

The background of the slide features a large, light blue watermark of the City of Vancouver's coat of arms. The crest is a shield divided into four quadrants. The top-left quadrant shows a city skyline with a prominent tower. The top-right quadrant depicts a beaver. The bottom-left quadrant shows a three-masted sailing ship on the water. The bottom-right quadrant features an eagle with its wings spread, perched on a branch. Above the shield is a crown with four maple leaves. A banner at the bottom of the shield contains the motto "CITY OF VANCOUVER" in a stylized font.

# **AGENDA ITEM**

**6**

**Waste Services: Update**

**Title: Waste Services: Update**  
**Meeting: Executive Committee**  
**Date: 13 February 2018**  
**Submitted By: Director of Development Services**

**1. Purpose of Report**

- 1.1 The purpose of this report is to provide an update on the report presented to the Executive of 28 November 2017 and also an update in relation to the processing and disposal of the Council's waste and recycling material.

**2. Recommendation(s)**

**2.1 The Executive is asked to:-**

**(1) note the contents of the report and what other Councils are doing in relation to Charter compliant collection services**

**(2) determine the next steps as to whether to proceed with an additional bin or authorise the Director of Development Services to develop another Charter compliant collection service**

**3. Background**

- 3.1 On 28 November 2017, a report was presented to the Executive with information on the current and emerging issues affecting the processing of the material collected in the blue bin (which should contain paper, card, metals, plastics and cartons; also known as co-mingled dry recycle) as part of the Council's segregated kerbside collection service.
- 3.2 The report also outlined the next steps to provide a revised service which would meet the requirements of the Scottish Government's Household Recycling Charter (the Charter) to which the Council is a signatory.
- 3.3 The Executive welcomed the report which is based on the Charter Compliant PDP from 2015, and agreed to further investigate all options, awaiting feedback from other councils who are currently implementing charter compliant services and identify best fit for our residents, service and area.
- 3.4 Officers have reviewed the collection services provided by other Councils in Scotland and have summarised the current position in Appendix 1.
- 3.5 From Appendix 1 it is noted:
- Every Council provides at least one bin as part of the collection service.
  - 18 Councils provide three bins.
  - 10 Councils provide four bins.

- 9 Councils use at least one box-type container as part of the service.
- 17 Councils have a separate caddy for food waste collection.
- 13 Councils have mixed garden and food waste.
- Of the 32 Councils, 5 currently provide a charter compliant service.
- Of these 5, 2 Councils have 4 bins with 1 container, 1 Council has 4 bins, 1 Council has 3 bins with 3 containers and 1 Council has 2 bins and 3 containers.

3.6 Of the top ten performing Councils for recycling performance in 2016 (last validated figures), four of these Councils provide a Charter compliant collection service and each provide four bins. The top two highest performing Councils in terms of recycling rate both have four bins.

3.7 At this time, it is noted that 26 Councils have signed up to the Charter, indicating a commitment to align waste and recycling services to its requirements. In order for this Council to align its collection service to the Charter, the report to the Executive in November detailed the options available.

3.8 Following a successful funding application to Zero Waste Scotland, £1.6 million was granted in order to deliver a Charter compliant collections service with the introduction of an additional bin. This offer is at risk and may not be still available and, if a different option is selected, would be subject to a new application process.

#### 4. Waste and Recycling: Tonnages and Costs

4.1 The following table provides a summary of the material tonnages collected in from the kerbside and also the disposal from household waste recycling centres (HWRC) from 2013 to 2017.

Year	Containers / Tonnages of Household Material						
	Grey Caddy (Food Waste)	Blue Bin (CDR)	Black Box (Glass)	Green Bin (Residual)	Brown Bin (Garden Waste)	HWRC Residual	Bulky Material
2013	2,235	11,223	2,193	28,847	8,271	3,343	1,781
2014	3,198	12,164	2,333	26,546	9,297	4,476	1,796
2015	4,186	12,321	2,674	25,056	9,033	4,130	854
2016	4,606	11,772	2,823	24,248	7,225	7,524	636
2017	4,842	11,521	3,261	23,527	8,274	8,242	971

4.2 The table illustrates the following:

- The tonnage of food waste collected has increased, linked to increased participation and the change in collection frequency of the green bin.
- The blue bin material has remained relatively consistent.
- The tonnage of glass collected has increased.
- The tonnage of green bin material has decreased linked to the change in collection frequency and better use of recycling opportunities
- The tonnage of brown bin material has varied due to service changes.
- The tonnage of disposed material from HWRC has increased.
- The tonnage of bulky material has varied linked to service changes.

