

Transport and Environment Committee

10am, Tuesday, 12 January 2016

Landfill and Recycling

Item number	8.5
Report number	
Executive/routine	
Wards	All

Executive summary

This report updates the Committee on performance in reducing the amount of non-recyclable waste sent to landfill and on increasing the amount of waste recycled, for the period April to October 2015.

Whilst total annual waste arisings increased in 2014/15 by 1.2%, monthly arisings to date (April to October 2015) are 1.9% lower than for the same period in 2014/15.

The amount of non-recyclable waste disposed of in the period April to October is down 5.8% on the same period in 2014/15. The projected tonnage of landfill to year end is 111,366, which is less than the Capital Coalition Pledge target of 118,000 tonnes.

The percentage of waste recycled in the period April to October 2015, has increased compared to the same period in 2014/15. The average recycling rate to date has increased by 2.4% to 44%. The forecast end of year recycling rate for 2015/16 is 42.1%.

Links

Coalition pledges	P44, P49, P50
Council outcomes	CO17, CO18, CO19
Single Outcome Agreement	SO4

Landfill and Recycling

Recommendations

- 1.1 It is recommended that Committee notes the contents of this report.

Background

Landfilled Waste and Recycling

- 2.1 Capital Coalition Pledge 49 outlines the Council's commitment towards increasing recycling levels across the city and reducing the proportion of waste going to landfill. This includes targets to reduce annual landfill tonnage to 118,000 tonnes and to increase the percentage of waste that is recycled to 50%.
- 2.2 Significant progress in implementing the changes required to deliver both service improvements and landfill savings have been made, including the implementation of managed weekly collections in September 2012, and the kerbside recycling redesign, which commenced in September 2014 in a five phase roll out.

Complaints

- 2.3 At the meeting of the Transport and Environment Committee on 27 August 2013, members requested that the performance reports also include updates on complaints made about waste services.
- 2.4 There are 242,878 residential dwellings in Edinburgh which receive multiple refuse and recycling collections. On average there are approximately 480,000 collections a week. Current complaints targets are based on the number of collections carried out, but are not adjusted for seasonal variation.
- 2.5 The figures also include complaints that may be made in error, for example where a resident has not presented their bin and misses the collection or presents their bin on the incorrect day, and then contacts the Council to report a missed collection.

Main report

Waste Arisings

- 3.1 Prior to 2014/15, the tonnage of total waste (waste arisings) had been falling, with consistent reductions in waste arisings experienced since 2006/7 (Figure 1).

Waste arisings increased in 2014/15 by 1.2%, however, it was initially forecast that the rising trend in total waste would continue in 2015/16 (Figure 1).

