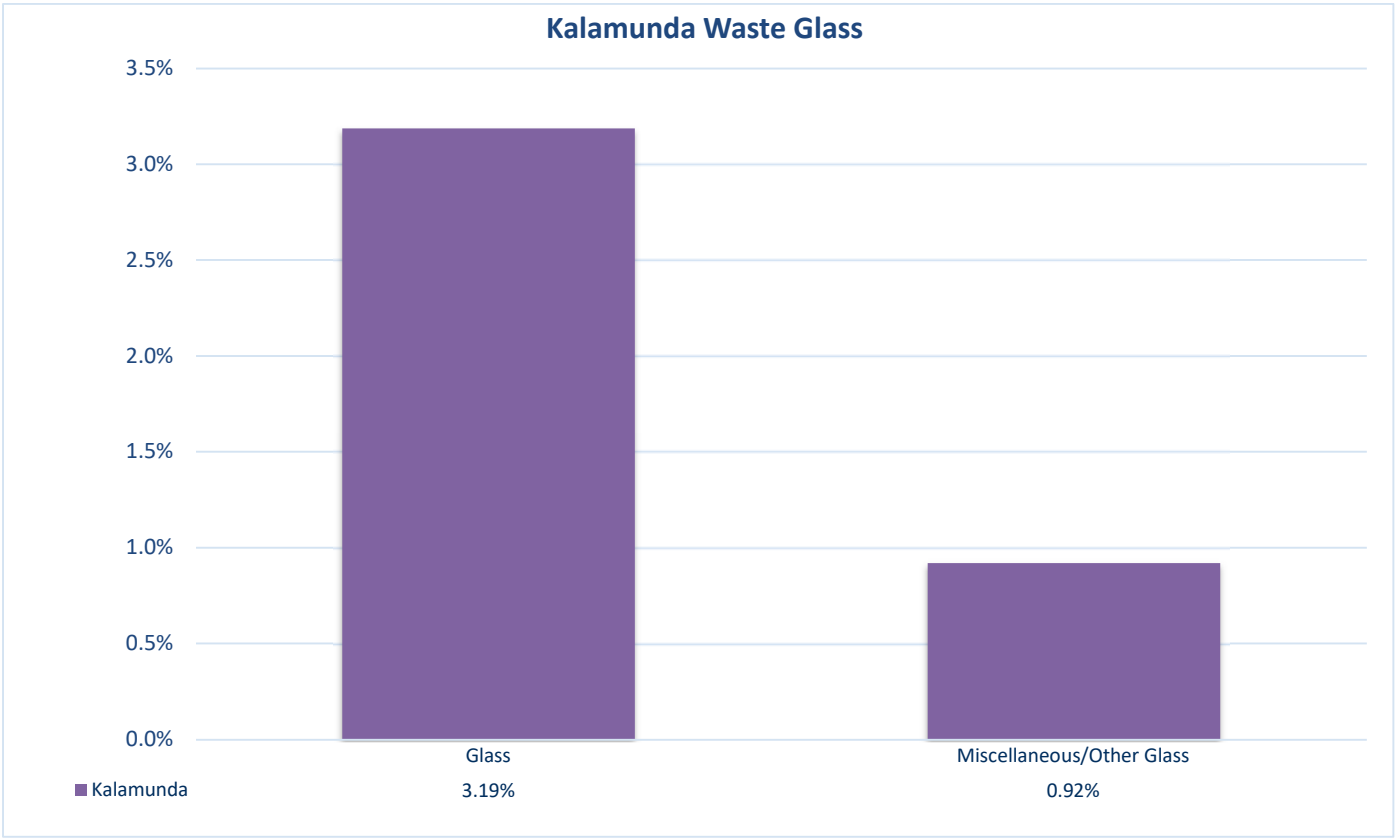


Figure 64 Kalamunda Waste Glass

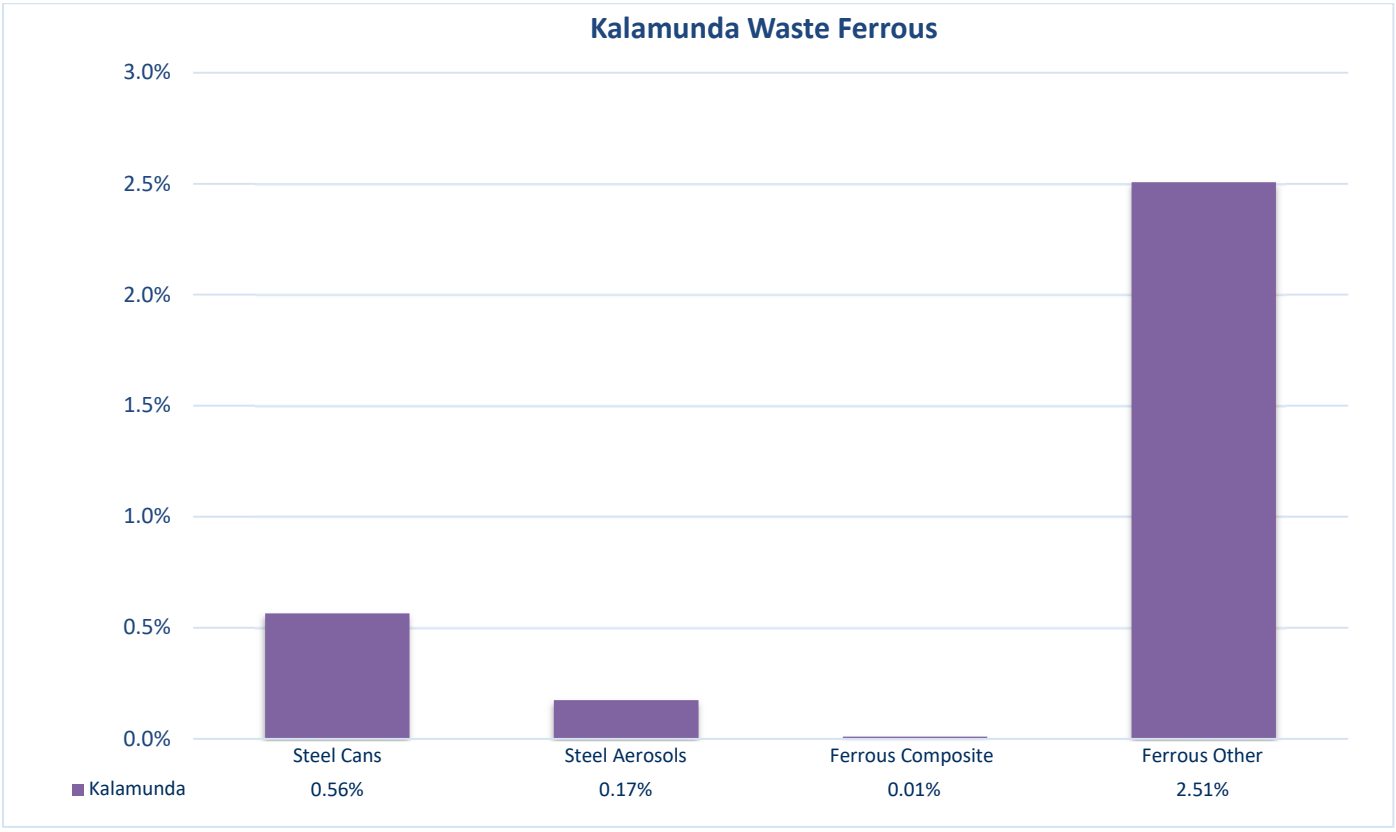


Figure 65 Kalamunda Waste Ferrous

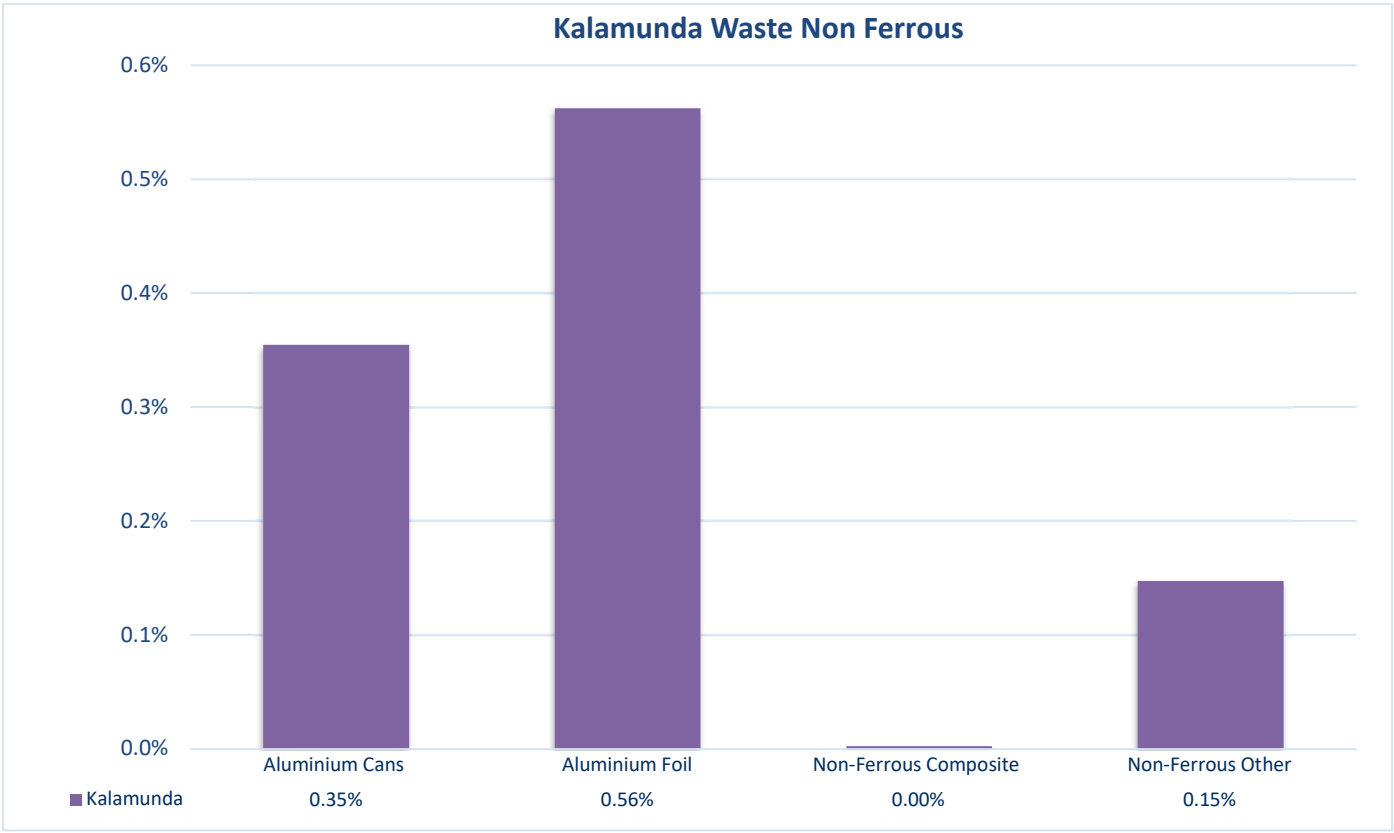


Figure 66 Kalamunda Waste Non-Ferrous

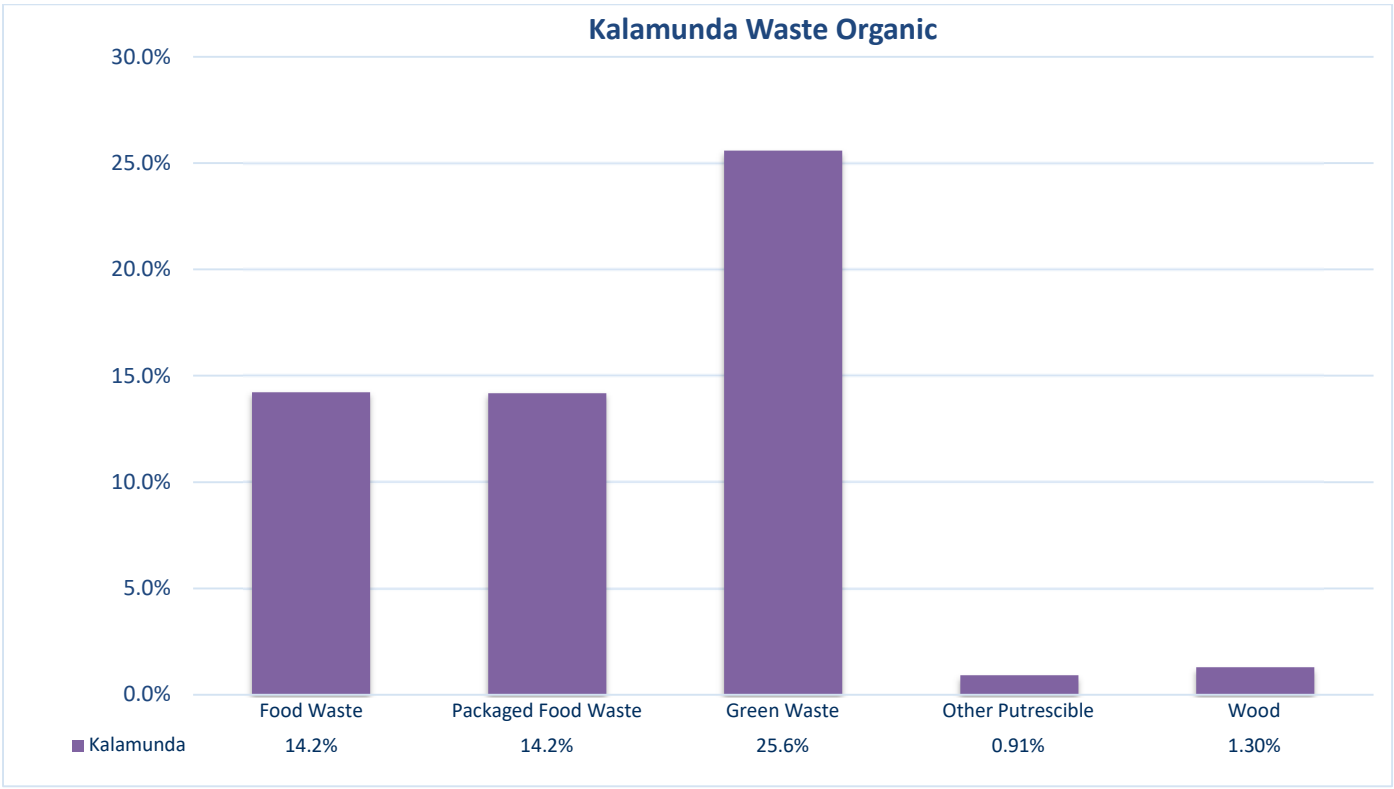


Figure 67 Kalamunda Waste Organic

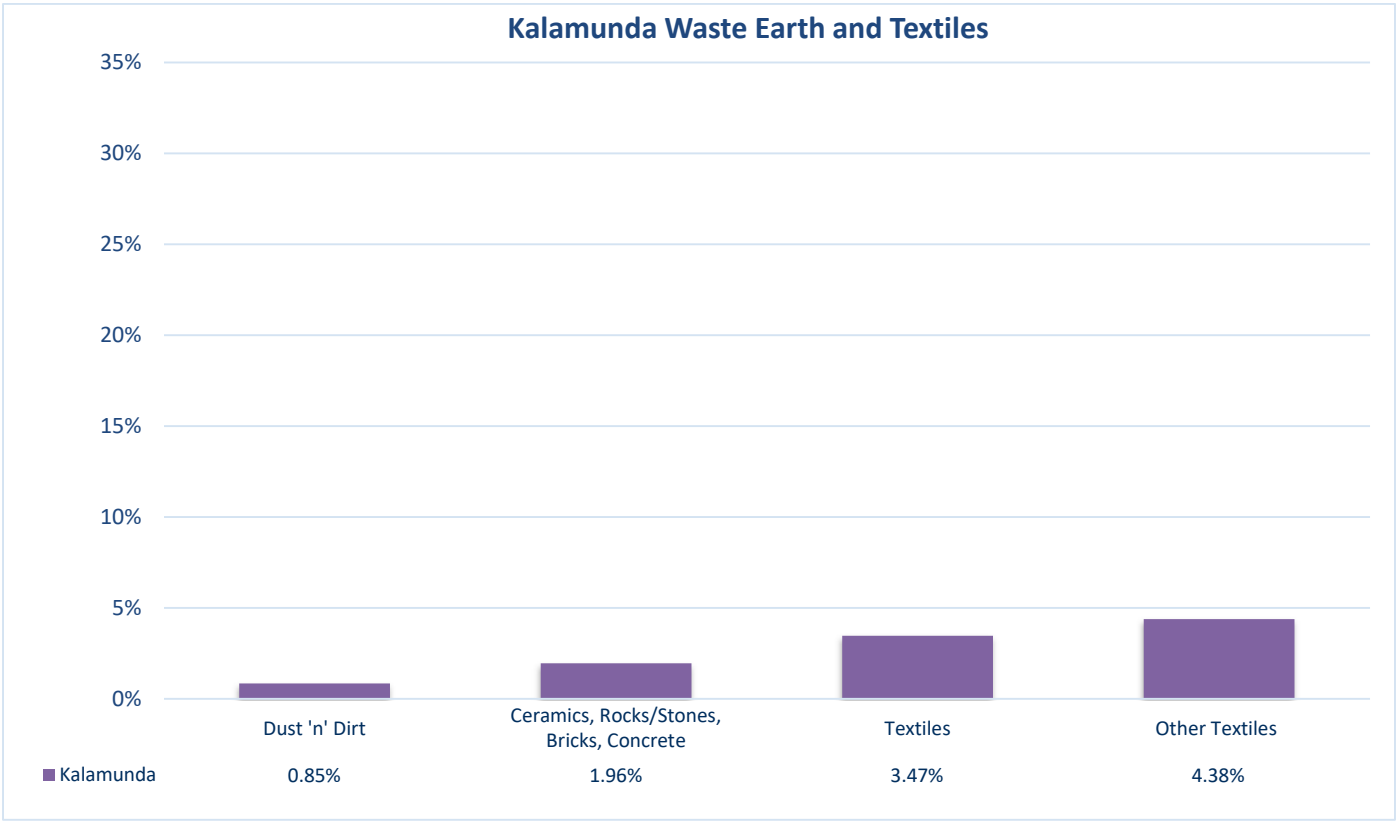


Figure 68 Kalamunda Waste Earth and Textiles

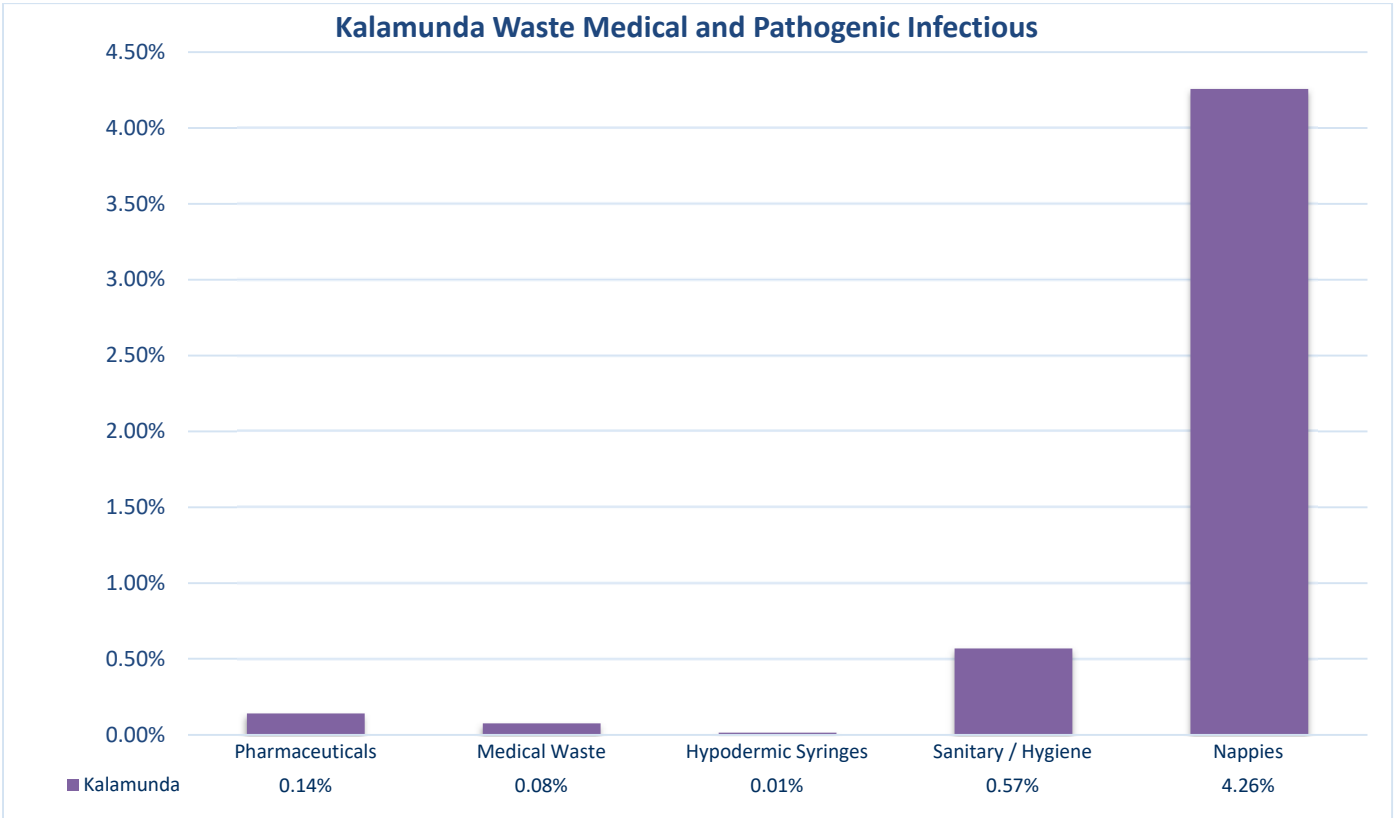


Figure 69 Kalamunda Waste Medical and Pathogenic Infectious

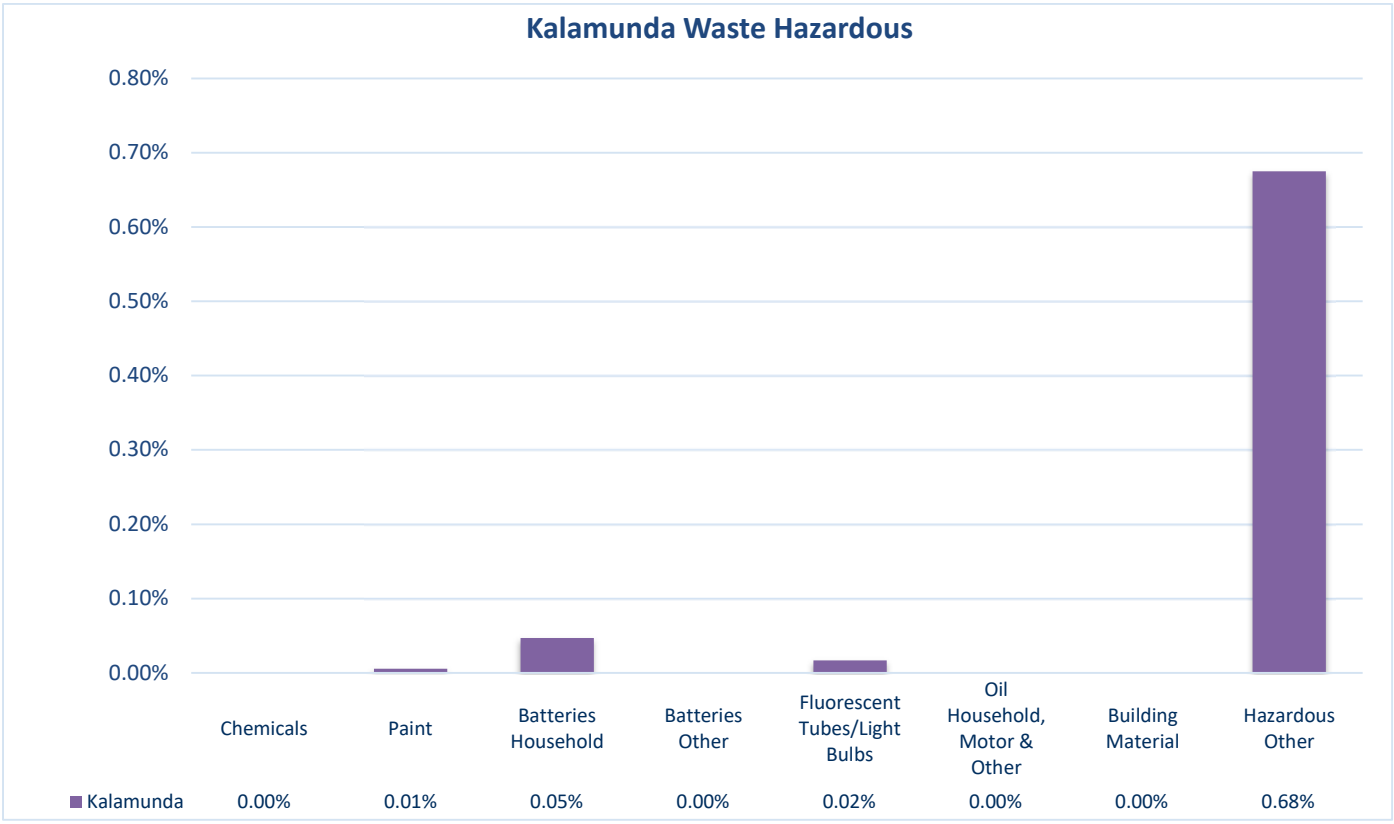


Figure 70 Kalamunda Waste Hazardous

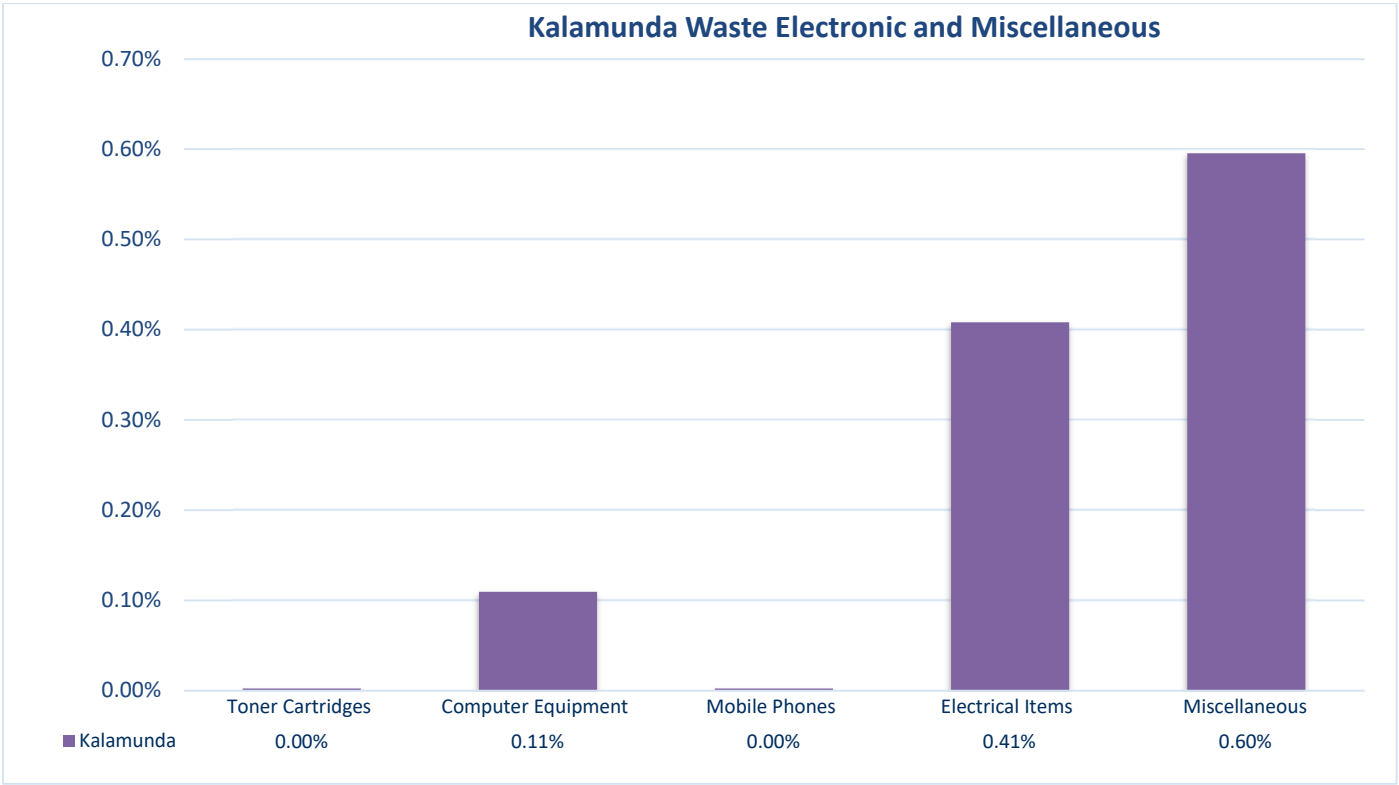


Figure 71 Kalamunda Waste Electronic and Miscellaneous

Table 15 Kalamunda Waste Summary Table

EMRC Waste Audit	Kalamunda	
Recyclables	Net Weight	Percentage of Weight
Paper	95.5 kg	5.82%
Cardboard	57.0 kg	3.47%
Plastics	139.9 kg	8.52%
Glass	67.4 kg	4.11%
Aluminium	17.5 kg	1.07%
Steel	53.5 kg	3.26%
Recyclables Total		
	430.9 kg	26.2%
Non-Recyclables		
Organic	923.0 kg	56.2%
Earth	46.1 kg	2.81%
Textiles	128.9 kg	7.85%
Medical	3.75 kg	0.23%
Pathogenic Infectious	79.3 kg	4.83%
Hazardous	12.2 kg	0.74%
Electronic Waste	8.6 kg	0.52%
Miscellaneous	9.8 kg	0.60%
Non-Recyclables Total		
	1,211.6 kg	73.8%
Summary		
Total Recyclables	430.9 kg	26.2%
Total Non-Recyclables	1,211.6 kg	73.8%
	1,642.5 kg	**100%**