- 4.3 The following table provides a summary of the costs associated with the processing and disposal of the household material presented in the previous table.

Year	Processing / Disposal Cost						
	Grey Caddy (Food Waste)	Blue Bin (CDR)	Black Box (Glass)#	Green Bin (Residual)*	Brown Bin (Garden Waste)	HWRC Residual*	Bulky Material*
2013	£89,400	£56,115	-£32,895	£2,076,984	£206,775	£240,696	£128,232
2014	£127,920	£60,820	-£34,995	£2,123,680	£232,425	£358,080	£143,680
2015	£167,440	£369,630	-£40,110	£2,069,626	£225,825	£341,138	£70,540
2016	£184,240	£470,880	-£42,345	£2,046,531	£180,625	£635,026	£53,678
2017	£193,680	£518,445	-£48,915	£2,025,675	£206,850	£709,636	£83,603

# Glass provides an income to offset the cost of collection

\* For illustrative purposes. This is the landfill tax element only and excludes the gate fee

- 4.4 The table illustrates the following:

- The increase in collected food waste has increased processing cost however if this material had been within the green bin, the cost would have been higher.
- The change in the marketplace for the material in the blue bin has increased the cost of processing every year.
- The increase in collected glass has increased the income to enable this to offset its collection cost.
- Whilst the green bin tonnages have reduced by c5,000 tonnes since 2013, the landfill tax has increased which has limited the reduction on the disposal cost.
- The brown bin material is processed at our own facility and costs have remained in line with service changes and resulting tonnages
- The HWRC disposal costs have increased which is considered to be due to further use of the sites and changes in the marketplace for certain materials.
- The bulky material costs have remained in line with service changes and resulting tonnages.

- 4.5 The most significant change in the costs associated with processing and disposal are for the co-mingled dry recyclate collected in the blue bin and the increased tonnages at the HWRC.

## 5. Update on Co-mingled Dry Recyclate (Blue Bin)

- 5.1 Costs associated with sorting co-mingled dry recyclate have increased as a higher quality product continues to be demanded by the national and international marketplace. This was highlighted in reports to the Executive in June and November 2017.
- 5.2 The ban on imports by China of a number of waste and recycling materials commenced on 1 January 2018. The UK government and other stakeholders in the recycling industry continue to examine the impact of these measures; and, as part of the supply chain within the industry, the Council will be affected by the measures, as are others within the UK. It is noted that the Environmental Audit Committee for the UK Parliament is intending to conduct

a one-off evidence session into the impact of the recent Chinese ban on imported plastic and paper waste.

- 5.3 In December 2017, due to a significant change in the quality demanded by the marketplace for mixed paper linked to the import ban, officers were required to manage this change in the short term in order to move material. This has resulted in an increase in the cost of processing as was flagged in previous reports.
- 5.4 The cost of processing the co-mingled dry recyclate at our own facility has therefore increased being in the region of £70 per tonne.
- 5.5 In 2018/19 it is anticipated that the Council will spend c£820,000 more on processing blue bin material than in 2013 therefore the current budget is not sufficient in current market conditions to fully cover the processing costs.
- 5.6 The Council would be better placed if the input material was split into separate collections of paper/card and metals/plastics/cartons to maximise the quality of output material that can be achieved.
- 5.7 There still remains a challenging market for recyclate material. However by introducing these separate collections, it allows the Council to manage a more consistent and less varied material at its facility thereby reducing the budget pressures. This would also align the collection service to the requirements of the Charter to which the Council was the first signatory.
- 5.8 However, should the collection remain as co-mingled dry recyclate, the Council will continue to be affected by the difficulties in processing this assorted input material into a higher quality product for the demands of the current marketplace.
- 5.9 Additionally, recent analysis of the contents of the blue bin indicates that at least 20% of the material should not have been placed in the bin. Further details are contained in Appendix 2. This non-recyclable material affects the quality of other recyclable blue bin material and also increases the processing cost. The non-recyclable material or 'contamination' equates to approximately £300,000 being spent on landfill which could be reduced if the correct materials are placed in the bin.