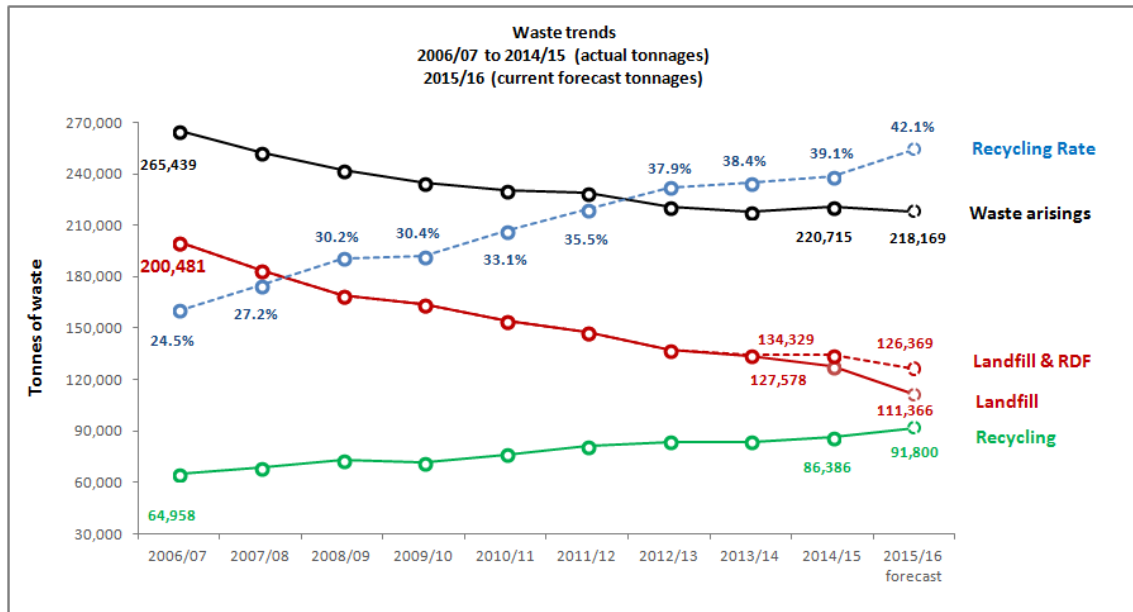


Figure 1 - waste trends 2006/7 to 2015/16 (forecast)

3.2 To date (April to October 2015), there has been a falling trend, with waste arisings 1.9% less than were recorded in the same period in 2014/15 (Figure 2).

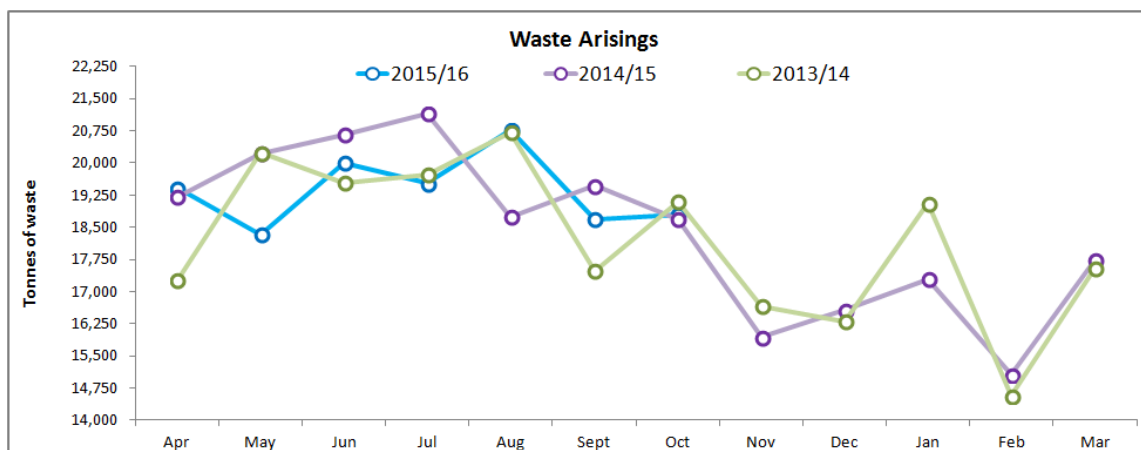


Figure 2 - waste arisings by month

3.3 Waste arisings are closely monitored on a monthly basis, and used to inform and adjust, if necessary, the end of year forecasts for non-recyclable waste and recycling tonnage.

3.4 At the meeting of the Transport & Environment Committee on 25 August 2015, members approved the decision to cease acceptance of commercial waste at Community Recycling Centres. This took effect on 23 October 2015. Data regarding any resulting reduction in landfill or recycling tonnage at the sites as a result of this change is not yet available. As such, the year end forecast figures contained in this report assume that no reduction in tonnage in financial year 2015/16 is observed at Community Recycling Centres.

Non-recyclable waste

- 3.5 Waste that cannot be recycled is disposed of as landfill or diverted as refuse derived fuel (RDF). Waste disposed of as RDF, whilst included in waste arising tonnages, is not counted as recycling or landfill. Some of the waste collected at Community Recycling Centres that cannot be recycled is currently disposed of as RDF.
- 3.6 It has been forecast that 111,366 tonnes of non-recyclable waste will be disposed of via landfill and 15,003 tonnes diverted as RDF in 2015/16, with the overall tonnage of non-recyclable waste forecast to be 126,369 tonnes (Table 1). This is 7,961 tonnes (5.8%) less than was disposed of in 2014/15 (Table 1). Capital Coalition Pledge 49 sets a target of reducing landfill tonnage to 118,000 tonnes which, due in part, to the diversion of some non recyclable waste as RDF, is forecast to be achieved in 2015/16.