7.6 Mundaring Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste streams in Mundaring.

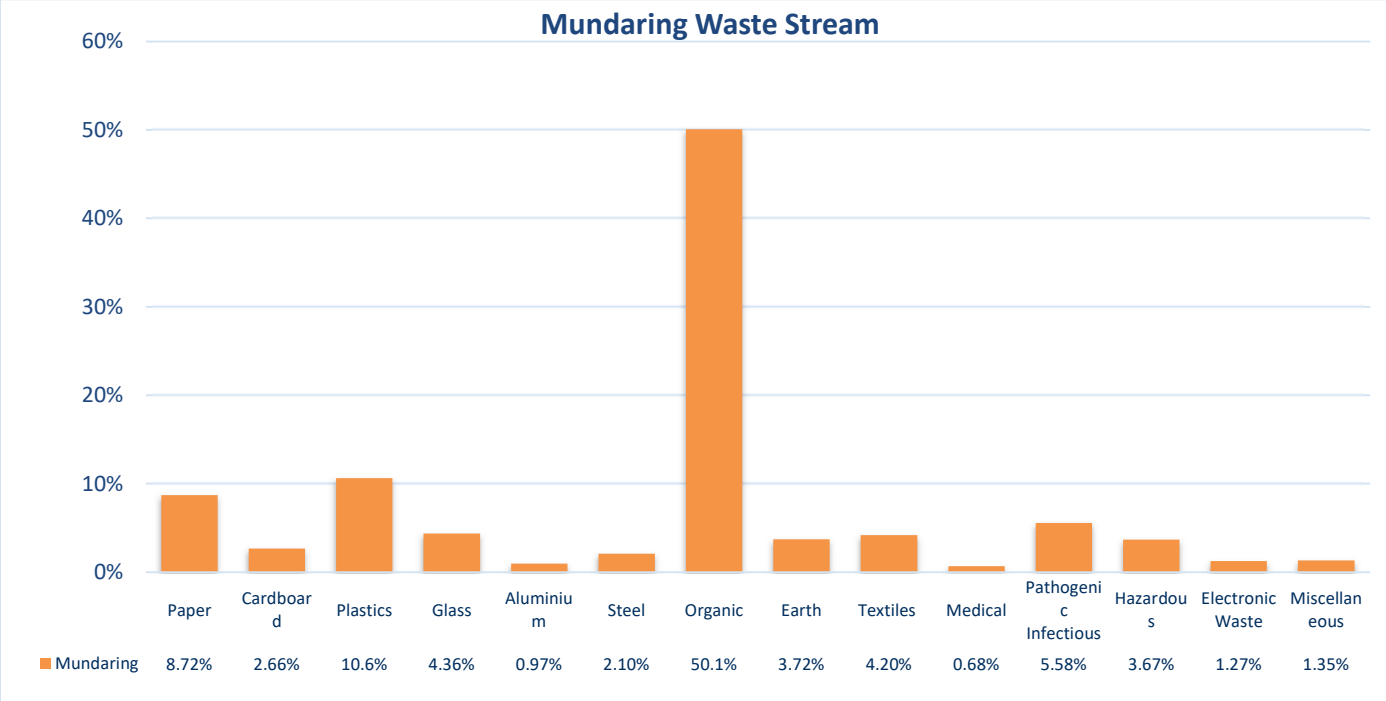


Figure 72 Mundaring Waste Stream

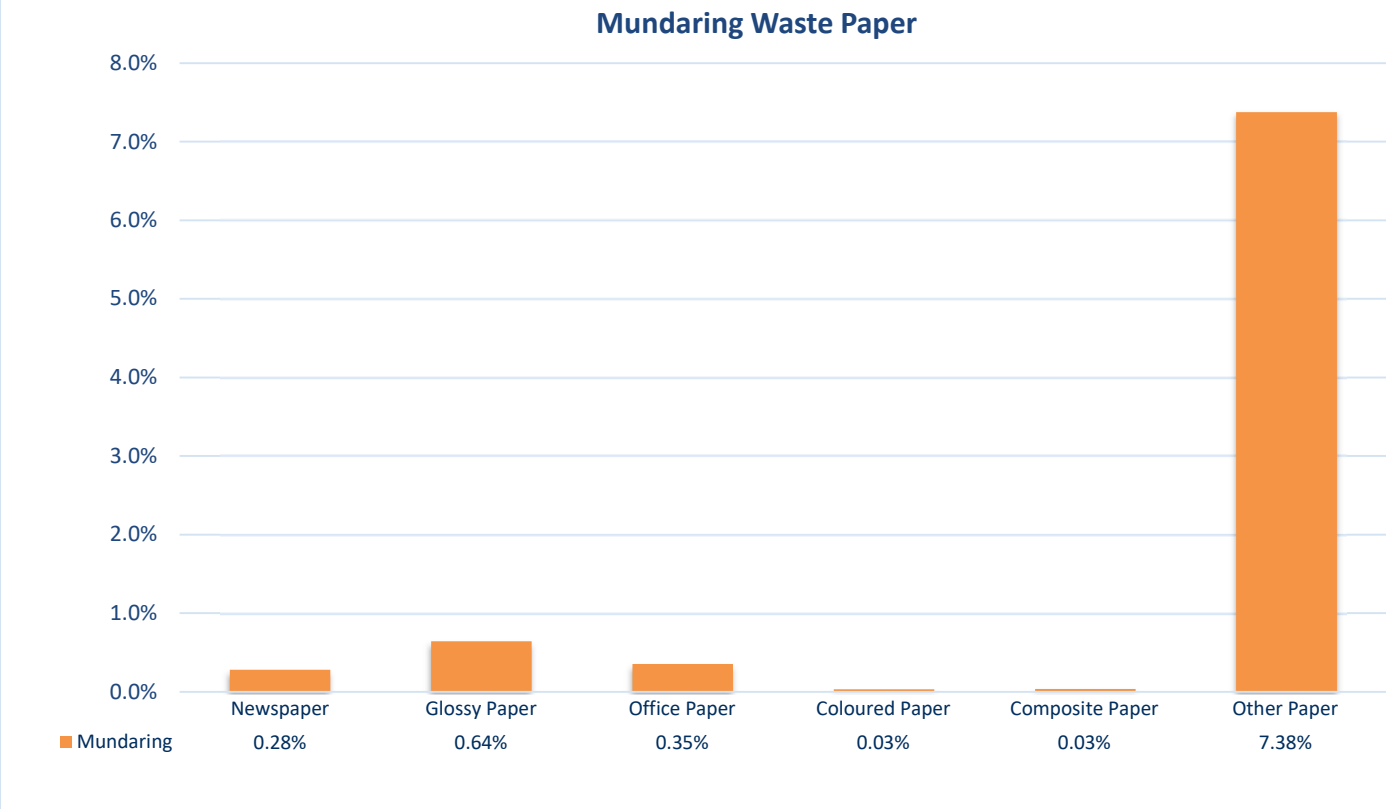


Figure 73 Mundaring Waste Paper

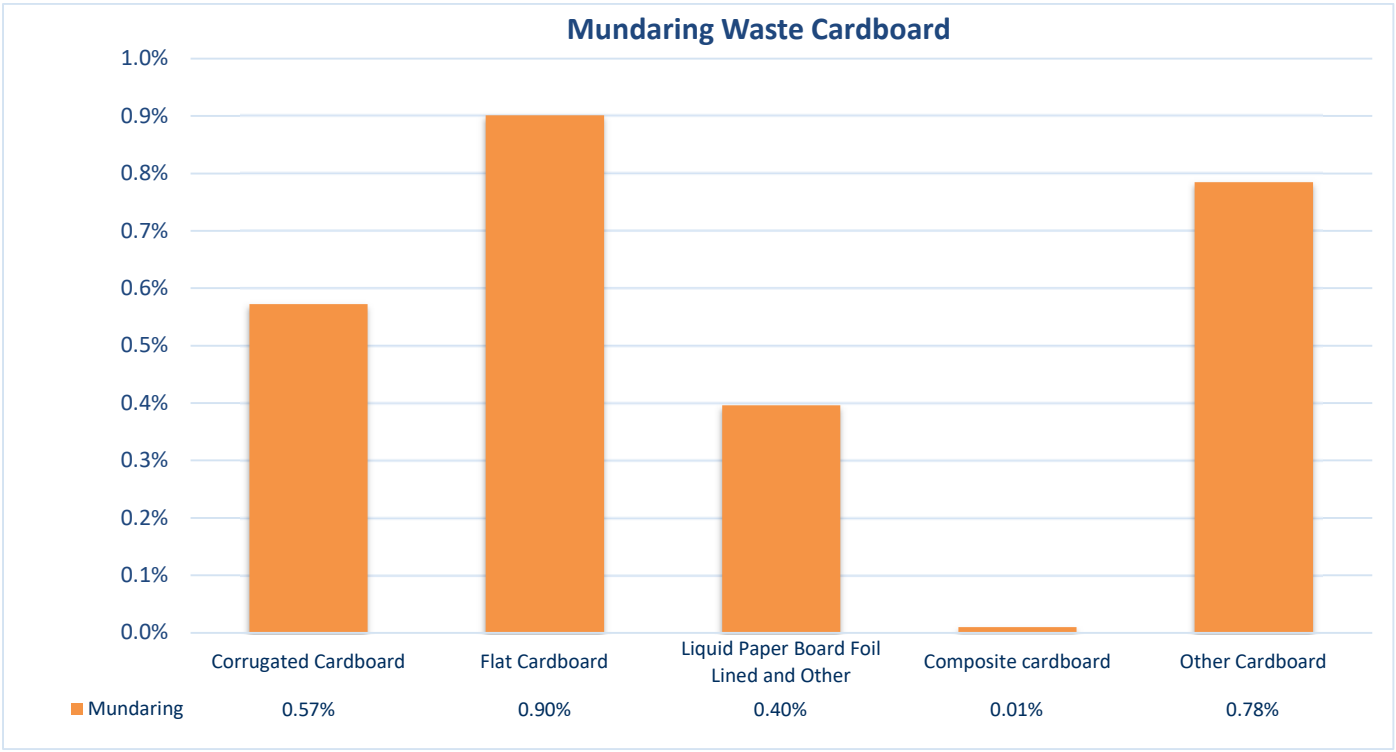


Figure 74 Mundaring Waste Cardboard

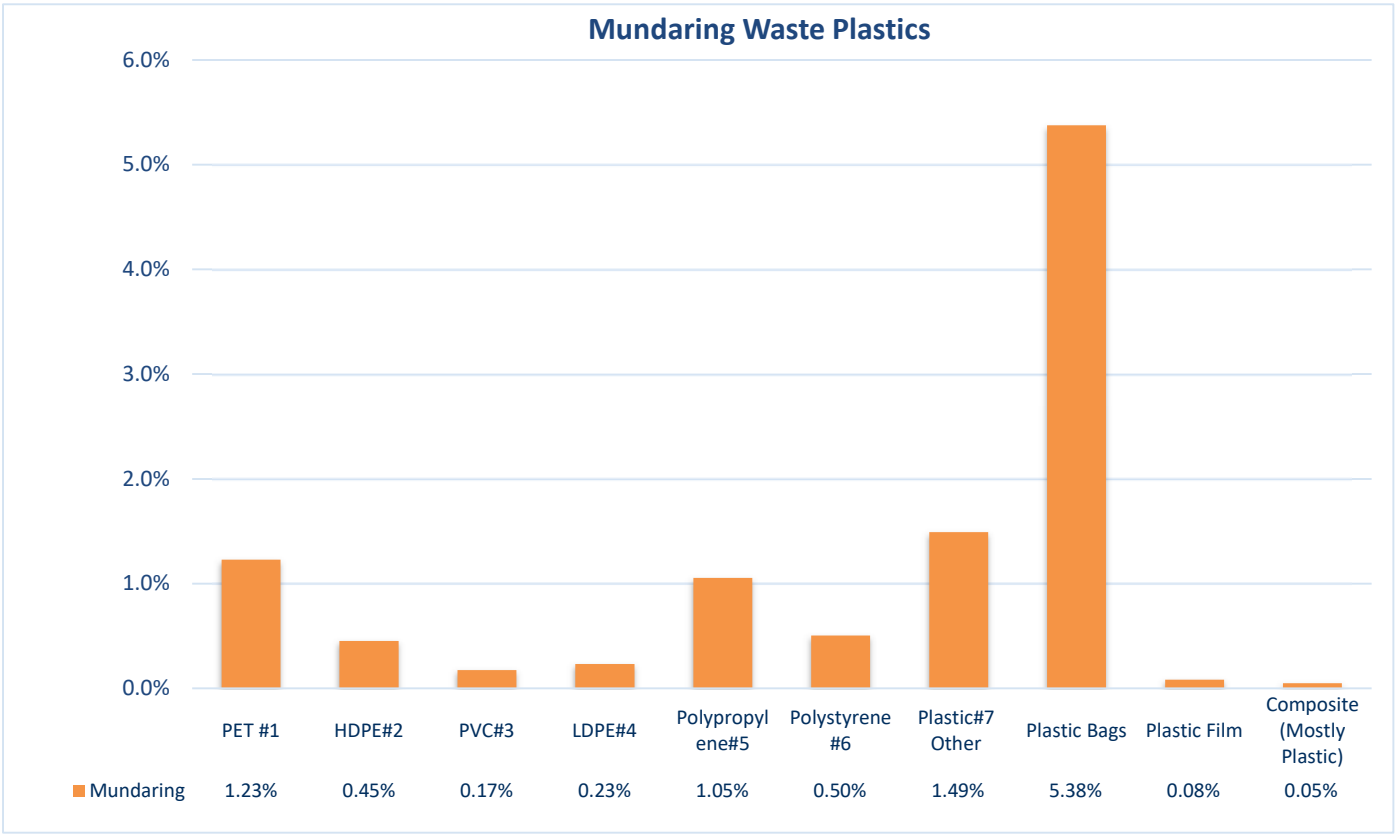


Figure 75 Mundaring Waste Plastics

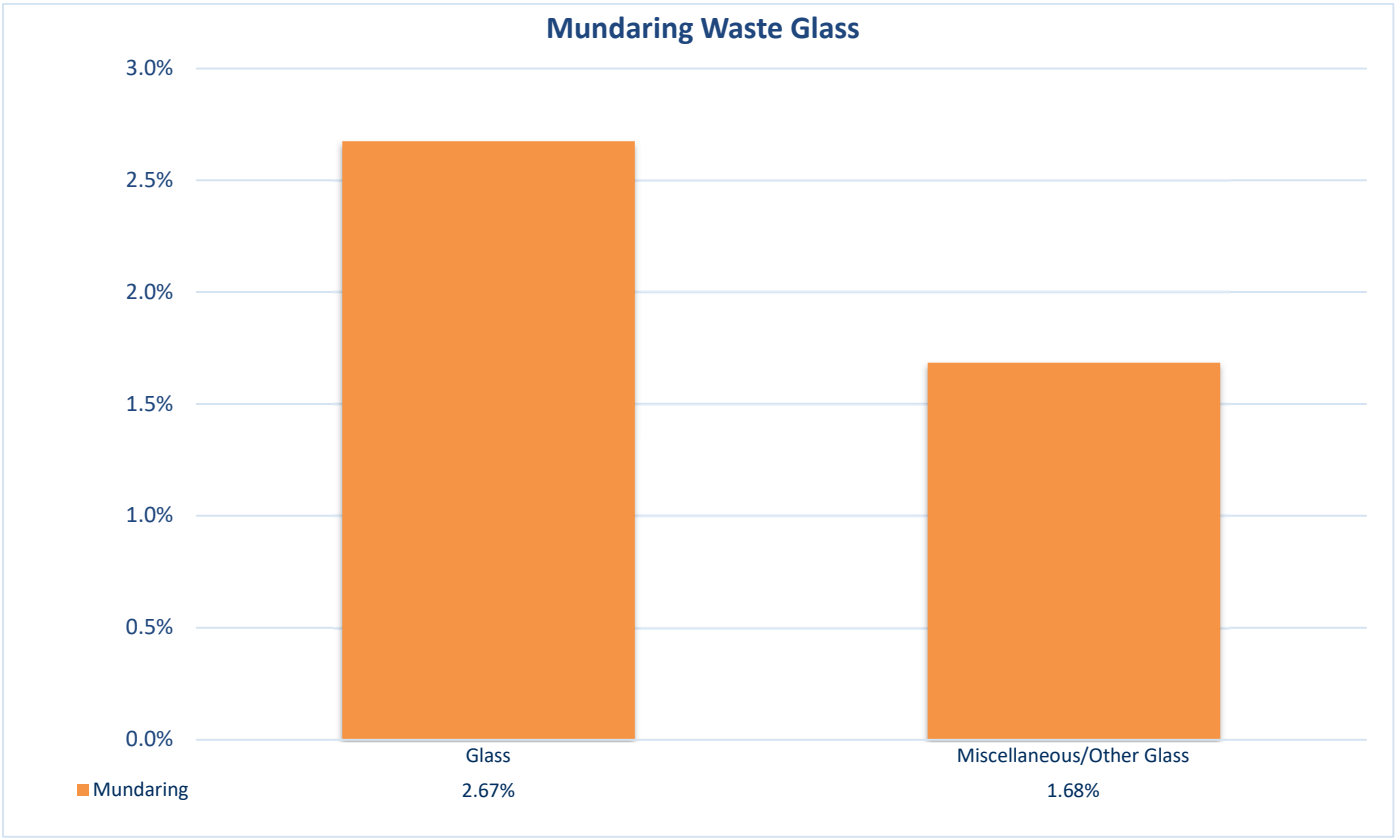


Figure 76 Mundaring Waste Glass

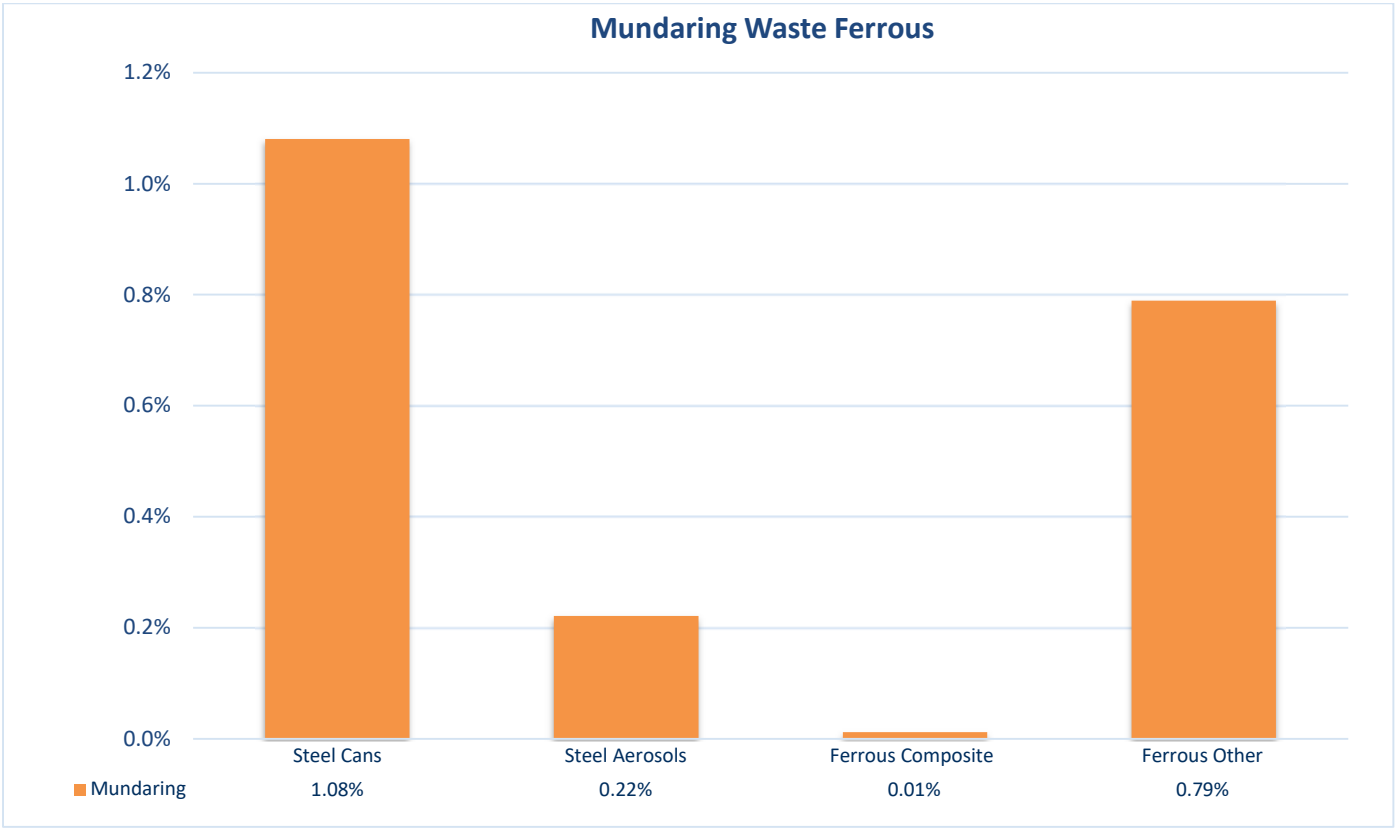


Figure 77 Mundaring Waste Ferrous

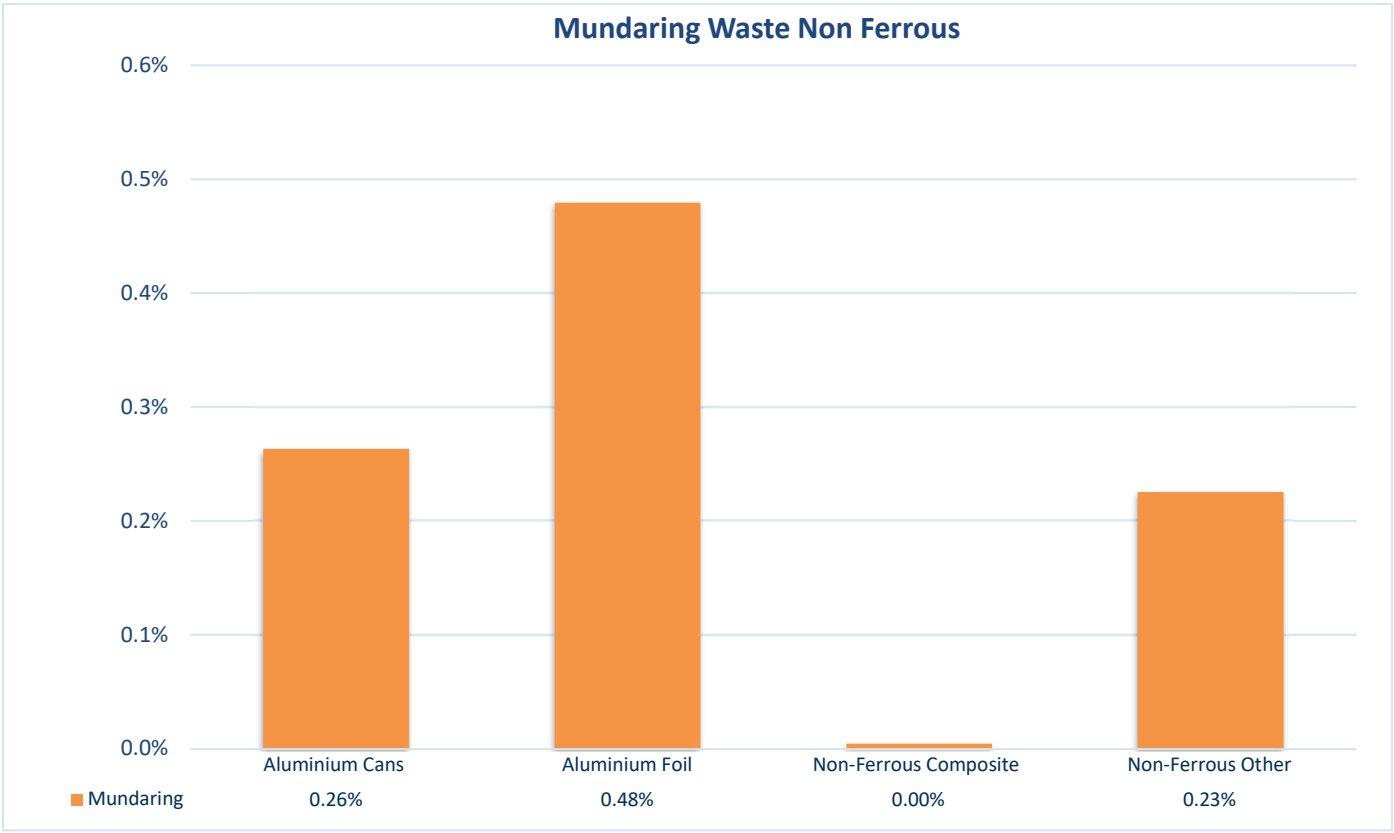


Figure 78 Mundaring Waste Non-Ferrous

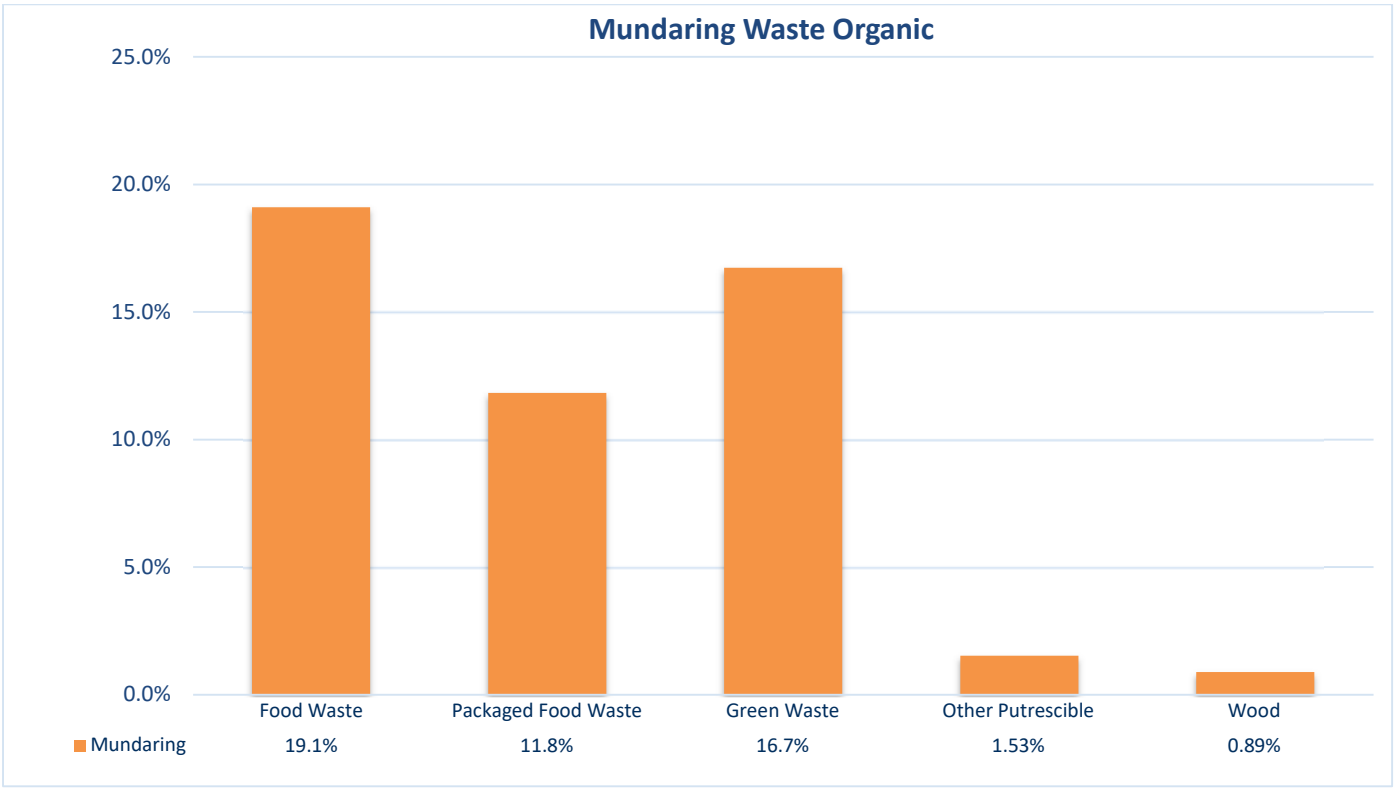


Figure 79 Mundaring Waste Organic

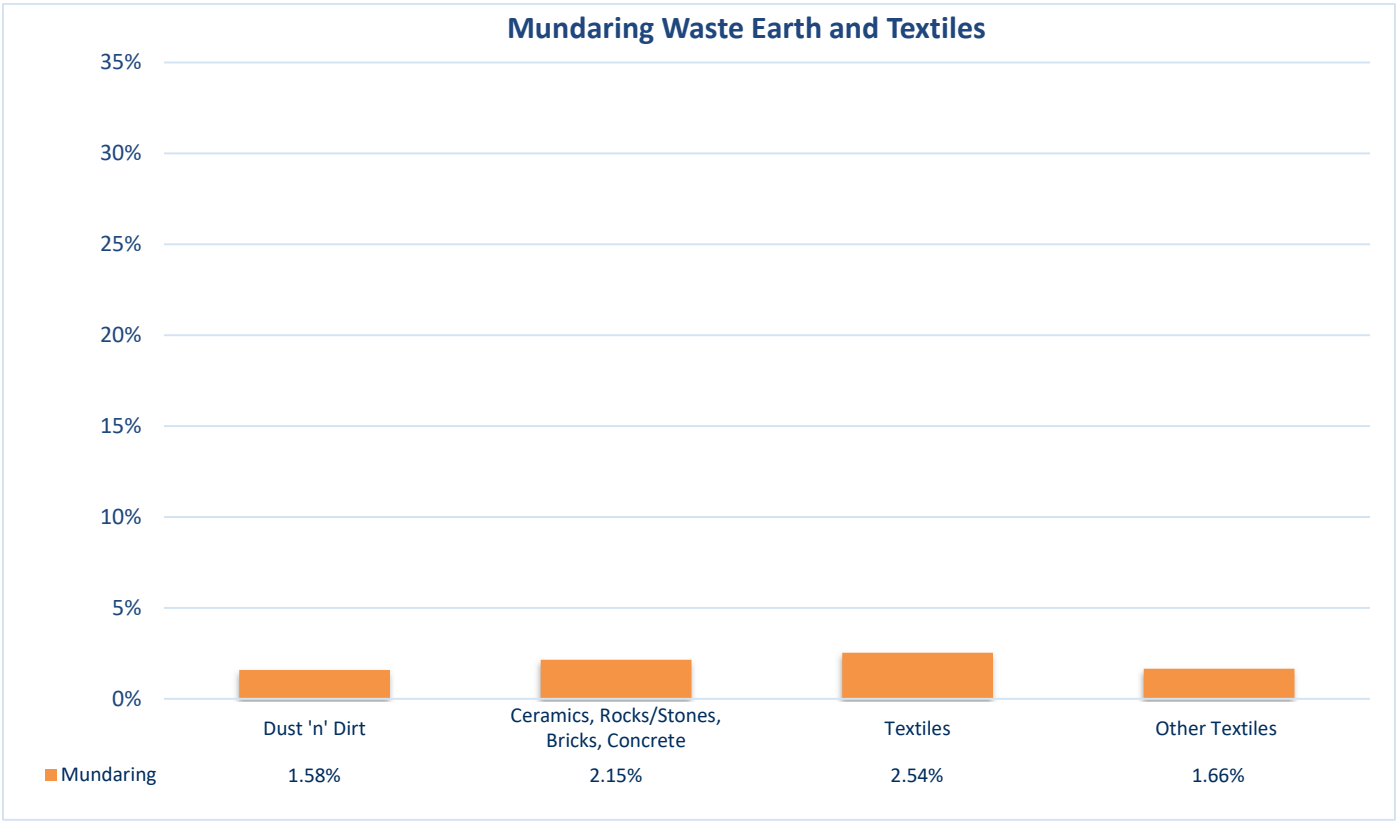


Figure 80 Mundaring Waste Earth and Textiles

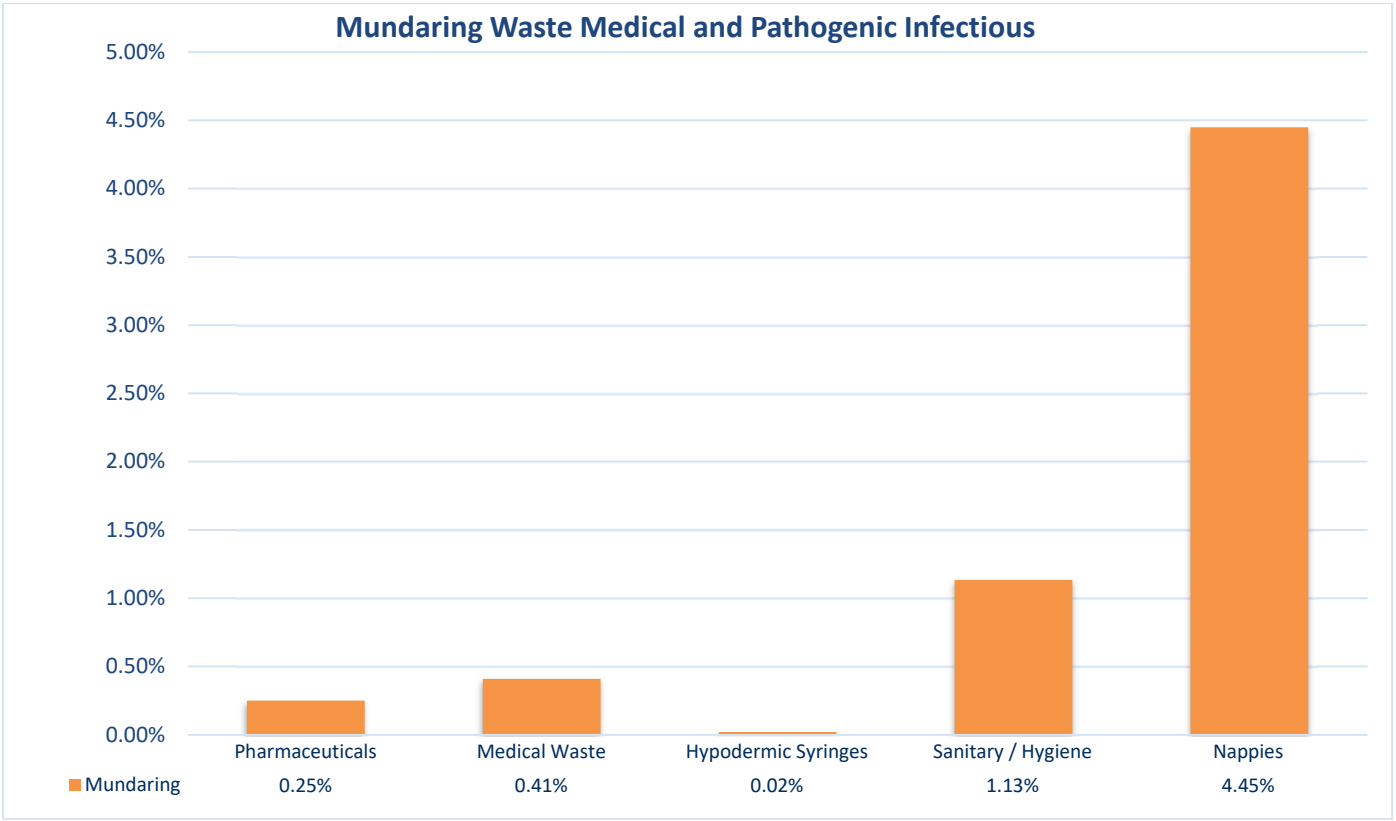


Figure 81 Mundaring Waste Medical and Pathogenic Infectious

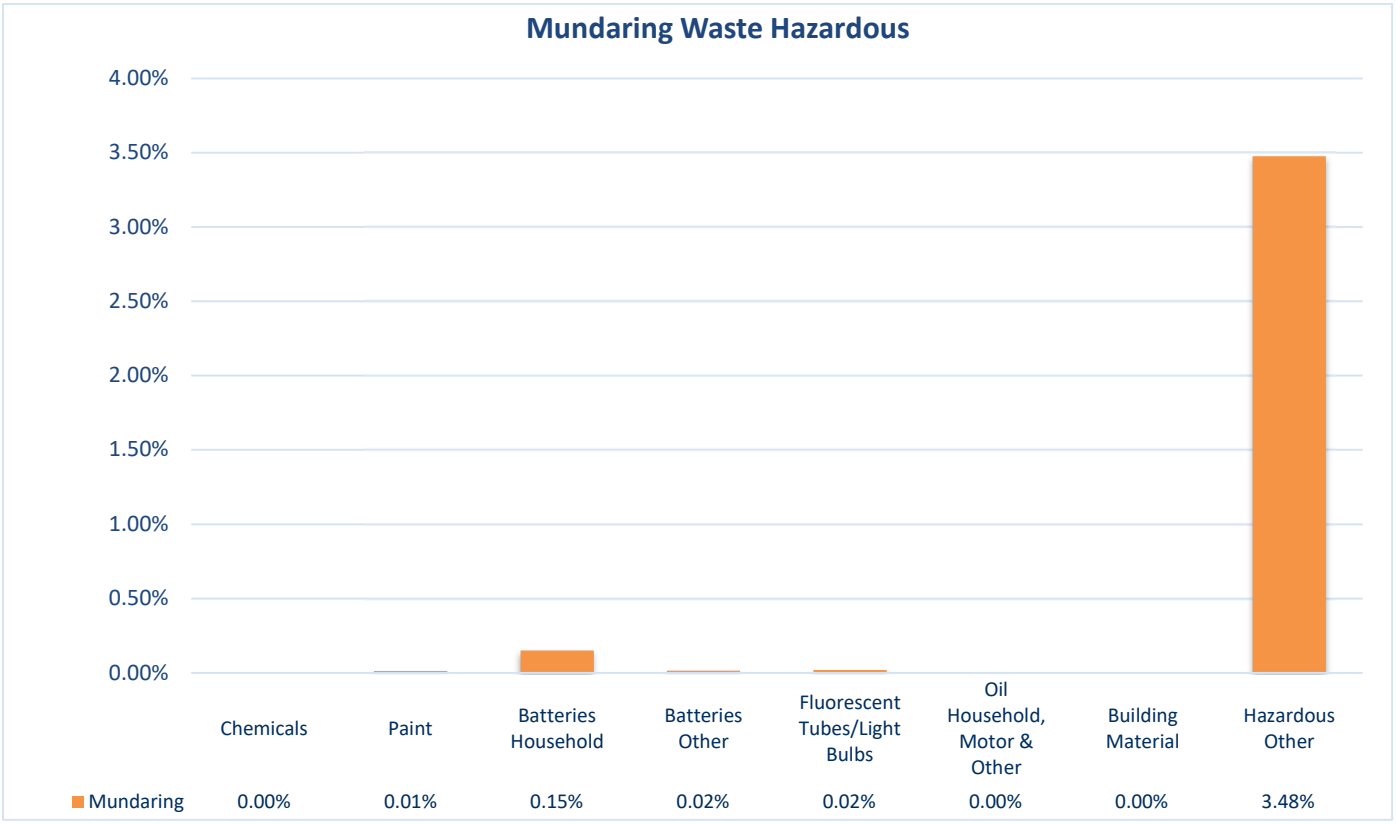