## **6. Update on Household Waste Recycling Centres**

- 6.1 The Council operates two Household Waste Recycling Centres, one at Kinneil Kerse, Bo'ness and one at Roughmote, Bonnybridge.
- 6.2 The two sites have received the following number of vehicles in the last three years:
  - 2015; 183,811
  - 2016; 216,111
  - 2017; 223,135 (to be verified)
- 6.3 The percentage of car users over these years is approximately 88%, 88% and 84% respectively. The remainder is other vehicle users.

- 6.4 The disposal tonnages into the HWRCs have increased in recent years. This is considered to be due to further use of the sites and changes in the marketplace for certain materials.

## **7. Update on Residual Waste (Green Bin)**

- 7.1 In October 2016, the authority moved to a collection of the green bin to every four weeks. This is in line with the capacity requirements of the Charter. By moving to every four weeks, the reduction in capacity intended to improve the participation in the food waste collection, which was a major proportion of material left in the green bin.
- 7.2 As indicated in Section 4, the tonnages for the green bin have reduced by c5,000 tonnes since 2013. An increase in food waste collected of c2,500 tonnes has also occurred since this time.
- 7.3 However, the most recent waste analysis for the green bin indicates that the bin still contains a significant proportion of recyclable material. Around 33% of the green bin contents (by weight) is still food waste and 14% (by weight) is material that should go in the blue bin. This equates to approximately £990,000 being spent on landfill instead of other lower cost processing. Further details of the analysis are contained in Appendix 3.
- 7.4 The landfill ban on biodegradable municipal waste is being introduced by the Waste (Scotland) Regulations 2012 from 1<sup>st</sup> January 2021. This requires the authority to have a compliant facility to take residual material (green bin) to. At this time, the Council has a contract in place with Avondale Environmental Limited under Scotland Excel framework until September 2018.
- 7.5 Options in relation to disposal solution after this period are currently being considered in order to be compliant with the landfill ban. Options include, conducting our own procurement exercise, continued use of the Scotland Excel framework, use of the next Scotland Excel framework (understood to be due for release later this year) or use of the Scottish Materials Brokerage Service for residual waste. Further information will be provided to Members in relation to this contract.

## **8. Update on Food Waste and Glass**

- 8.1 As part of the introduction of the Waste (Scotland) Regulations 2012, local authorities are required to provide a collection for food waste. This was fully rolled out in this Council in 2013. As indicated in Section 4, the tonnages for food waste have increased by c2,500 tonnes. This can be linked to the reduced capacity of the green bin collection.
- 8.2 Kerbside collected glass has also shown an increase in tonnage since 2013.

## **9. Update on Brown Bin (Garden Waste)**

- 9.1 This is a non-statutory service and is being considered as part of the current budget setting process. Service changes reflect the tonnages that have been collected in recent years.

## **10. Update on Bulky Material (or Special Uplifts)**

- 10.1 This service is being considered as part of the current budget setting process. At present, there is one free special uplift per household with a cost of £15 per uplift thereafter. The changes to this service are reflected in the tonnages that have been collected in recent years.

## **11. Next Steps**

- 11.1 Until a charter compliant service is introduced, the Council will continue to incur higher costs than necessary for processing co-mingled dry recyclate at its Council operated facility.
- 11.2 Further additional budgetary and processing pressures will be experienced from the marketplace in the coming months due to the need for higher quality material required by the supply chain.
- 11.3 A charter compliant collection system was presented in paragraph 8.2 of the Executive report of 28 November 2017. At this time, funding was available to implement the new system, reduce the budgetary pressures and represented the most cost effective method of delivering a charter compliant service. This will, however, mean the introduction of a new 240 litre container to most of the area's households.
- 11.4 If the Zero Waste Scotland funding is not to be lost (see paragraph 3.7), Members will need to press ahead with the option identified in the report. If this is not favoured, there will be a need to pursue a different Charter compliant service.