	Non recyclable waste			Recycled waste		Waste Arisings
	Landfill tonnes	RDF tonnes	Total tonnes	Tonnes	Rate %	Tonnes
Actual 14/15	127,579	6,751	134,330	86,386	39.1%	220,716
Forecast 15/16	111,366	15,003	126,369	91,800	42.1%	218,169
Difference	-16,213	8,252	-7,961	5,414	3.0%	-2,547

Table 1 – non recyclable waste and recycling forecasts 2015/16

- 3.7 The City of Edinburgh and Midlothian council are working together to deliver a sustainable solution for the disposal of non-recyclable residual waste which will see the eradication of disposal via landfill by 2018. More information can be found at www.zerowastefuture.com.

Citywide recycling rate

- 3.8 The citywide recycling rate for 2015/16 is currently forecast to be 42.1%. This is less than the 44.1% forecast at the start of 2015/16, and less than Capital Coalition Pledge 49 target of a recycling rate of 50%. If achieved, it will be a 3% improvement on the rate of 39.1% recorded in 2014/15. It is forecast that 5,414 tonnes more waste will be recycled in 2015/16 than was recycled in 2014/15 (Table 1).
- 3.9 To achieve the Capital Coalition Pledge target of 50% recycling rate in 2015/16 would require 17,284 tonnes more waste to be recycled in addition to what is currently forecast.
- 3.10 Multiple recycling collections are provided in the city to cater for the differing needs of householders. A comparison of how each of the different recycling streams in the city contribute to the total citywide amount of recycling collected in both October 2015 and the year to date is detailed in Table 2.

Recycling Stream	October (2014)	October (2015)	Change	YTD Apr - Oct (2014)	YTD Apr - Oct (2015)	YTD Change	
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	% change
Community Recycling Centres	1,564	1,636	72	12,823	12,112	-711	-6%
Food Waste	478	784	306	3,255	4,802	1,547	48%
Garden Waste - kerbside	1,853	1,935	82	18,778	18,290	-488	-3%
Kerbside - Red/blue boxes	1,082	106	493	8,142	3,280	2,583	30%
- New Service bin/box	239	1,708		397	7,842		
Recycling Banks (supermarket)	574	505	-69	3,972	3,570	-402	-10%
Packaging bins - on street communal	297	290	-7	2,133	2,109	-24	-1%
Paper bins - on street communal	170	155	-15	1,091	1,151	60	5%
Other streams (includes Trade and special uplifts)	749	599	-150	5,019	4,555	-464	-9%
Mechanised street sweepings	339	200	-139	2,019	1,943	-76	-4%
Total Recycling	7,345	7,918	573	57,629	59,654	2,025	4%
Recycling rate	39.3%	42.1%		41.6%	44.0%		2.4%

Table 2 – recycling by waste collection stream

3.11 It can be seen in Table 2 that improvements have been achieved in both food recycling and kerbside recycling, with year to date increases in tonnage, compared to the same period in 2014/15 of 48% and 30% respectively. Other streams have experienced reductions, for example, the seasonality dependant garden waste brown bin collection has seen year to date tonnages fall by 3%. Similarly, the tonnage of recycled waste collected at the community recycling centres has reduced by 6% year to date. These reductions have offset some of the gains recorded in kerbside and food recycling. Notwithstanding this, a 2.4% improvement in the recycling rate was achieved in the period April to October compared to the same period in 2014/15 (Table 2).