Figure 82 Mundaring Waste Hazardous

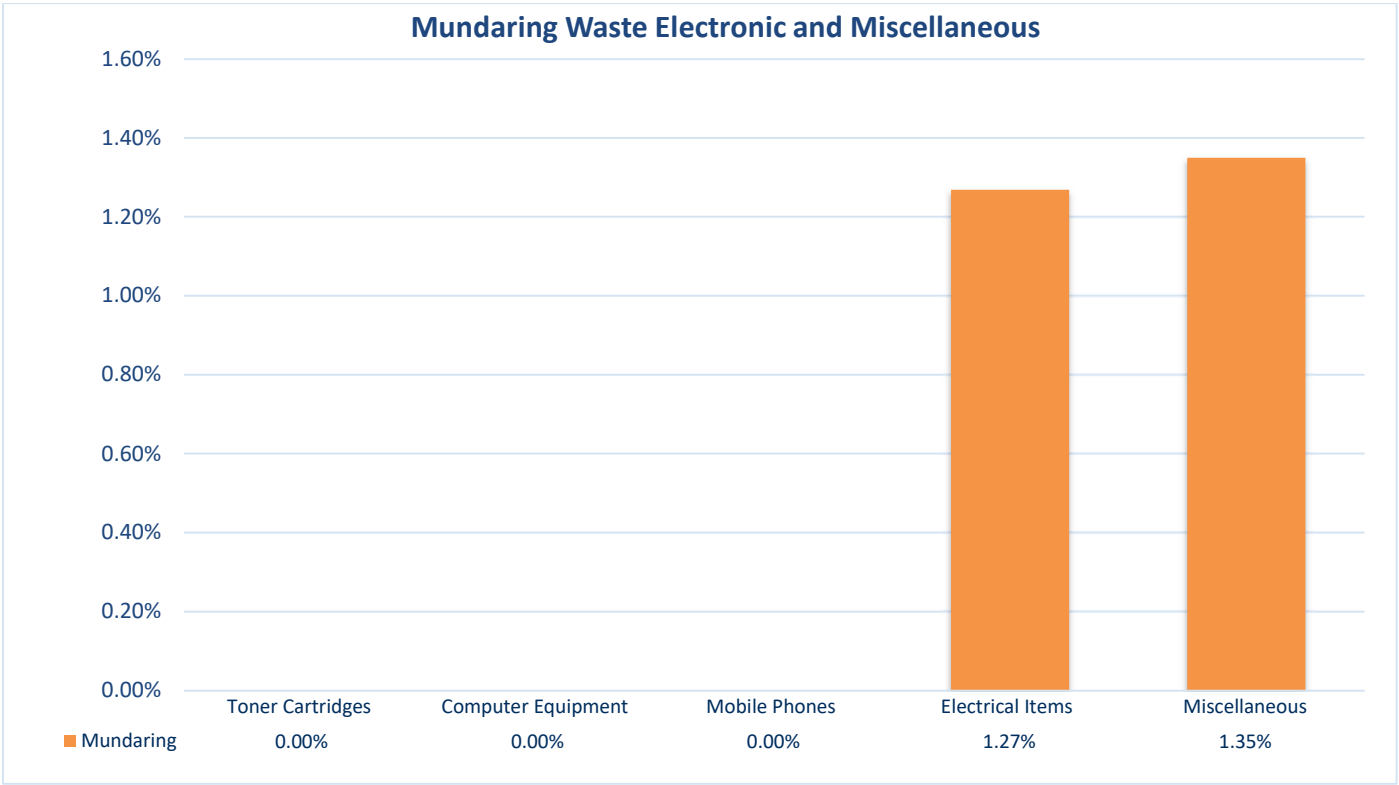


Figure 83 Mundaring Waste Electronic and Miscellaneous

Table 16 Mundaring Waste Summary Table

EMRC Waste Audit	Mundaring	
Recyclables	**Net Weight**	**Percentage of Weight**
Paper	103.9 kg	8.72%
Cardboard	31.7 kg	2.66%
Plastics	126.8 kg	10.6%
Glass	52.0 kg	4.36%
Aluminium	11.6 kg	0.97%
Steel	25.1 kg	2.10%
Recyclables Total		
	351.1 kg	29.5%
Non-Recyclables		
Organic	596.9 kg	50.1%
Earth	44.4 kg	3.72%
Textiles	50.0 kg	4.20%
Medical	8.08 kg	0.68%
Pathogenic Infectious	66.5 kg	5.58%
Hazardous	43.8 kg	3.67%
Other	15.1 kg	1.27%
Miscellaneous	16.1 kg	1.35%
Non-Recyclables Total		
	840.9 kg	70.5%
Summary		
Total Recyclables	351.1 kg	29.5%
Total Non-Recyclables	840.9 kg	70.5%
	1,192.0 kg	**100%**

7.7 Swan Waste Stream Comparison Graphs

The following graphs give a detailed representation of the comparisons in the Waste streams in Swan.