## **12. Consultation**

No consultation has been undertaken for the purposes of this report.

## **13. Implications**

### **Financial**

- 13.1 None other than those already mentioned in the report.

### **Resources**

- 13.2 None other than those already mentioned in the report.

### **Legal**

- 13.3 None.

## **Risk**

- 13.4 Should there be further delay in the decision regarding an additional container or should the option change, the current funding allocation may not be available. This is due to more Councils seeking to become charter compliant and applying for limited funding.
- 13.5 A further delay in the introduction of a charter complaint collection service would also continue to overburden the budget for processing blue bin material.

## **Equalities**

- 13.6 None.

## **Sustainability/Environmental Impact**

- 13.7 None other than those already mentioned in the report.

## **14. Conclusions**

- 14.1 Until a charter compliant collection service is introduced, the Council will continue to incur higher costs than necessary for processing co-mingled dry recycle at its Council operated facility and continue not to meet its undertakings in respect of the Charter.

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Director of Development Services

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**Date: 31 January 2018**

## **APPENDICES**

Appendix 1 – Waste and Recycling Collection Services in Scotland

Appendix 2 – Blue Bin Composition Analysis

Appendix 3 – Green Bin Composition Analysis








































































### **List of Background Papers:**

**The following papers were relied on in the preparation of this report in terms of the Local Government (Scotland) Act 1973:**

- **Executive – 13 June, 28 November 2017**
- **Household Recycling Charter for Scotland**
- **Code of Practice – Household Recycling in Scotland**