3.12 A summary of the current and past recycling rate by month is detailed in Figure 3.

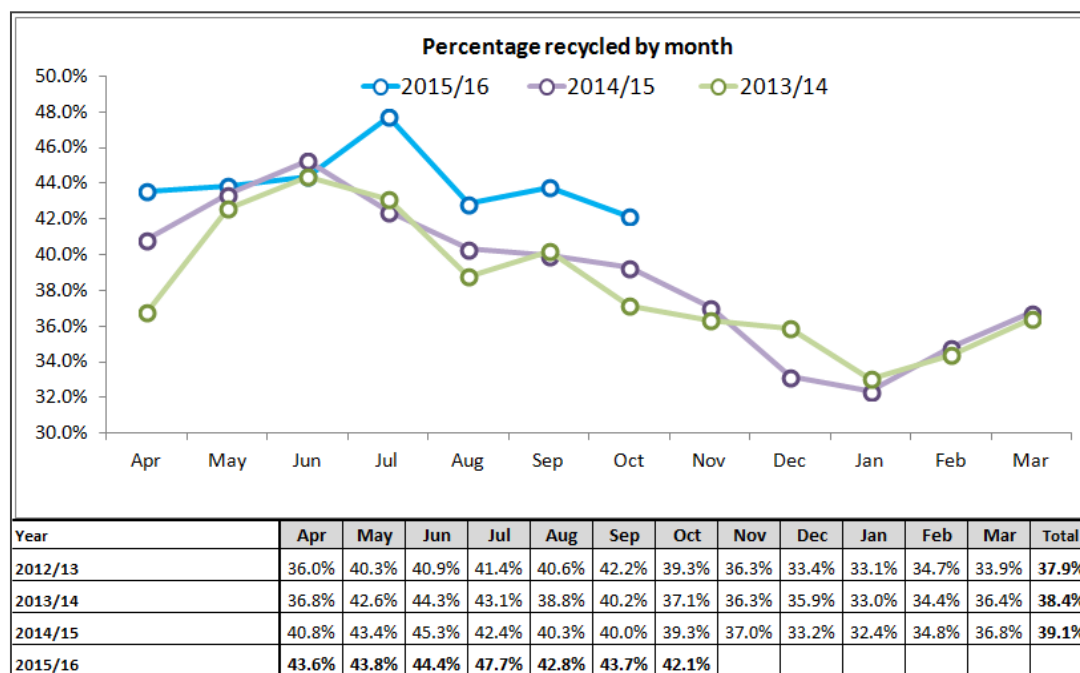


Figure 3 – recycling rate by month

Recycling - New kerbside bin/box recycling service

- 3.13 All five programmed phases to roll-out a new kerbside green bin and blue box recycling service (a replacement to the existing red and blue box service) to approximately 140,000 residents have been successfully delivered, with phase 5 rolled out as programmed in October 2015 to approximately 40,000 residents. An additional sixth phase to provide 8,000 rural and difficult to access households, which includes colony properties, with the new recycling service commenced in late November, at which time all households in the city with a wheeled bin landfill service will have access to the new recycling service.
- 3.14 This is a major change to recycling provision in the city, as the new green bin/blue box service simplifies the recycling process for kerbside residents and increases the range of materials collected. As detailed in Table 2, the new service has had a positive impact on the overall citywide recycling rate, with year to date kerbside tonnages increasing by 30% compared to last year. On average in October, 77% of eligible households presented their green recycling bin for collection.
- 3.15 A summary of the increasing trend in kerbside recycling at the end of October 2015 and the respective contribution of the existing box collection and new recycling collection are detailed in Figure 4.