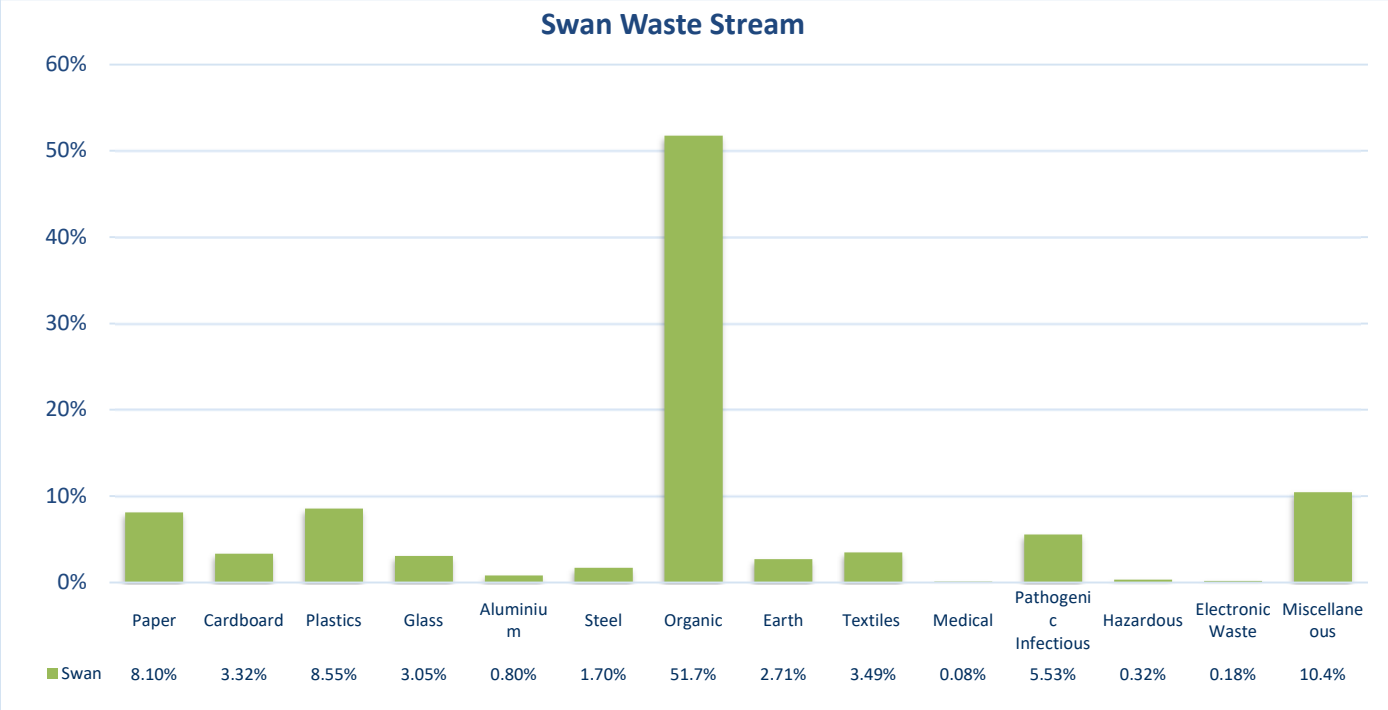


Figure 84 Swan Waste Stream

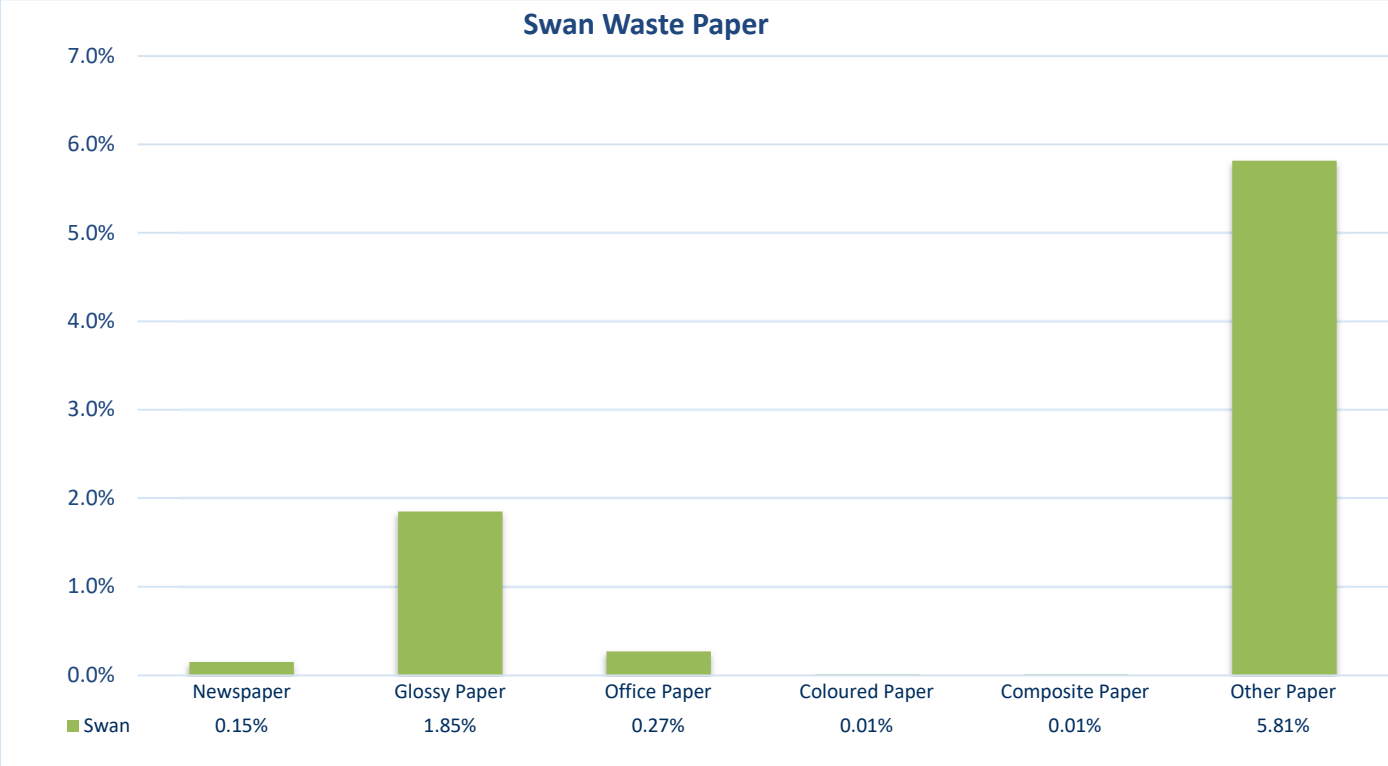


Figure 85 Swan Waste Paper

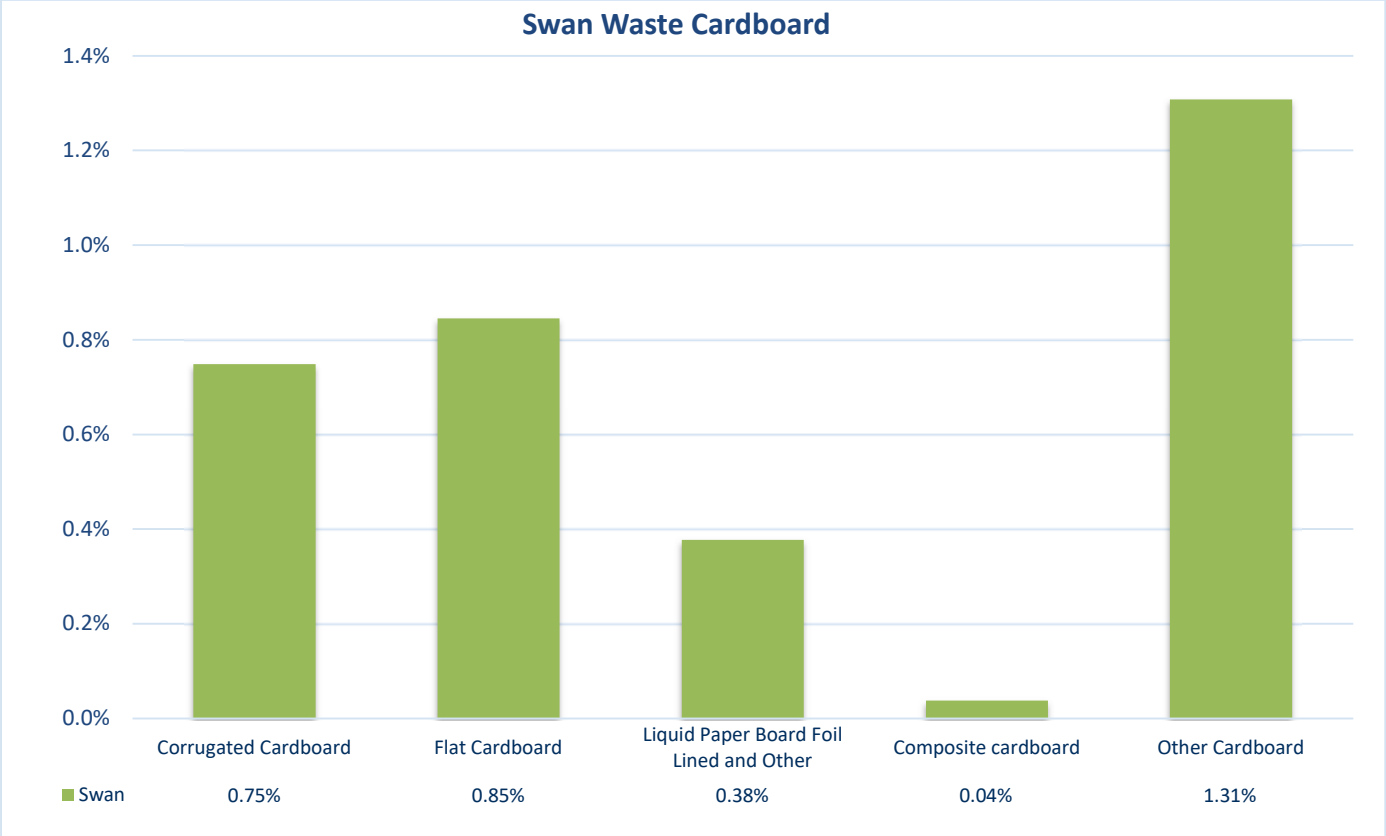


Figure 86 Swan Waste Cardboard

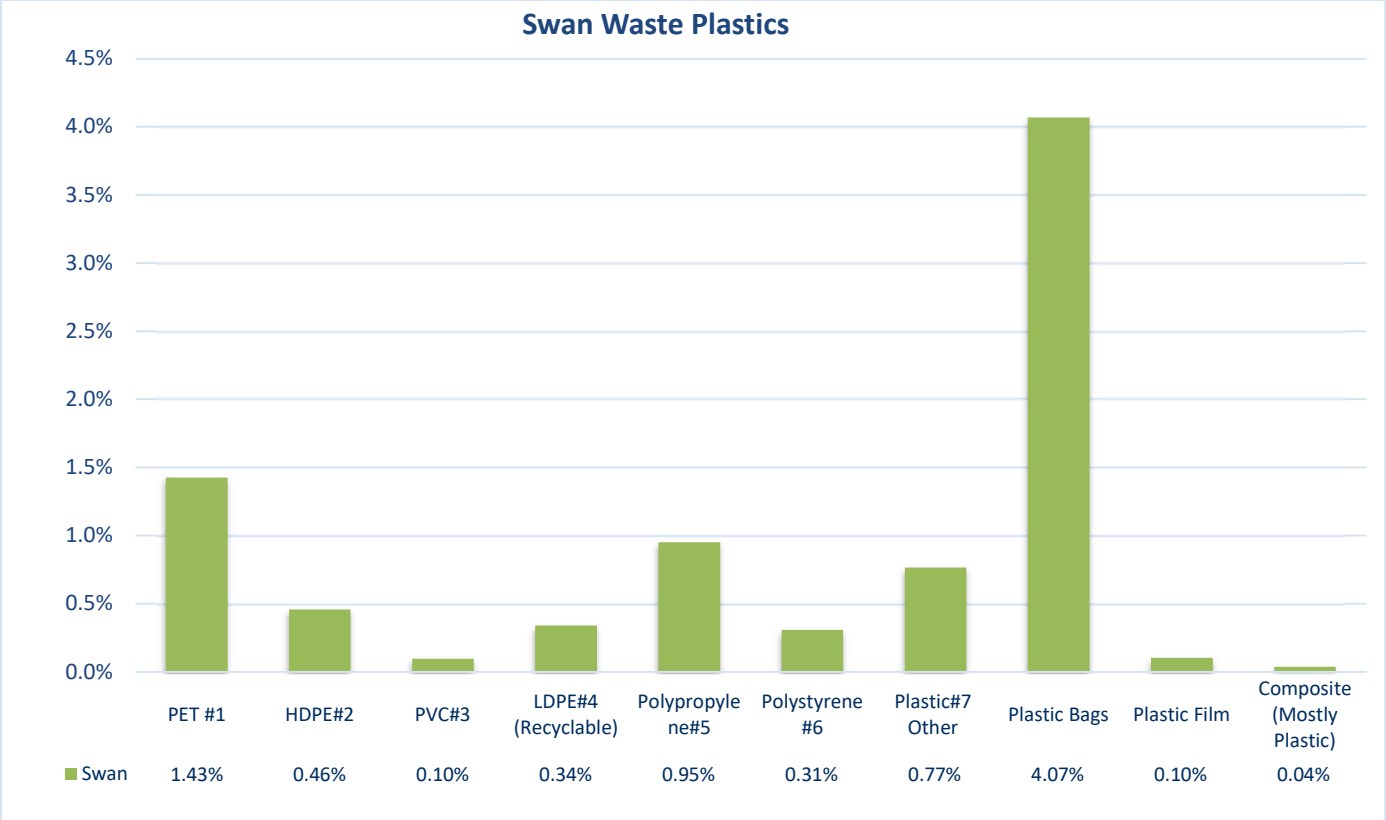


Figure 87 Swan Waste Plastics

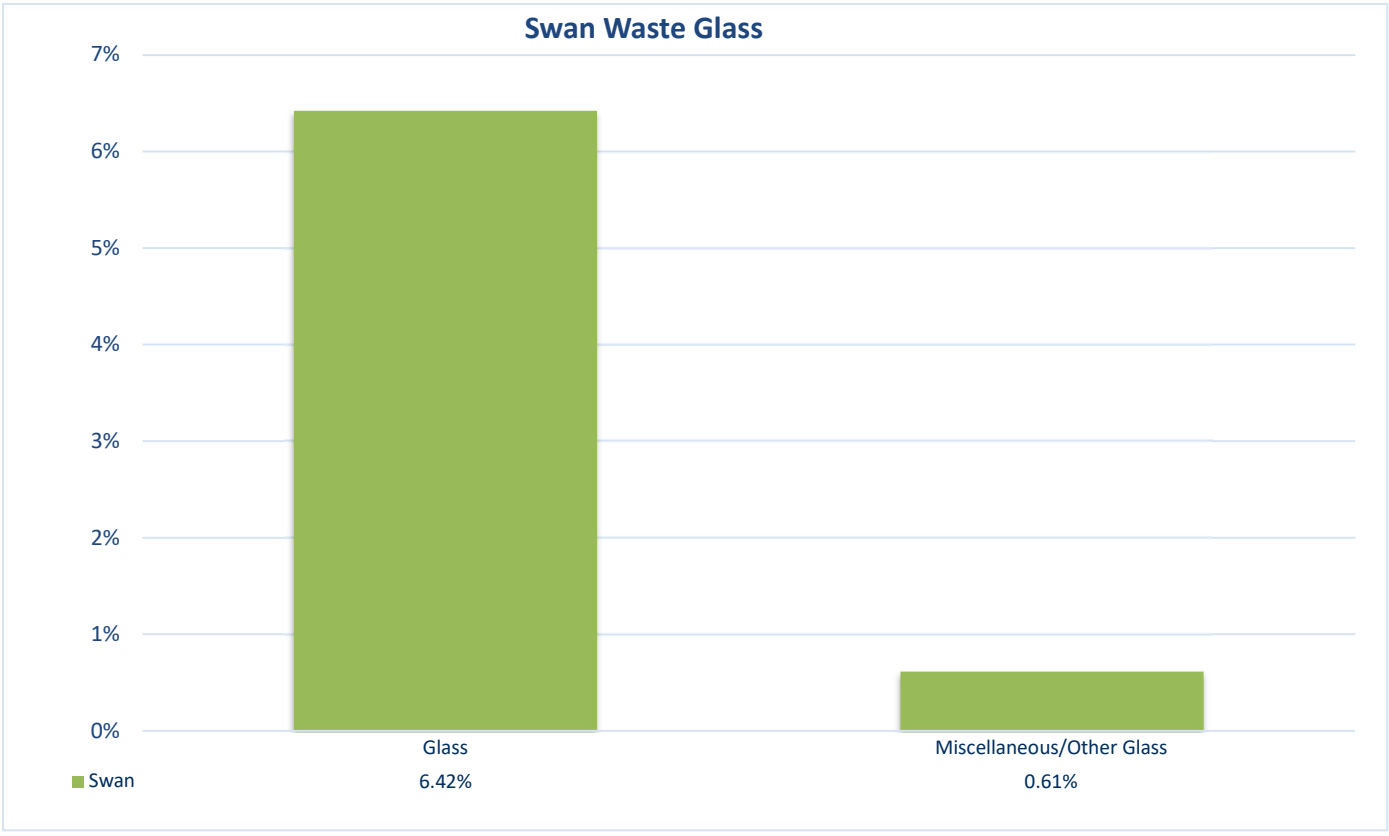


Figure 88 Swan Waste Glass

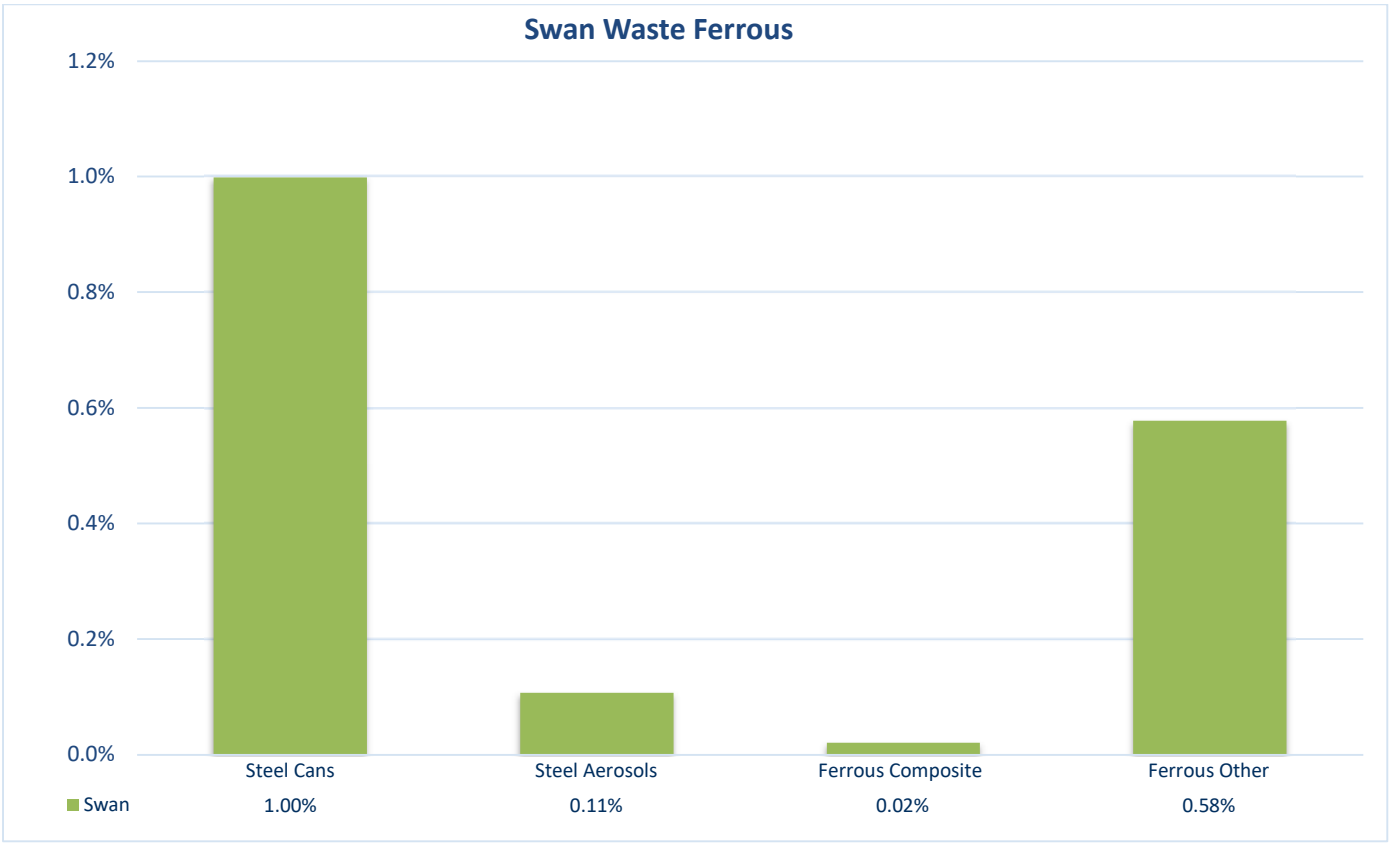


Figure 89 Swan Waste Ferrous

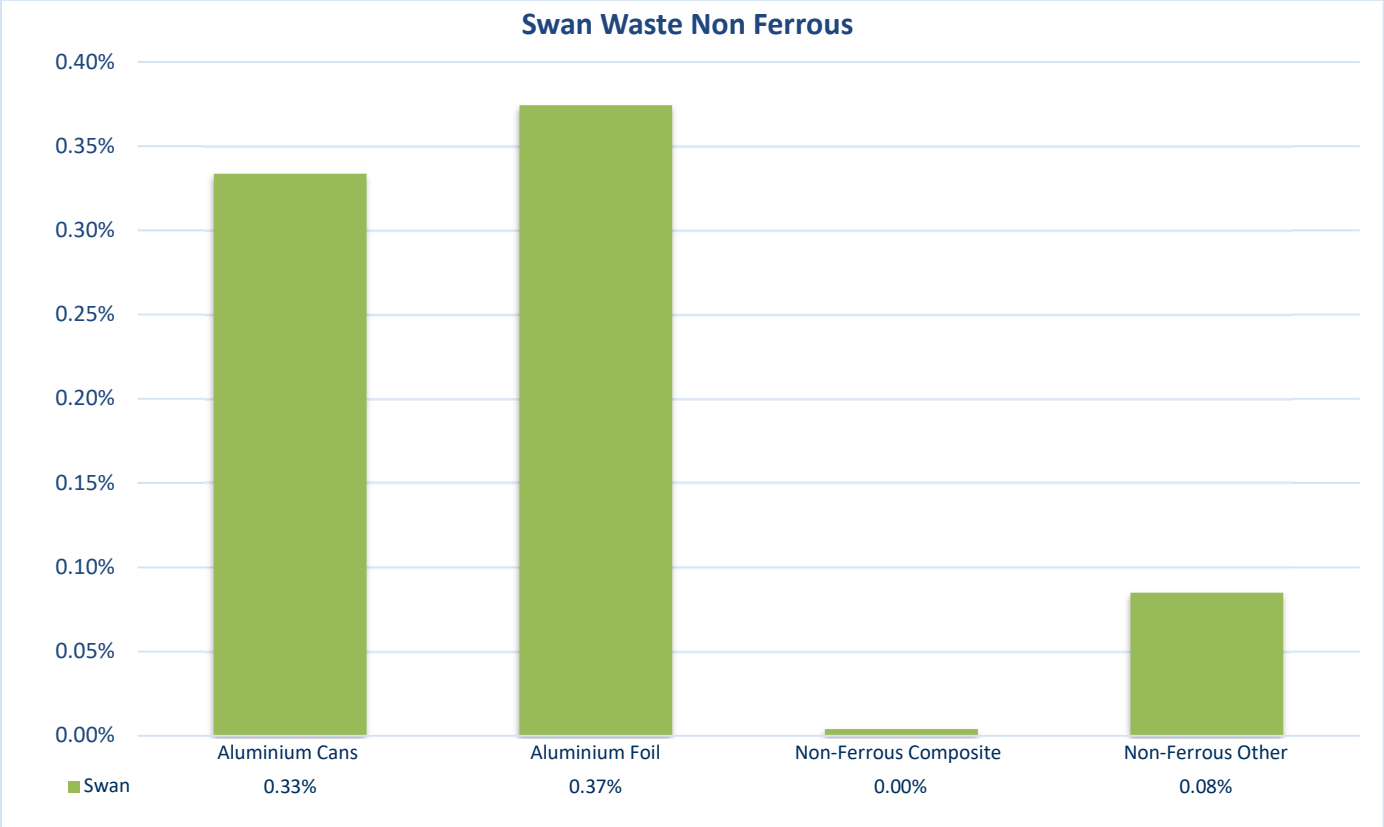


Figure 90 Swan Waste Non-Ferrous

Figure 91 Swan Waste Organic

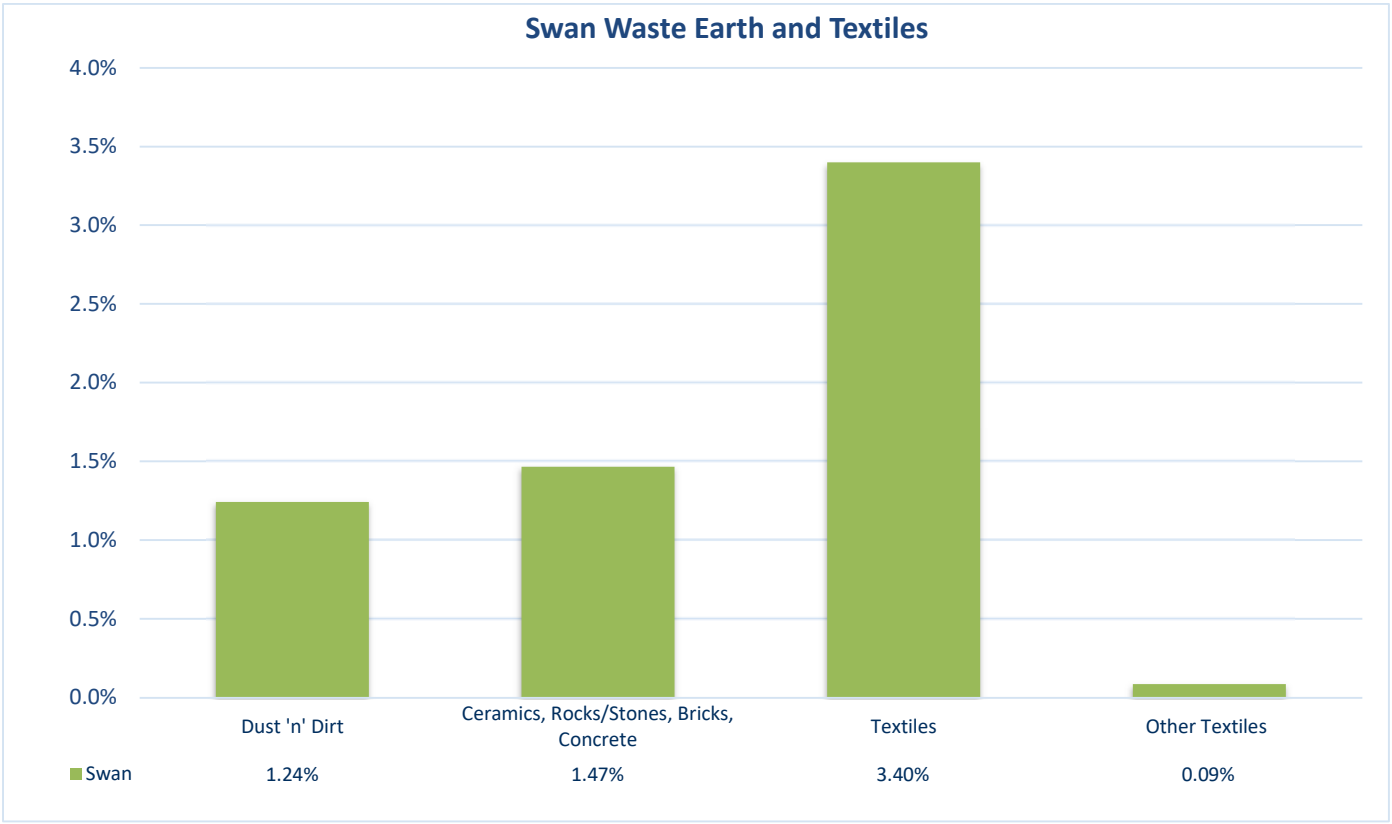


Figure 92 Swan Waste Earth and Textiles

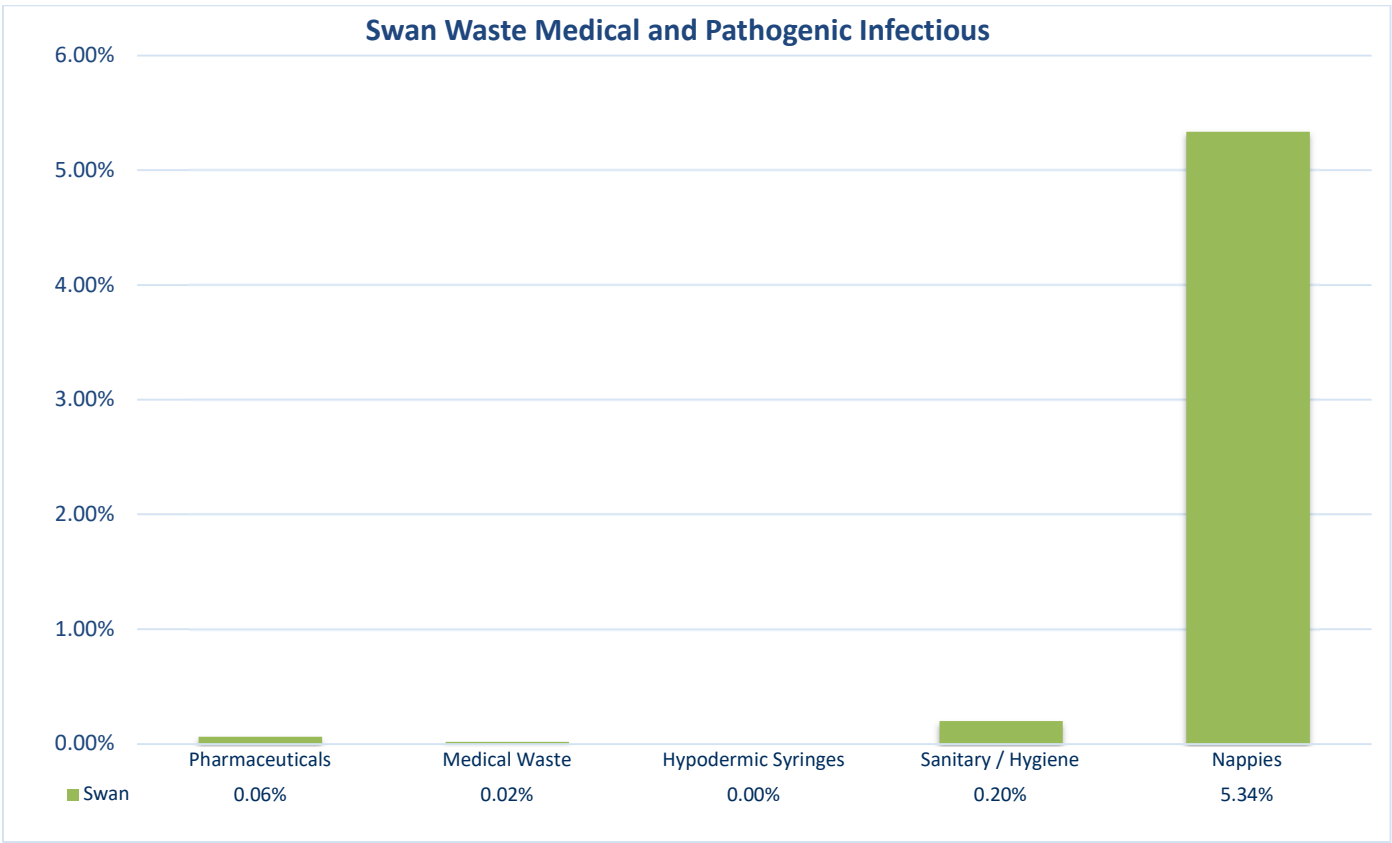


Figure 93 Swan Waste Medical and Pathogenic Infectious

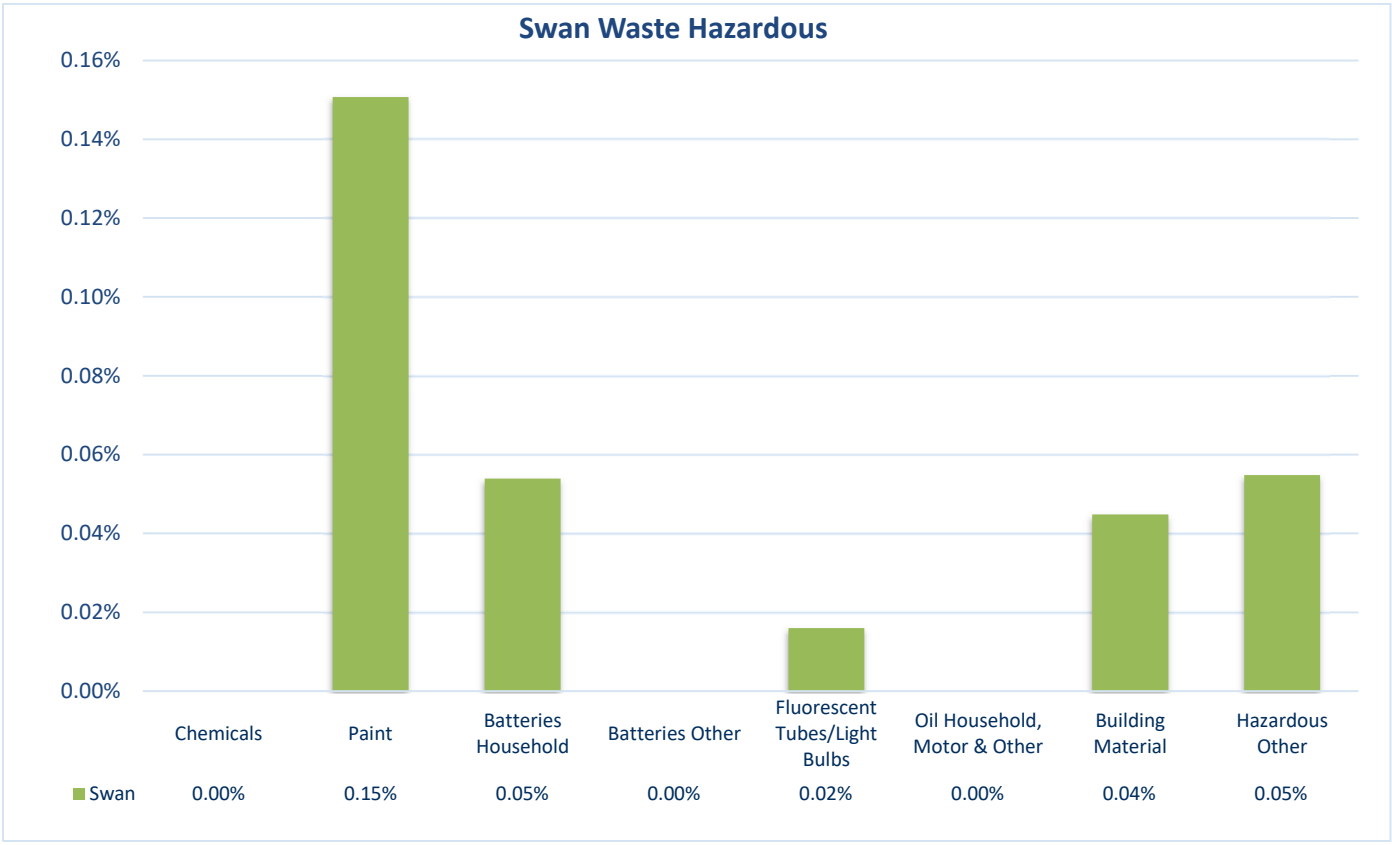


Figure 94 Swan Waste Hazardous

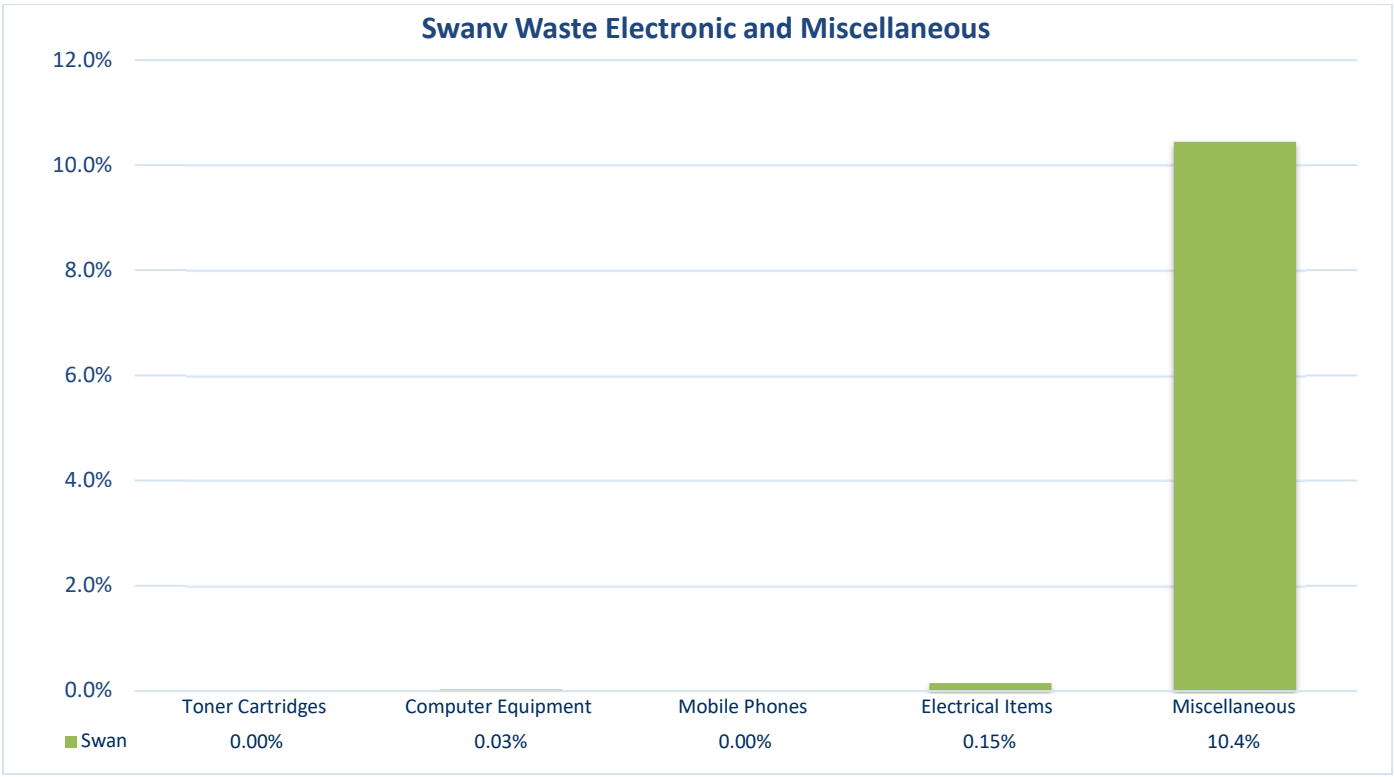


Figure 95 Swan Waste Electronic and Miscellaneous

Table 17 Swan Waste Summary Table

EMRC Waste Audit	Swan	
Recyclables	Net Weight	Percentage of Weight
Paper	148.1 kg	8.10%
Cardboard	60.7 kg	3.32%
Plastics	156.3 kg	8.55%
Glass	55.9 kg	3.05%
Aluminium	14.6 kg	0.80%
Steel	31.2 kg	1.70%
Recyclables Total		
	466.7 kg	25.5%
Non-Recyclables		
Organic	946.2 kg	51.7%
Earth	49.5 kg	2.71%
Textiles	63.7 kg	3.49%
Medical	1.43 kg	0.08%
Pathogenic Infectious	101.2 kg	5.53%
Hazardous	5.86 kg	0.32%
Electronic Waste	3.24 kg	0.18%
Miscellaneous	191.05 kg	10.4%
Non-Recyclables Total		
	1,362.3 kg	74.5%
Summary		
Total Recyclables	466.7 kg	25.5%