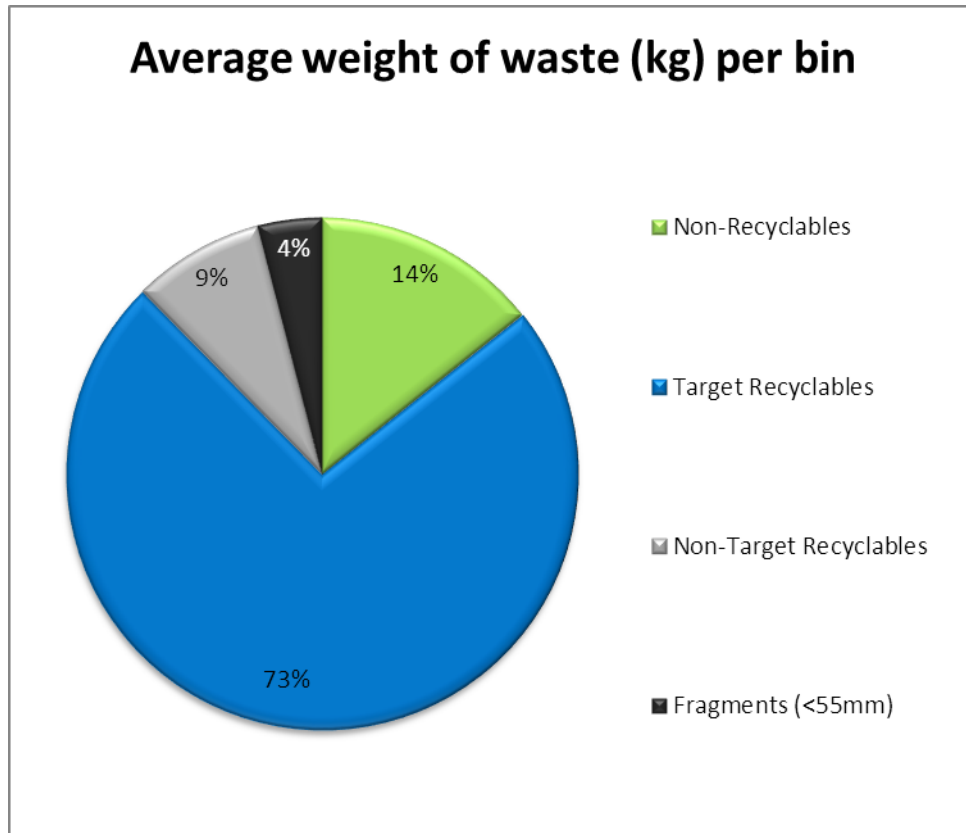


APPENDIX 1: Waste and Recycling Collection Services in Scotland

Council	Residual Container/Frequency	Recyclate Material	Recyclate Container/Frequency	Glass Separate at Kerbside?	Mixed Garden & Food?	Garden	Food	Is Collection Charter Compliant?	Glass Comments	General Comments
Aberdeen City	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	Fortnightly					
	 Bin Colour: Dark Blue	Paper, card, plastics, cans, glass						NO	Trade has separate glass	
Aberdeen-shire	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	No		Weekly			
	 Black bin	Paper, card, plastics, cans	 Black Bin with a blue lid					NO	Take glass to recycling points	No garden waste collection
Angus	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	No	Fortnightly	Weekly			
	 Purple Bin	Paper, card, plastics, cans, glass						NO		Glass in recycling bin. Planning change to Charter compliance 2019/20
Argyll & Bute	3 weekly	Mixed Dry Recyclate	Fortnightly	4 Weekly	No		Weekly			
	 3 weekly	Paper, card, plastics, cans		 140 Ltr.				NO		Recycling service varies due to the islands.
Clackmannanshire	3 weekly	Mixed Dry Recyclate	Fortnightly	Yes	No	3 Weekly	Weekly			Have not signed Charter yet.
	 3 weekly	Paper, card, plastics, cans						NO		
Dumfries & Galloway	Weekly	Mixed Dry Recyclate	Fortnightly	Yes	No	No	Weekly			
	 Weekly	Paper, card, plastics, cans, glass	 					NO		Not same service across all Council area (boxes not fully rolled out). Non-compliant capacity for residual.
Dundee City	Fortnightly	Mixed Dry Recyclate	Varies	No	No	Fortnightly	Weekly			
	 240 Ltr.	Paper, card in blue bin; plastics and metals in burgundy bin	  240 Ltr. 240 Ltr.			 240 Ltr.		IN PART	Bring sites. Currently small amount still getting glass kerbside collected but this will be removed by end of year	Anticipated compliant with Charter by Spring 2018
East Ayrshire	3 weekly	Mixed Dry Recyclate	Varies	Yes	No	4 Weekly	Weekly			
	 240 Ltr.	Paper and card in blue bin 4 weekly; plastics weekly, cans and glass fortnightly in boxes	  240 Ltr. 240 Ltr.			 240 Ltr.		YES		New recycling trolley service - launching in 2018. The recycling trolley will provide households with a weekly kerbside collection service for paper and card, plastics, cartons, cans and glass.
East Dunbartonshire	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	No	Fortnightly	Weekly			
	 240 Ltr.	Blue Bin - Paper and card Brown Bin - Metals, Cartons and Plastics, Glass	  240 Ltr. 240 Ltr.			 240 Ltr.		NO	Mixed with plastics and cans. Will be moving to glass only next year.	
East Lothian	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	No	Fortnightly	Weekly			
	 240 Ltr.	Paper and cardboard together in a blue box and glass, cans and plastics together in a green box.	  240 Ltr. 240 Ltr.			 240 Ltr.		YES		
East Renfrewshire	3 weekly	Mixed Dry Recyclate	3 weekly	No	Fortnightly					
	 240 Ltr.	Paper, card and cardboard lined cartons in the blue. Plastics, glass and cans collected in the green bin	  240 Ltr. 240 Ltr.		 240 Ltr.			NO		
Edinburgh City	Fortnightly	Mixed Dry Recyclate	Fortnightly	Yes	No	3 Weekly	Weekly			
	 240 Ltr.	Paper, card, plastics, cans	 240 Ltr.			 240 Ltr.		NO		
Eilean Siar	Fortnightly	Mixed Dry Recyclate	4 weekly	4 Weekly	Fortnightly					
	 240 Ltr.	Glass (green bin), paper, card, plastics, metals (blue bin)	 240 Ltr.	 240 Ltr.	 240 Ltr.			NO		
Falkirk	4 weekly	Mixed Dry Recyclate	Fortnightly	Yes	No	4 Weekly	Weekly			
	 240 Ltr.	Paper, card, plastics, cans	 240 Ltr.			 240 Ltr.		NO		
Fife	Fortnightly	Mixed Dry Recyclate	Fortnightly	No	Fortnightly					
	 140 Ltr.	Paper and card in the grey bin Plastics and metals in the green bin.	  240 Ltr. 240 Ltr.		 240 Ltr.			YES	Bring Sites	Trial Conducted for 3 Weekly and 4 Weekly Residual Collection
Glasgow City	Fortnightly	Mixed Dry Recyclate	Fortnightly	4 Weekly	Fortnightly					
	 240 Ltr.	Paper, card, plastics, cans	 240 Ltr.	 240 Ltr.	 240 Ltr.			NO	Bring sites	Not signed the Charter