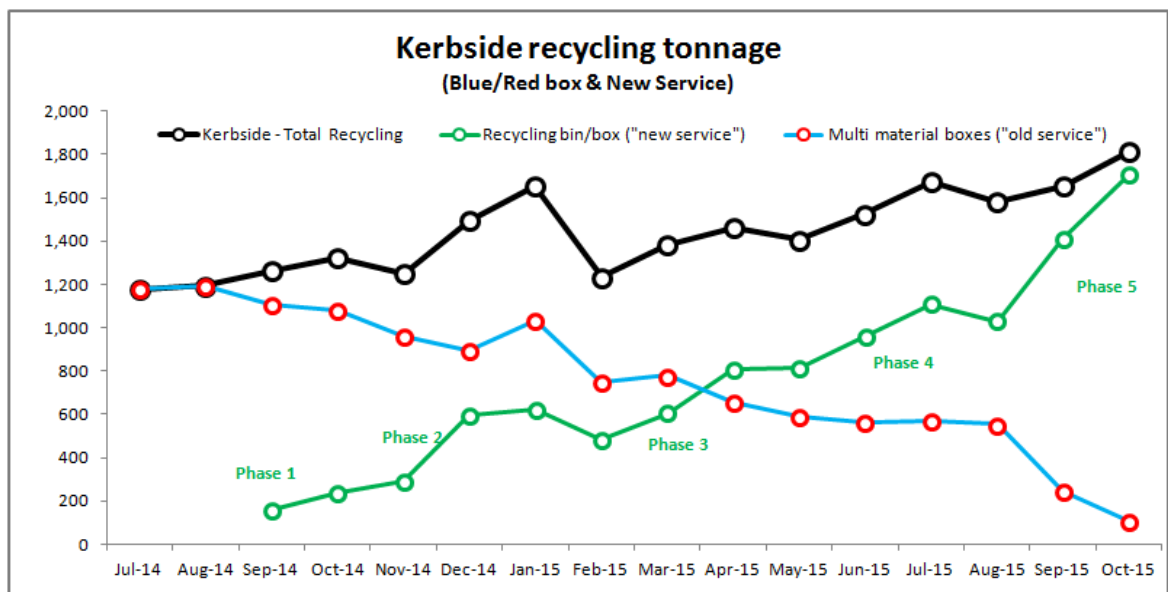


Figure 4 – kerbside recycling tonnages July 2014 to October 2015

- 3.16 In October 2015, the existing red and blue box service accounted for 6% of the collected kerbside tonnage. The 50,000 potential users of this service are located in flatted areas serviced by on-street communal landfill bins. Many of these properties have existing provision to recycle paper, mixed packaging and food using the on-street communal bin system. Waste Services is looking to enhance this service to achieve:

- An emphasis on balancing the bin capacity provided for recycling versus landfill;
- combined paper and packaging collections in a single stream, to mirror that used in new service kerbside collection areas;
- an increase in the number of points at which glass can be recycled on the kerbside; and
- the replacement of the existing red and blue box service to remove duplication of recycling services in those streets where communal recycling facilities already exist or can be provided.

3.17 The replacement of the red and blue box service for householders outwith the World Heritage Site is being undertaken in a two phase process. This commenced in October and was programmed for completion in December 2015. Where it does not exist already, on street provision will be provided for the recycling of dry mixed recyclate (DMR) and glass. The range of materials that can be recycled in communal DMR bins is increasing and will mirror that collected in the green recycling bin.

Enhancement to World Heritage Site recycling services

3.18 Householders in the World Heritage Site (modernising waste area), where the provision of additional on-street communal bins is not possible, received a new enhanced kerbside recycling collection commencing in late November 2015. Residents continue to use their existing red and blue boxes, but are now able to recycle the same mixture of materials that are accepted via the green bin/ blue box service, with the red box now mirroring the contents of the green bin. Residents present both boxes on the same day and receive a fortnightly collection.

Recycling – food waste

3.19 Large increases continue to be experienced in the tonnage of food waste collected, with 64% more food waste collected in October 2015 than was collected in October 2014. Residents have re-engaged with the service, with increases in the tonnage of kerbside waste recorded at each stage of the new recycling service bin/ box rollout (Figure 5).