Total Non-Recyclables	1,362.3 kg	74.5%
	1,828.9 kg	**100%**

Appendix 2

Detailed Categories Tables

Table 18 EMRC All Councils Waste Detailed Table

EMRC Waste Audit Analysis		
	Total All Councils	
Paper	Net Weight	Percentage of Weight
Newspaper	31.3 kg	0.36%
Glossy Paper	136.1 kg	1.56%
Office Paper	23.7 kg	0.27%
Coloured Paper	0.96 kg	0.01%
Composite Paper	4.99 kg	0.06%
Other Paper	532.0 kg	6.09%
Net Paper Weight:	**729.1 kg**	**8.35%**
Cardboard		
Corrugated Cardboard	65.9 kg	0.75%
Flat Cardboard	74.3 kg	0.85%
Liquid Paper Board Foil Lined an	28.8 kg	0.33%
Composite cardboard	1.49 kg	0.02%
Other Cardboard	111.8 kg	1.28%
Net Cardboard Weight:	**282.3 kg**	**3.23%**
Plastics		
PET #1	98.0 kg	1.12%
HDPE#2	40.4 kg	0.46%
PVC#3	19.6 kg	0.22%
LDPE#4 (Recyclable)	20.7 kg	0.24%
Polypropylene#5	84.8 kg	0.97%
Polystyrene #6	39.4 kg	0.45%
Plastic#7 Other	80.9 kg	0.93%
Plastic Bags	380.8 kg	4.36%
Plastic Film	8.02 kg	0.09%
Composite (Mostly Plastic)	3.10 kg	0.04%
Net Plastic Weight:	**775.8 kg**	**8.88%**
Glass		
Glass	234.5 kg	2.69%
Miscellaneous/Other Glass	81.0 kg	0.93%
Net Glass Weight:	**315.5 kg**	**3.61%**
Ferrous		
Steel Cans	70.3 kg	0.81%
Steel Aerosols	10.6 kg	0.12%
Ferrous Composite	0.8 kg	0.01%
Ferrous Other	90.8 kg	1.04%
Net Ferrous Weight:	**172.5 kg**	**1.98%**
Non Ferrous		
Aluminium Cans	27.9 kg	0.32%
Aluminium Foil	40.6 kg	0.47%
Non-Ferrous Composite	0.46 kg	0.01%
Non-Ferrous Other	15.4 kg	0.18%
Net Non-Ferrous Weight:	**84.4 kg**	**0.97%**