Council	Residual Container/Frequency	Recyclate Material	Recyclate Container/Frequency	Glass Separate at Kerbside?	Mixed Garden & Food?	Garden	Food	Is Collection Charter Compliant?	Glass Comments	General Comments
Highland	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	No	Chargeable - Fortnightly	Weekly Inverness Only			
								NO	Bring sites/ Recycling Centres	
Inverclyde	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	Yes	No		Weekly			
								NO		
Midlothian	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	Yes	No	Fortnightly	Weekly			
								NO		
Moray	Fortnightly	Mixed Dry Recyclate Blue bin paper and card; purple bin cans and plastics; orange box glass	Fortnightly	Fortnightly	Fortnightly					
			 					YES		No plans to adopt Charter but this may change
North Ayrshire	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans, glass	Fortnightly	No	Fortnightly					
								NO		
North Lanarkshire	3 weekly	Mixed Dry Recyclate Blue bin for paper, card and cardboard Green-lid for plastics, glass, metals, cartons	3 weekly	No	Fortnightly					
			 					NO	200 Bring Sites	
Orkney Islands	Fortnightly	Mixed Dry Recyclate As per general comments	Fortnightly	Yes	No					
			 					IN PART	Glass is collected within a 140L bin	Internal caddys used within each 140L (one for paper/card and one for metals) No Food Waste Collection Noted (Likely Due to Rurality)
Perth & Kinross	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	Fortnightly					
	 Green bin with green lid		 Green bin with blue lid		 Green bin with brown lid			NO	Bring sites	2018/19 planning
Renfrew-shire	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans, glass	Fortnightly	No	Fortnightly					
								NO		
Scottish Borders	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	No		Weekly			
								NO	HWRC for Glass	
Shetland Islands	Weekly	Mixed Dry Recyclate Blue bin for paper and card Grey bin for plastics, metals and cartons	Weekly	No	No				Bring Sites	
			 					NO	Brign Sites	
South Ayrshire	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	No	Fortnightly	Weekly			
								NO	Bring sites: 140L glass only will start on 01/04/2019	Implementation of new service Sep 2018
South Lanarkshire	Fortnightly	Mixed Dry Recyclate Blue bin for paper and card Light grey bin - glass, cans and plastics	4 weekly	No	Fortnightly					
			 					NO		Estimate planning Charter compliance 2017/18
Stirling	Fortnightly	Mixed Dry Recyclate Blue Bin - Plastic cans and cartons Green bin paper and card	Fortnightly Blue/ 4 Weekly Green	4 Weekly	Fortnightly					
			 					YES		
West Dunbarton-shire	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	Fortnightly					
								NO	150 Bring sites	
West Lothian	Fortnightly	Mixed Dry Recyclate Paper, card, plastics, cans	Fortnightly	No	No	Fortnightly	Weekly			
								NO	180 bring sites	

**Appendix 2: Percentage of Contents of Blue Bin (based on average weight)**



### Appendix 3: Percentage of Contents of Green Bin (based on average weight)