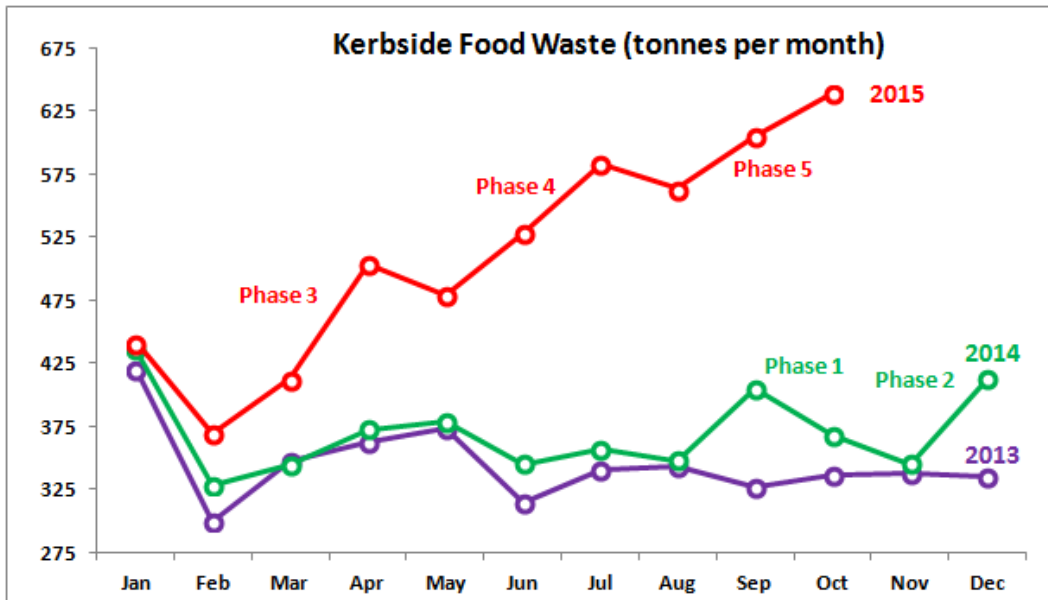


Figure 5 – kerbside food waste tonnages January 2013 to July 2015

Complaints

3.20 Weekly complaint numbers since 2013 are detailed in figure 6 below.

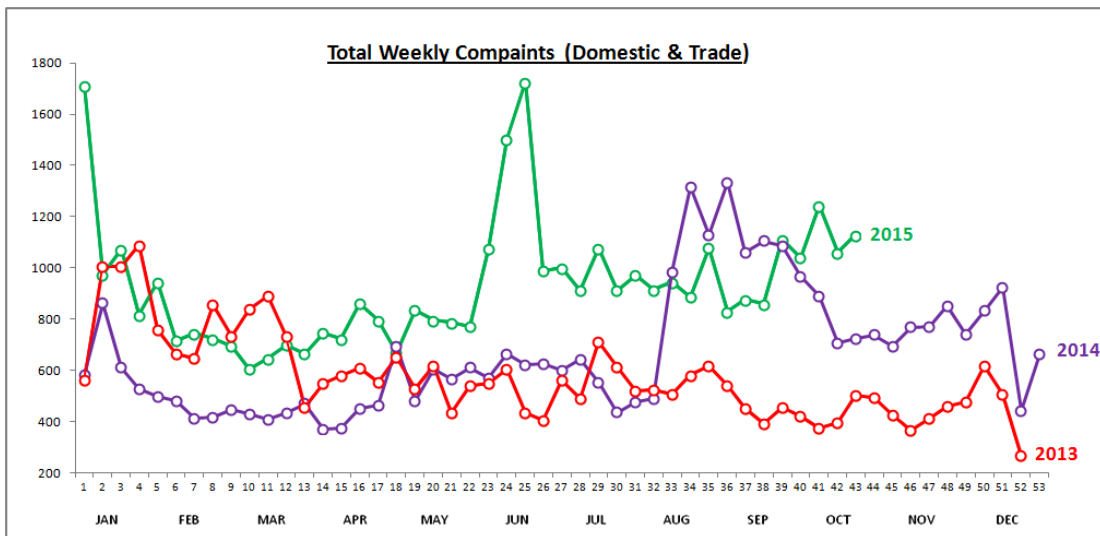


Figure 6 – weekly complaint number 2012-2015 by month

3.21 On average to date (April to October 2015), 962 complaints a week were received by Waste Services. With approximately 480,000 collections a week, this translates to 0.2% of collections resulting in a customer complaint. The majority of complaints received were regarding the non-collection of waste (96% of complaints).

3.22 A breakdown of complaints regarding non-collection of waste for the period April to October 2015 by collection stream is detailed in figure 7.