Organic	Net Weight	Percentage of Weight
Food Waste	1,557.2 kg	17.8%
Packaged Food Waste	934.5 kg	10.7%
Green Waste	2160.2 kg	24.7%
Other Putrescible	83.9 kg	0.96%
Wood	75.0 kg	0.86%
Net Organic Weight:	**4,810.9 kg**	**55.1%**
Textiles		
Textiles Natural	237.4 kg	2.72%
Other Textiles	109.6 kg	1.26%
Net Textiles Weight:	**347.0 kg**	**3.97%**
Earth		
Dust 'n' Dirt	134.6 kg	1.54%
Ceramics, Rocks/Stones, Bricks, Concr	203.8 kg	2.33%
Net Earth Weight:	**338.4 kg**	**3.88%**
Medical		
Pharmaceuticals	10.5 kg	0.12%
Medical Waste	9.29 kg	0.11%
Hypodermic Syringes	0.69 kg	0.01%
Net Medical Weight:	**20.5 kg**	**0.23%**
Pathogenic Infectious		
Sanitary / Hygiene	47.2 kg	0.54%
Nappies	362.2 kg	4.15%
Net Pathogenic Infectious Weight:	**409.5 kg**	**4.69%**
Hazardous		
Chemicals	0.10 kg	0.00%
Paint	2.99 kg	0.03%
Batteries Household	6.22 kg	0.07%
Batteries Other	0.19 kg	0.00%
Fluorescent Tubes/Light Bulbs	1.52 kg	0.02%
Oil Household, Motor & Other	5.51 kg	0.06%
Building Material	3.00 kg	0.03%
Hazardous Other	72.1 kg	0.83%
Net Hazardous Weight:	**91.6 kg**	**1.05%**
Electronic Waste		
Toner Cartridges	0.12 kg	0.00%
Computer Equipment	4.78 kg	0.05%
Mobile Phones	0.04 kg	0.00%
Electrical Items	60.1 kg	0.69%
Net Other Weight:	**65.0 kg**	**0.74%**
Miscellaneous		
Miscellaneous	289.9 kg	3.32%
Net Miscellaneous Weight:	**289.9 kg**	**3.32%**

Appendix 3

Category Descriptors

Table 19 Category Descriptors

Recyclable Components		
Paper	Newspaper	Newspapers, Newspaper like pamphlets,
	Glossy Paper	magazines (glossy) pamphlets, present wrapping paper,
	Office Paper	A4 document paper, writing pads, letters, stationery papers
	Coloured Paper	Coloured Paper
	Composite Paper	Composite paper items where the weight of the paper is estimated to be greater the weight of the other materials, envelopes
	Other Paper	Non-Recyclable Paper, greaseproof paper, paper with a wax coating, high wet strength papers, telephone books Paper towel, Paper Napkins, Contaminated Paper
Cardboard	Corrugated Cardboard	Corrugated cardboard boxes,
	Packaged Flat Cardboard	packing boxes etc., cereal boxes, business cards, folding cartons
	Liquid Paper Board Foil Lined and Other	UHT / Long life milk, Soy Milk Cartons, some fruit juice cartons, Carbon barriers, Milk Cartons, Cardboard with a wax coating,
	Composite cardboard	Composite cardboard items where the weight of the cardboard is estimated to be greater the weight of the other materials, e.g. pringle boxes etc.,
	Other Cardboard	Non-Recyclable Cardboard, Contaminated Cardboard, e.g. pizza boxes
Plastics	PET #1	Soft drink bottles, juice bottles, some food & mouthwash containers (e.g. jam & sauce bottles, peanut butter jars) including coloured PET
	HDPE#2	Milk and cream bottles, shampoo and cleaner bottles, HDPE bottles, including coloured HDPE
	PVC#3	Cordial and juice bottles, blister packs, plumbing pipes and fittings, PVC labels
	LDPE#4	Ice cream container lids, cream bottle lids, squeeze bottles, lids, builder's black plastic, black mulch film, plant nursery bags
	Polypropylene#5	Ice cream containers, drinking straws, pot plant pots, some bottle caps, plastic garden settings, potato crisp bags, compost bins
	Polystyrene #6	Yoghurt / sour cream containers, hot drink cups, take away containers, plastic cutlery, video/CD boxes, packaging foam, any foam
	Plastic#7 Other	Tupperware, Mixed unidentifiable plastics, all other resins and multi-blend plastic materials
	Plastic Bags	Plastics Shopping Bags, Plastic Produce/Food Bags, Resealable Plastic Bags, Bin liners, Garbage bin liners, Compostable Plastics Bags
	Plastic Film	Cling film
	Composite (Mostly Plastic)	Composite plastic items where the weight of the plastic is estimated to be greater than the other material items
Glass	Glass	Beer bottles, wine bottles, food and sauce jars, not broken glass
	Miscellaneous/Other Glass	Plate glass (window and windscreen), broken light globes glass, glass particles, Black or ceramic lined glass, Including broken glass that is recyclable more than 50mm in size
Ferrous	Steel Cans	Food cans, pet food cans, tins, empty paint tins,
	Steel Aerosols	Aerosol cans
	Composite Ferrous (Mostly Ferrous)	Composite ferrous items where the weight of the metal is estimated to be greater than the other material items
	Ferrous Other	Beer bottle tops, 100% ferrous items that are not cans/tins/ packaging materials
Non Ferrous	Aluminium Cans	Beer and soft drink cans,
	Aluminium Foil	clean foil
	Composite Non-Ferrous (Mostly Non-Ferrous)	Composite non-ferrous metal items where the weight of the metal is estimated to be greater than the other material items
	Non-Ferrous Other	Aluminium aerosol cans Copper/brass/ bronze items, other metals (not ferrous / aluminium), Aluminium tamper proof seals

Contaminants/Non-Recyclable Components		
Food Organic	Food Waste	Vegetable scraps, meat scraps, animal food, leftover food, Food particles, Bones
	Packaged Food Waste	(Liquid containers - quarter full or more) and (Food Waste in containers or bags)
Green Organic	Green Waste	Grass clippings, tree trimmings/pruning's, flowers, tree wood
Other Organics	Other Putrescible	Animal excrement, mixed compostable items
	Wood/Timber	Milled wood/timber, wooden skewers
Textiles	Textiles	(Natural/Synthetic - Apparel/Bedding etc.), (Leather and Rubber)
	Other Textiles	Shoes, handbags, millinery etc
Earth	Soil/Dust 'n' Dirt and Inert and Broken Glass, Ash/Coal	Vacuum bag contents, soil, rocks, dirt, grit, mud, Broken Glass less than 50mm in size
	Ceramics, Rocks/Stones, Bricks, Concrete	Bricks and stones, Cups, bowls, pottery items, concrete
Medical	Pharmaceuticals	Unused prescription medicine, vitamins and Minerals
	Medical Waste	Band aids, Bandages, Used surgical gloves, Surgical Instruments, Medical aids/kits, Medical devices and radioactive materials, any solid waste generated from diagnosis, treatment of humans or animals, /Medical Other
	Hypodermic Syringes	Hypodermic Syringes, Epi Pens
Pathogenic Infectious	Sanitary / Hygiene	used tissues (items with any bodily fluids), tampons/pads, cotton buds)
	Nappies	Adult and Child disposable nappies
Hazardous	Chemicals	Bleach, Shampoo, Cleaning Products, (where the weight of the product is estimated to be greater than the weight of the container)
	Paint	Wet/Dry Paint
	Batteries Household	Batteries (Single Use and Rechargeable), Mobile phone battery
	Batteries Other	Vehicle Batteries, e.g. Car/Boat, Industrial batteries, e.g. Power Supply (UPS)
	Fluorescent Tubes/Light Bulbs	
	Oil Household, Motor & Other	
	Building Material	
	Hazardous Other	Uncategorized hazardous waste
Electronic Waste	Toner Cartridges	Toner Cartridges
	Computer Equipment	Computer Components, Peripheral Devices/Computer Printer or Photocopier/Printer
	Mobile Phones	Mobile phones
	Electrical Items	Electrical Products
Miscellaneous	Miscellaneous (Specify)	Any items not applicable to other categories

11.2 EXPRESSION OF INTEREST – EOI2019-007 EMRC FOOD ORGANICS, GARDEN ORGANICS (FOGO) PROCESSING

REFERENCE: D2020/00713

PURPOSE OF REPORT

The purpose of this report is to advise Council on the outcomes of the Expression of Interest (EOI) process for the Food Organics and Garden Organics (FOGO) Processing Facility.

KEY POINTS AND RECOMMENDATION(S)

- The call for Expressions of Interest was advertised on 7 December 2019 and closed on 7 January 2020.
- Eleven (11) submissions were received by the closing time.
- One of the submissions was non-compliant.
- The Evaluation Committee has completed the assessment of the submissions against the selection criteria.

Recommendation(s)

That:

1. The following respondents to the Expression of Interest 2019-007 are listed as Acceptable Tenderers:
   a. Barpa Pty Ltd;
   b. Hitachi Zosen Inova Australia Pty Ltd;
   c. Pindan Contracting Pty Ltd;
   d. Sacyr Environment Australia Pty Ltd; and
   e. Veolia Environmental Services (Australia) Pty Ltd.
2. The following respondents to the Expression of Interest 2019-007 are not listed as Acceptable Tenderers:
   a. Aurigen Group
   b. Biogass Renewables Pty Ltd;
   c. Cleanaway Pty Ltd;
   d. FOCUS Enviro (EMER Pty Ltd);
   e. Re.Group Pty Ltd; and
   f. Skala Australasia Pty Ltd.
3. The respondents to Expression of Interest 2019-007 be advised of the outcome of the assessment.
4. The attachment remain confidential and be certified by the Chairman and CEO.

SOURCE OF REPORT

Chief Project Officer

Item 11.2 continued

BACKGROUND

At its 21 March 2019 meeting of Council, it was resolved (D2019/05266):

"THAT:

1. *THE EMRC BEGIN THE PROCESS OF DEVELOPING A LONG-TERM FOOD ORGANIC & GARDEN ORGANIC (FOGO) STRATEGY INCLUDING, IF REQUIRED, SEEKING EXPRESSIONS OF INTEREST FOR THE APPROPRIATE TECHNOLOGY TO IMPLEMENT LONG-TERM FOGO PROCESSING SOLUTIONS TO CATER FOR ALL MEMBER COUNCIL WASTE STREAMS.*
2. *IN THE INTERIM, THE EMRC PROCEEDS WITH THE PROCUREMENT PROCESS AND LICENCE APPROVAL FOR THE ADDITION OF A TRIAL MOBILE AERATOR FLOOR (MAF) COMPOSTING SYSTEM FOR THE PROCESSING OF UP TO 10,000 TPA OF FOGO WASTE AT THE RED HILL WASTE MANAGEMENT FACILITY.*
3. *APPROVES THE EXPENDITURE OF UP TO $400,000 EX GST FOR THE PURCHASE AND INSTALLATION OF A SUITABLE MAF SYSTEM, INCLUDING HARDSTAND INSTALLATION AND THAT THE FUNDS BE ALLOCATED FROM THE SECONDARY WASTE RESERVE.*
4. *NOTES THAT INTERIM ARRANGEMENTS ARE AVAILABLE WITH SEVERAL THIRD PARTY PROCESSORS OF FOGO WASTE IF THE INSTALLATION OF A PROCESSING FACILITY OR THE LICENCE APPROVAL IS DELAYED FOR WHATEVER REASON BEYOND PLANNED START DATES FOR FOGO COLLECTIONS BY MEMBER COUNCILS.*
5. *ADVISE THE TOWN OF BASSENDEAN AND THE CITY OF BAYSWATER OF THE COUNCIL RESOLUTION AND AUTHORISE THE CEO TO ENTER INTO NEGOTIATIONS WITH THESE MEMBER COUNCILS FOR A SUITABLE PROCESSING ARRANGEMENT.*
6. *SEEK FUNDING SUPPORT FROM THE WASTE AUTHORITY FOR THE FOGO TRIAL AT THE RED HILL WASTE MANAGEMENT FACILITY.*
7. *THAT THE EMRC EXPLORE ALL MARKETING OPPORTUNITIES FOR THE COMPOST PRODUCT DURING THE FOGO TRIAL PERIOD."*

At its 19 September 2019 meeting, it was resolved as follows:

"THAT COUNCIL:

1. *NOTES THE DRAFT FOOD ORGANICS AND GARDEN ORGANICS (FOGO) WASTE STRATEGY.*
2. *ENDORSES THE PROPOSED OUTCOME OF HAVING A LONG TERM OR PERMANENT FOGO TREATMENT FACILITY FOR THE REGION OPERATING BY JULY 2022.*
3. *REQUESTS THAT THE DRAFT FOGO WASTE STRATEGY BE FURTHER DEVELOPED IN CONSULTATION WITH MEMBER COUNCIL STAFF AND BE PRESENTED TO COUNCIL FOR ENDORSEMENT.*
4. *BY ABSOLUTE MAJORITY IN ACCORDANCE WITH SECTION 6.8(1)(B) OF THE LOCAL GOVERNMENT ACT 1995, AUTHORISES AN ALLOCATED BUDGET OF $500,000 TO BE UTILISED FROM THE SECONDARY WASTE RESERVE TO IMPLEMENT ELEMENTS OF THE FOGO STRATEGY, INCLUDING BUT NOT NECESSARILY LIMITED, TO PRELIMINARY WORK SUCH AS VARIOUS MODELLING AND TENDER PREPARATIONS."*

11.2 continued

REPORT

The call for Expression of Interest 2019-007 closed on 7 January 2020 with eleven (11) submissions received. Submissions were received from the following respondents:

a. Aurigen Group;
b. Barpa Pty Ltd;
c. Biogass Renewables Pty Ltd;
d. Cleanaway Pty Ltd;
e. FOCUS Enviro (EMER Pty Ltd);
f. Hitachi Zosen Inova Australia Pty Ltd;
g. Pindan Contracting Pty Ltd;
h. Re.Group Pty Ltd;
i. Skala Australasia Pty Ltd;
j. Sacyr Environment Australia Pty Ltd; and
k. Veolia Environmental Services (Australia) Pty Ltd

The submission from Aurigen Group was non-compliant with the requirements of the EOI and was not assessed further.

The remaining ten (10) submissions were fully assessed by the Evaluation Committee against the evaluation criteria listed below:

EOI Assessment Criteria	
Compliance Criteria	
1	Compliance and completeness in completing Part 4, in particular the Offer Form is section 4.1 and the Qualitative Criteria section 4.3.2 of the EOI
2	Compliance with the Conditions of Responding to this EOI
3	Compliance with the EOI closing date
Qualitative Criteria	
Weighting	**Criterion**
20%	Relevant experience and reference sites globally
15%	Knowledge and understanding of the FOGO processing plant market
15%	Capacity in Australia and local capability requirements
20%	Proven technology at the scale EMRC requires and proposed project execution methodology
10%	Safety performance
80%	Sub-total
20%	Price Schedule Offered
100%	Total Score

Item 11.2

The Evaluation Committee met to evaluate the submissions.

This involved:

- Individual assessments of the submissions;
- Group consensus of the evaluations;
- Consideration of any additional information sought from respondents and referees;
- Advice from an independent panel member, MRA Consulting who also completed the assessment;
- Adherence to the confidentiality requirements; and
- Management of any potential conflicts of interest.

The attachment is required to be kept confidential because the EOI process will progress to a tender process and the information contained in the attachment are commercial-in-confidence.

The confidential supporting document, Summary of Commercial Arrangements and FOGO Processing Technologies for FOGO Processing Facility – MRA Consulting summarising the submissions is **Attached**.

A summary of the submissions received is as follows:

Respondent	**Technology**
Barpa	Pre-treatment, Anaerobic Digestion and tunnel composting
Biogass	Pre-treatment, Anaerobic Digestion and aerated floor composting
Cleanaway	Pre-treatment, aerated static pile composting
Focus	Pre-treatment, Anaerobic Digestion and in vessel composting
HZI	Pre-treatment, Anaerobic Digestion and tunnel composting
Pindan	Pre-treatment, Anaerobic Digestion and tunnel composting
Re.Group	Pre-treatment, Anaerobic Digestion and tunnel composting
Sacyr	Pre-treatment, Anaerobic Digestion and tunnel composting
Skala	Pre-treatment, Anaerobic Digestion and tunnel composting
Veolia	Pre-treatment, Anaerobic Digestion and tunnel composting

STRATEGIC/POLICY IMPLICATIONS

Key Result Area 1 – Environmental Sustainability

1.1 To provide sustainable waste disposal operations

FINANCIAL IMPLICATIONS

Once the tender costs are known, a provision will be made in the in the 2020/2021 Annual Budget and the ten (10) year financial plan for capital expenditure on food organics and garden organics (FOGO) processing.

SUSTAINABILITY IMPLICATIONS

The FOGO Processing Facility will contribute toward minimising the environmental impact of waste by facilitating the sustainable use and development of organic waste.

Item 11.2 continued

MEMBER COUNCIL IMPLICATIONS

Member Council	Implication Details
Town of Bassendean City of Bayswater City of Belmont City of Kalamunda Shire of Mundaring City of Swan	Processing of FOGO waste in line with the EMRC FOGO Strategy

CONFIDENTIAL ATTACHMENT(S)

Summary of Commercial Arrangements and FOGO Processing Technologies for FOGO Processing Facility – MRA Consulting (Ref: D2020/01718)

VOTING REQUIREMENT

Simple Majority

RECOMMENDATION(S)

That:

1. The following respondents to the Expression of Interest 2019-007 are listed as Acceptable Tenderers:
    a. Barpa Pty Ltd;
    b. Hitachi Zosen Inova Australia Pty Ltd;
    c. Pindan Contracting Pty Ltd;
    d. Sacyr Environment Australia Pty Ltd; and
    e. Veolia Environmental Services (Australia) Pty Ltd.
2. The following respondents to the Expression of Interest 2019-007 are not listed as Acceptable Tenderers:
    a. Aurigen Group
    b. Biogass Renewables Pty Ltd;
    c. Cleanaway Pty Ltd;
    d. FOCUS Enviro (EMER Pty Ltd);
    e. Re.Group Pty Ltd; and
    f. Skala Australasia Pty Ltd.
3. The respondents to Expression of Interest 2019-007 be advised of the outcome of the assessment.
4. The attachment remain confidential and be certified by the Chairman and CEO.

Item 11.2 continued

Mr Jackson moved an amendment to the Officer Recommendation that point 4 becomes point 5 and is replaced by:

4. That a feasibility study is prepared and adopted by Council prior to tenders being called.

This was seconded by Cr O'Connor.

Mr Jackson highlighted that the rationale for the amendment was to ensure that the ownership and management models as well as the tonnage capacity of the facility is discussed and agreed to prior to the tender documents being issued.

Discussion ensued.

WAC RECOMMENDATION(S)

MOVED MR JACKSON SECONDED CR O'CONNOR

That:

1. The following respondents to the Expression of Interest are listed as Acceptable Tenderers:
   a. Barpa Pty Ltd;
   b. Hitachi Zosen Inova Australia Pty Ltd;
   c. Pindan Contracting Pty Ltd;
   d. Sacyr Environment Australia Pty Ltd; and
   e. Veolia Environmental Services (Australia) Pty Ltd.
2. The following respondents to the Expression of Interest are not listed as Acceptable Tenderers:
   a. Aurigen Group
   b. Biogass Renewables Pty Ltd;
   c. Cleanaway Pty Ltd;
   d. FOCUS Enviro (EMER Pty Ltd)
   e. Re.Group Pty Ltd; and
   f. Skala Australasia Pty Ltd.
3. The respondents to Expression of Interest 2019 -007 be advised of the outcome of the assessment.
4. That a feasability study is prepared and adopted by council prior to tenders being called.
5. The attachment(s) remain confidential and be certified by the Chairman and CEO.

CARRIED UNANIMOUSLY

11.3 MOBILE AERATED FLOOR SYSTEM (MAFS) UPDATE

REFERENCE: D2020/01457

PURPOSE OF REPORT

The purpose of this report is to provide an update on the installation of the Mobile Aerated Floor System and to request approval for additional capital expenditure.