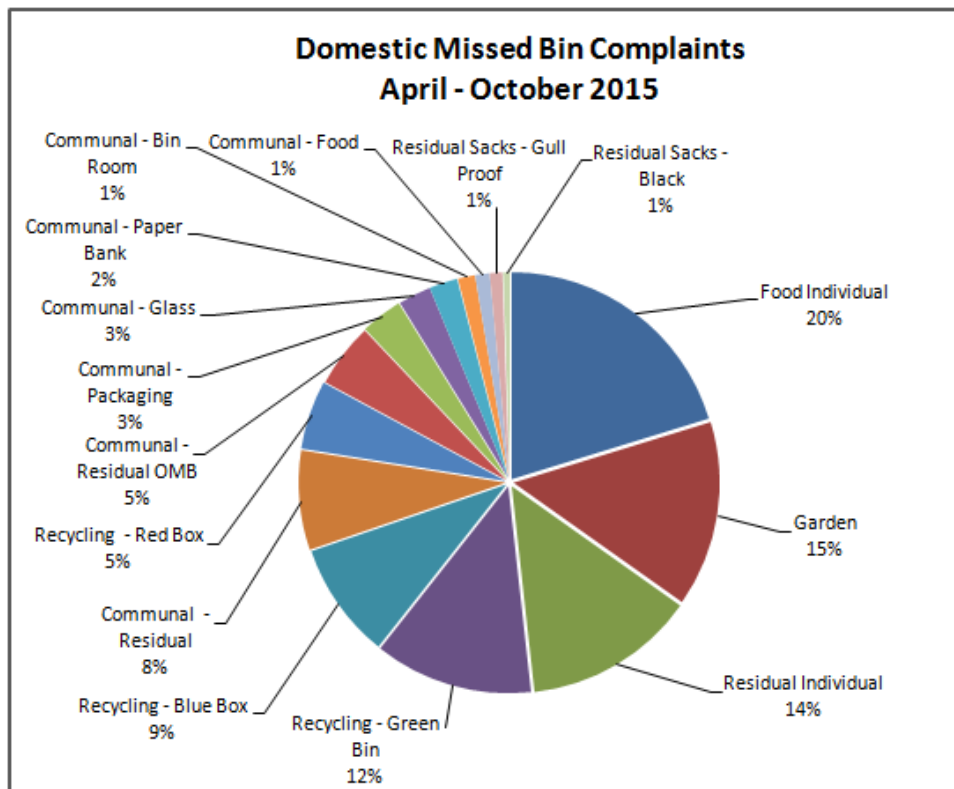


Figure 7 – complaint numbers by collection stream

- 3.23 The new bin and box recycling service is having a positive impact on recycling tonnage in the city, with year to date kerbside recycling tonnages increasing by 30% as outlined in section 3.14. The citywide service change for some 140,000 wheeled bin households has, however, increased the number of complaints received each month regarding kerbside recycling. In the period April to October 2015, 6,788 more missed collection complaints were recorded than in the same period in 2014. Of these, increases in complaints regarding recycling services accounted for 77% of the increase (5,252 additional complaints). It is anticipated that once fully rolled out, and when residents become fully accustomed to the new service, complaints regarding recycling will reduce.
- 3.24 As outlined in section 3.19, the service continues to experience significant increases in kerbside food waste, with tonnages 48% higher than the same period in 2014. Whilst this is positive for recycling tonnages, it places significant pressure on the largely fixed food collection routes, with vehicles requiring more trips to tip and, as a result, less time available for collections. Procurement of larger capacity food vehicles and the citywide redesign of new food routes to reflect increased participation is ongoing, with rollout of both anticipated in the winter 2015/16.
- 3.25 Waste Services does not currently differentiate between types of complaints, for example, between complaints from addresses that are known to have been missed for operational reasons such as delays due to vehicle breakdown or roadworks, and complaints where a bin has been missed in error.

- 3.26 Reporting missed collections via the council website, rather than phoning the contact centre, is becoming increasingly popular, with 1,312 complaints (30%) recorded by residents in this manner in October 2015. Steps to improve the accuracy and validity of complaints received via the website is ongoing. Currently complaints received via the web include when residents have logged a complaint multiple times, when scheduled collections are still ongoing, when it is not the collection day for the service and when bins have been tagged as contaminated.

Measures of success

- 4.1 Achievement of the Council's targets for increasing recycling and reducing landfill.