KEY POINTS AND RECOMMENDATION(S)

- The re-tender for the design, supply, install and maintain of a Mobile Aerated Floor System (MAFS) was awarded to the contractor Spartel Pty Ltd by Council at its 5 December 2019 meeting.
- Procurement of the MAFS to process up to 10,000 tonnes per annum of Food Organics and Garden Organics (FOGO) waste is underway and the installation is expected to be completed in March/April 2020 ready for the commencement of member Council FOGO waste deliveries in July 2020.
- A licence amendment for the Red Hill Waste Management Facility is being progressed with the Department of Water and Environment Regulation (DWER) for the FOGO trial.
- The negotiations with DWER have resulted in the requirement to purchase additional items of equipment for odour management during the composting process.
- Additional capital expenditure of $40,000 is required to be authorised.

Recommendation(s)

That Council, by absolute majority, authorise the expenditure of $40,000 (ex GST) from the Secondary Waste Reserve for the purchase of additional equipment for the Mobile Aerated Floor System (MAFS) to meet the regulatory requirements for odour management.

SOURCE OF REPORT

Chief Project Officer

BACKGROUND

At the 21 March 2019 meeting of Council it was resolved (D2019/04263):

"*THAT*:

1. *THE EMRC BEGIN THE PROCESS OF DEVELOPING A LONG-TERM FOOD ORGANIC & GARDEN ORGANIC (FOGO) STRATEGY INCLUDING, IF REQUIRED, SEEKING EXPRESSIONS OF INTEREST FOR THE APPROPRIATE TECHNOLOGY TO IMPLEMENT LONG-TERM FOGO PROCESSING SOLUTIONS TO CATER FOR ALL MEMBER COUNCIL WASTE STREAMS.*
2. *IN THE INTERIM, THE EMRC PROCEEDS WITH THE PROCUREMENT PROCESS AND LICENCE APPROVAL FOR THE ADDITION OF A TRIAL MOBILE AERATOR FLOOR (MAF) COMPOSTING SYSTEM FOR THE PROCESSING OF UP TO10,000 TPA OF FOGO WASTE AT THE RED HILL WASTE MANAGEMENT FACILITY.*
3. *APPROVES THE EXPENDITURE OF UP TO $400,000 EX GST FOR THE PURCHASE AND INSTALLATION OF A SUITABLE MAF SYSTEM, INCLUDING HARDSTAND INSTALLATION AND THAT THE FUNDS BE ALLOCATED FROM THE SECONDARY WASTE RESERVE.*
4. *NOTES THAT INTERIM ARRANGEMENTS ARE AVAILABLE WITH SEVERAL THIRD PARTY PROCESSORS OF FOGO WASTE IF THE INSTALLATION OF A PROCESSING FACILITY OR THE LICENCE APPROVAL IS DELAYED FOR WHATEVER REASON BEYOND PLANNED START DATES FOR FOGO COLLECTIONS BY MEMBER COUNCILS.*

Item 11.3 continued

5. *ADVISE THE TOWN OF BASSENDEAN AND THE CITY OF BAYSWATER OF THE COUNCIL RESOLUTION AND AUTHORISE THE CEO TO ENTER INTO NEGOTIATIONS WITH THESE MEMBER COUNCILS FOR A SUITABLE PROCESSING ARRANGEMENT.*
6. *SEEK FUNDING SUPPORT FROM THE WASTE AUTHORITY FOR THE FOGO TRIAL AT THE RED HILL WASTE MANAGEMENT FACILITY.*
7. *THAT THE EMRC EXPLORE ALL MARKETING OPPORTUNITIES FOR THE COMPOST PRODUCT DURING THE FOGO TRIAL PERIOD."*

At its 6 December 2019 meeting Council resolved:

"THAT:

1. *COUNCIL AWARDS SPARTEL PTY LTD AS THE PREFERRED TENDERER FOR TENDER RFT2019-006 – DESIGN, SUPPLY, INSTALL AND MAINTAIN A MOBILE AERATED FLOOR SYSTEM.*
2. *THE CEO BE AUTHORISED ON BEHALF OF THE EMRC TO ENTER INTO NEGOTIATIONS WITH THE PREFERRED TENDERER AND TO ENTER INTO A CONTRACT WITH PREFERRED TENDERER IN ACCORDANCE WITH THEIR SUBMITTED TENDER, SUBJECT TO ANY MINOR VARIATIONS THAT MAY BE AGREED ON BETWEEN THE CEO AND THE PREFERRED TENDERER.*
3. *COUNCIL AUTHORISE A 10% CONTINGENCY BASED ON THE TENDERED PRICE FOR ANY CONTRACT VARIATIONS THAT MAY ARISE FOR TENDER RFT2019-006.*
4. *THE IDENTITY OF THE SUCCESSFUL TENDERER BE REDACTED FOR LEGAL REASONS AND REMAIN CONFIDENTIAL UNTIL SUCH TIME THAT THE RESULTANT CONTRACT HAS BEEN FORMED".*

REPORT

Following the award of Tender RFT2019-006 for the design, supply, install and maintain of a Mobile Aerated Floor System (MAFS) to Spartel Pty Ltd, procurement of the MAFS to process up to 10,000 tonnes per annum of Food Organics and Garden Organics (FOGO) waste is underway. Installation is expected to be completed by April 2020 ready for the commencement of member Council FOGO waste deliveries on 1 July 2020.

A licence amendment for the Red Hill Waste Management Facility is being progressed with the Department of Water and Environment Regulation (DWER) for the FOGO trial. The negotiations with DWER will require the installation of additional items of equipment for odour management during the composting process.

This will require additional capital expenditure of $40,000 to be authorised over and above the authority granted on 5 December 2019. This amount includes a 20% contingency allowance.

The additional expenditure is for another fan unit, piping and controls to enable the MAFS to provide suction on freshly delivered FOGO waste and pump this odorous air into adjacent windrows which will then act as a biofilter reducing odour emissions. The normal system design is to blow air into the windrows of composting FOGO waste to promote the composting process.

STRATEGIC/POLICY IMPLICATIONS

Key Result Area 1 – Environmental Sustainability

1.1 To provide sustainable waste disposal operations

1.2 To improve regional waste management

Food Organics & Garden Organics (FOGO) Recovery Strategy

Item 11.3 continued

FINANCIAL IMPLICATIONS

An amount of $600,000 was provided for in the adopted 2019/2020 Annual Budget which covers the cost of this project.

SUSTAINABILITY IMPLICATIONS

The FOGO trial is part of the long-term strategy of the EMRC to be ready for the implementation of FOGO collections from the member Councils over the next few years.

MEMBER COUNCIL IMPLICATIONS

Member Council	Implication Details
Town of Bassendean City of Bayswater	The Town of Bassendean and the City of Bayswater are participating in the FOGO Trial
City of Belmont City of Kalamunda Shire of Mundaring City of Swan	The learnings and outcomes of the FOGO Trial will benefit all member Councils for the development of future permanent FOGO facility and the implementation of FOGO across the Region.

ATTACHMENT(S)

Nil

VOTING REQUIREMENT

Absolute Majority

The CPO provided a brief overview advising the meeting the reason for the additional expenditure is attributable to the additional licensing requirement for odour control.

RECOMMENDATION(S)

That Council, by absolute majority, authorise the expenditure of $40,000 (ex GST) from the Secondary Waste Reserve for the purchase of additional equipment for the Mobile Aerated Floor System (MAFS) to meet the regulatory requirements for odour management.

WAC RECOMMENDATION(S)

MOVED CR CONGERTON SECONDEDCR HAMILTON

That Council, by absolute majority, authorise the expenditure of $40,000 (ex GST) from the Secondary Waste Reserve for the purchase of additional equipment for the Mobile Aerated Floor System (MAFS) to meet the regulatory requirements for odour management.

CARRIED UNANIMOUSLY

11.4 RESOURCE RECOVERY FACILITY UPDATE

REFERENCE: D2020/00718

PURPOSE OF REPORT

The purpose of this report is to update Council on the status of Request for Tender (RFT) 2016-005 – Resource Recovery Facility (RRF) and to consider the Contractor's progress.

KEY POINTS AND RECOMMENDATION(S)

- During December 2019, participating member Councils conducted an independent legal review of the Financier Side Deed (FSD) and agreement was reached with HZI on the terms of this agreement.
- Participating member Councils signed the FSD on 12 December 2019.
- The Hitachi Zosen Inova (HZI) Consortium (the Contractor) achieved financial close on 23 December 2019.
- Notice to Proceed was given to the EPC Contractor on 2 January 2020.
- The plant is scheduled to be in service in December 2022 after a 35 month construction program.

Recommendation(s)

That:

1. The report be received.
2. The attachment to this report remains confidential and is certified by the Chairman and CEO.

SOURCE OF REPORT

Chief Project Officer

BACKGROUND

In a confidential report to the 7 September 2017 (Ref: D2017/12794) Special meeting of Council it was resolved:

"THAT:

1. *COUNCIL CONFIRMS THAT THE PREFERRED TENDERER FOR REQUEST FOR TENDER (RFT) 2016-005 – RESOURCE RECOVERY FACILITY (RRF) IS A CONSORTIUM COMPRISING HITACHI ZOSEN INOVA AG, NEW ENERGY CORPORATION PTY LTD AND TRIBE INFRASTRUCTURE DEVELOPMENT PTE LTD (HZI CONSORTIUM).*
2. *COUNCIL CONFIRMS THAT HZI CONSORTIUM INTENDS TO ESTABLISH AN ENERGY FROM WASTE FACILITY IN EAST ROCKINGHAM TO PROCESS MUNICIPAL WASTE FROM THE EMRC, MRC AND COMMERCIAL CUSTOMERS.*
3. *COUNCIL ADOPTS THE WASTE SUPPLY AGREEMENT BETWEEN EMRC AND HZI CONSORTIUM FORMING AN ATTACHMENT TO THIS REPORT.*
4. *THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER BE AUTHORISED TO SIGN THE WASTE SUPPLY AGREEMENT WITH HZI CONSORTIUM UNDER THE COMMON SEAL.*

Item 11.4 continued

5. *COUNCIL ADOPTS THE FINANCIER SIDE DEED WITH THE SECURITY TRUSTEE AND EACH OF THE EMRC MEMBER COUNCILS FORMING AN ATTACHMENT TO THIS REPORT.*
6. *THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER BE AUTHORISED TO SIGN THE FINANCIER SIDE DEED WITH THE SECURITY TRUSTEE UNDER THE COMMON SEAL.*
7. *COUNCIL ADOPTS THE PARTICIPANTS AGREEMENT FOR A WASTE SUPPLY AGREEMENT WITH EACH OF THE EMRC MEMBER COUNCILS.*
8. *THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER BE AUTHORISED TO SIGN THE PARTICIPANTS AGREEMENT FOR A WASTE SUPPLY AGREEMENT UNDER THE COMMON SEAL WITH EACH OF THE EMRC MEMBER COUNCILS.*
9. *THE CEO BE AUTHORISED IN CONSULTATION WITH THE CHAIRMAN AND ON LEGAL ADVICE TO MAKE MINOR CHANGES TO THE AGREEMENTS FORMING ATTACHMENTS TO THIS REPORT.*
10. *EMRC MEMBER COUNCILS BE REQUESTED TO ADOPT AND SIGN THE PARTICIPATION AGREEMENT FOR A WASTE SUPPLY AGREEMENT.*
11. *EMRC MEMBER COUNCILS BE REQUESTED TO ADOPT AND SIGN THE FINANCIER SIDE DEED.*
12. *THE REPORT AND ATTACHMENTS REMAIN CONFIDENTIAL AND BE CERTIFIED BY THE CHAIRMAN AND CEO*."

In a confidential report (D2018/02486) to the 22 March 2018 meeting of Council, it was resolved:

"*THAT COUNCIL NOTES THE ADVICE RECEIVED FROM THE TOWN OF BASSENDEAN AND THE CITY OF BAYSWATER REGARDING THEIR RESPECTIVE RESOLUTIONS ON THE RRF PROJECT."*

In a confidential report (D2019/01428) to the 21 February 2019 meeting of Council, it was resolved:

"*THAT:*

1. *COUNCIL NOTES THE CONTRACTOR'S ADVICE THAT FINANCIAL CLOSE FOR THE EAST ROCKINGHAM RESOURCE RECOVERY FACILITY (RRF) PROJECT MAY NOT BE REACHED BY 14 MARCH 2019 AS SPECIFIED IN THE WASTE SUPPLY AGREEMENT.*
2. *COUNCIL GRANTS AN EXTENSION OF TIME FOR THE CONTRACTOR TO ACHIEVE FINANCIAL CLOSE UNTIL 30 JUNE 2019.*
3. *COUNCIL AUTHORISES THE CEO TO GRANT FURTHER EXTENSIONS OF TIME TO THE CONTRACTOR FOR FINANCIAL CLOSE AS REQUIRED.*
4. *THE REPORT REMAINS CONFIDENTIAL AND BE CERTIFIED BY THE CHAIRMAN AND CEO*."

At the ordinary meeting of Council on 20 June 2019, the HZI Consortium provided a confidential briefing on the project status and the need for a further extension of time and responded to questions from councillors and officers.

In a confidential report to a Special Meeting of Council on 27 June 2019, it was resolved:

THAT:

1. *COUNCIL NOTES THE CONTRACTOR'S ADVICE THAT FINANCIAL CLOSE FOR THE EAST ROCKINGHAM RESOURCE RECOVERY FACILITY (RRF) PROJECT WILL NOT BE REACHED BY 30 JUNE 2019 AS SPECIFIED IN THE WASTE SUPPLY AGREEMENT.*
2. *COUNCIL ADOPTS OPTION 5 AS CONTAINED IN THE BODY OF THE REPORT AND ADVISES THE CONTRACTOR ACCORDINGLY.*
3. *THE REPORT REMAINS CONFIDENTIAL AND BE CERTIFIED BY THE CHAIRMAN AND CEO.*

Item 11.4 continued

REPORT

Member Councils completed their review of the Financier Side Deed (FSD) on 11 December 2019 and confirmed through their independent lawyers Hopgood Ganim that the deed was acceptable for execution.

As part of the preparations for the signing of the FSD, the EMRC reviewed the conditions for the extension of time granted on 27 June 2019 which were as follows:

1. *The Contractor is to report prior to the 30th of each month through in person presentations to council on the progress of activities towards financial close. In the event that a council meeting is not held, the Contractor is to provide an update presentation by email to the EMRC, to be distributed through the Chairman to Councillors.*
2. *The Contractor is to appoint an EPC contractor by 31 October 2019 and notify the EMRC with evidence immediately of the appointment.*
3. *The Contractor to receive expressions of interest and updated pricing from potential EPC contractors by 28 June 2019.*
4. *The Contractor issues invitation to negotiate to selected bidders by 5 July 2019.*
5. *The Contractor receives a fixed price EPC proposal by 31 August 2019.*
6. *The Contractor to commence initial site works by 1 November 2019 (Temporary services location, tree relocation, boundary temporary fencing and site office).*
7. *Financial close is to be completed and all supporting documents are to be received by the EMRC by 31 December 2019.*
8. *The Contractor is to advise in writing to the EMRC the completion status of each milestone as they are completed or on the due date of completion, or whichever comes first.*

The progress against these milestone conditions is as follows:

1. Condition 1 Monthly verbal and written reports have been provided since July 2019 and are ongoing.
2, Condition 2 Completed
3. Condition 3 Completed
4. Condition 4 Completed
5. Condition 5 Completed
6. Condition 6 Completed
7. Condition 7 Completed
8. Condition 8 Completed

The Project achieved Financial Close on the 23 December 2019. Funding has been secured from the flowing parties:

- Australian Renewable Energy Agency (ARENA)
- Clean Energy Finance Corporation (CEFC)
- Debt Funding provided by NAB, SMBC, KFW, ABN Amro, Mizuho
- Equity: John Laing, Masdar, HZI, Acciona

The FSD was signed by the respective participating member Council CEO's and Mayors/President and representatives of HZI on 12 December 2019 and by the Security Trustee on 23 December 2019.

HZI issued a Notice to Proceed (NTP) to the EPC Contractor Acciona/HZI on 2 January 2020.

At the time of drafting this report, the East Rockingham RRF Project Co will hold its first Board Meeting in Perth on the 12 February 2020.

Item 11.4 continued

The attachment to this report was prepared and provided by the Contractor. As the information in the attachment is commercial-in-confidence it is required to be kept confidential at the request of the Contractor.

STRATEGIC/POLICY IMPLICATIONS

Key Result Area 1 – Environmental Sustainability

1.3 To provide resource recovery and recycling solutions in partnership with member Councils

FINANCIAL IMPLICATIONS

The cost of implementing the tender is budgeted in the adopted 2019/2020 Annual Budget and subsequent years.

SUSTAINABILITY IMPLICATIONS

Resource recovery is recovery of resources from the waste stream.

MEMBER COUNCIL IMPLICATIONS

Member Council	Implication Details
Town of Bassendean	As reflected in the report.
City of Bayswater	
City of Belmont	
City of Kalamunda	
Shire of Mundaring	
City of Swan	

CONFIDENTIAL ATTACHMENT(S)

Report – East Rockingham Resource Recovery Facility - Project Update January 2020 (Ref: D2020/01701)

VOTING REQUIREMENT

Simple Majority

RECOMMENDATION(S)

That:

1. The report be received.
2. The attachment to this report remains confidential and is certified by the Chairman and CEO.

Item 11.4 continued

WAC RECOMMENDATION(S)

MOVED CR O'CONNOR SECONDED CR JEANS

That:

1. The report be received.
2. The attachment remains confidential and be certified by the Chairman and CEO.

CARRIED 11/1
Cr Johnson against

11.5 ITEMS CONTAINED IN THE INFORMATION BULLETIN

REFERENCE: D2020/00723

The following items are included in the Information Bulletin, which accompanies the Agenda.

1. WASTE SERVICES

1.1 COUNCIL TONNAGE COMPARISONS AS AT 31 DECEMBER 2019 (Ref: D2020/00722)

RECOMMENDATION

That the Waste Advisory Committee notes the items contained in the Information Bulletin accompanying the 13 February 2020 Waste Advisory Committee Agenda.

WAC RESOLUTION(S)

MOVED CR JOHNSON SECONDED CR HAMILTON

THAT THE WASTE ADVISORY COMMITTEE NOTES THE ITEMS CONTAINED IN THE INFORMATION BULLETIN ACCOMPANYING THE 13 FEBRUARY 2020 WASTE ADVISORY COMMITTEE AGENDA.

CARRIED UNANIMOUSLY

12 REPORTS OF DELEGATES

Nil

13 NEW BUSINESS OF AN URGENT NATURE APPROVED BY THE CHAIRMAN OR PRESIDING MEMBER OR BY DECISION OF MEETING

Nil

14 CONFIDENTIAL MATTERS FOR WHICH THE MEETING MAY BE CLOSED TO THE PUBLIC

Nil

15 FUTURE MEETINGS OF THE WASTE ADVISORY COMMITTEE

The next meeting of the Waste Advisory Committee will be held on ***Thursday, 5 March 2020 (if required)*** at the EMRC Administration Office, 1st Floor, 226 Great Eastern Highway, Belmont WA 6104 commencing at 5:00pm.

Future Meetings 2020

Thursday	5 March	(if required)	at	EMRC Administration Office
Thursday	2 April	(if required)	at	EMRC Administration Office
Thursday	7 May	(if required)	at	EMRC Administration Office
Thursday	4 June	(if required)	at	EMRC Administration Office
Thursday	9 July	(if required)	at	EMRC Administration Office
Thursday	6 August	(if required)	at	EMRC Administration Office
Thursday	3 September	(if required)	at	EMRC Administration Office
Thursday	8 October	(if required)	at	EMRC Administration Office
Thursday	19 November	(if required)	at	EMRC Administration Office

16 DECLARATION OF CLOSURE OF MEETING

There being no further business the meeting was closed at 7:05pm.