Financial impact

- 5.1 At the meeting of the Transport and Environment Committee on 25 August 2015, members requested that overall disposal and landfill expenditure be included in future reports.
- 5.2 Non recyclable material is currently disposed of as refuse derived fuel (RDF) and as landfill. In addition, there are charges associated with transporting landfill waste by rail from the transfer station at Powderhall to the landfill site at Dunbar. Monthly disposal expenditures for 2015/16, including a comparison with the same period in 2014/15, are detailed in Table 3 below.
- 5.3 Some of the waste collected at Community Recycling Centres that cannot be recycled is diverted as RDF. This waste in previous years would have been sent to landfill. The tonnage of waste disposed of this way increased as of Quarter 2, 2014/15. In Quarter 1 of 2015/16, as well as waste from Community Recycling Centres, a portion of non-recyclable waste collected via kerbside collections was diverted as RDF.
- 5.4 The decreasing trend in monthly disposal costs is reflective of the reduction in waste arisings and a corresponding decrease in non recyclable waste observed in Quarters 1 and 2 of 2015/16.

Disposal Costs	2014-15			2015-16		
	Quarter 1 (Apr- Jun)	Quarter 2 (Jul-Sep)	Total Q1 & Q2	Quarter 1 (Apr- Jun)	Quarter 2 (Jul-Sep)	Total Q1 & Q2
Refuse Derived Fuel (RDF)	£55,210	£168,940	£224,150	£682,390	£289,335	£971,725
Landfill	£3,575,719	£3,693,154	£7,268,872	£2,858,095	£3,275,643	£6,133,738
Freight / Haulage	£239,482	£274,379	£513,861	£204,138	£337,601	£541,739
Total monthly disposal costs	£3,870,411	£4,136,473	£8,006,883	£3,744,623	£3,902,579	£7,647,202

Table 3 -Disposal expenditure 2014/15 and 2015/16

Risk, policy, compliance and governance impact

- 6.1 The information contained in this report is a review of the current performance of landfill and recycling. This report does not impact on any existing policies and no risks have been identified pertaining to health and safety, governance or compliance. Further, there are no regulatory implications that require to be taken into account.

Equalities impact

- 7.1 The Council is meeting its public sector duty to advance equal opportunity for residents to recycle by using a range of communications methods. Written information is available through leaflets and electronic media. Road shows and door knocking visits provide face to face contact with residents and visits from recycling advisers are available on request. All material can be translated on request. Consultation was carried out via demographically representative focus groups and via on line and written questionnaires to ensure that a full and representative range of views were obtained. Assistance with the presentation of recycling and waste containers is available for those who require it to ensure everyone has access to these services. The above has ensured that information is available for all within the equality and rights framework.

Sustainability impact

- 8.1 Increased recycling will help to divert waste from landfill and support the achievement of greenhouse gas reduction targets, and reductions in local environmental impact.

Consultation and engagement

- 9.1 The Community Engagement team has supported the implementation of all phases of the new service, and is now focusing on supporting phases 5 and 6. The final phase, phase 6, will see the new service rolled out to difficult to reach properties, for example colonies. It will also include improvements to the existing red and blue box service for city centre residents and the withdrawal of the box service in areas where residents have access to on street recycling services.
- 9.2 For all phases the Community Engagement team has delivered comprehensive targeted communications to residents, briefings for key stakeholders and community groups, attended events, and answered an increased volume of customer enquiries relating to the new service.
- 9.3 The Community Engagement team is further supporting each phase of the rollout with Recycling Advisor visits. The Recycling Advisors have made over 1700 visits to residents in Phase 5 to offer advice and support on how to use the

new service. This is expected to continue until the service has been fully rolled out.

Background reading/external references

The City of Edinburgh and Midlothian council are working together to deliver a sustainable solution for the disposal of non-recyclable residual waste which will see the eradication of disposal via landfill by 2018. More information can be found at www.zerowastefuture.com.

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Links

Coalition pledges	P44 – Prioritise keeping our streets clean and attractive P49 – Continue to increase recycling levels across the city and reducing the proportion of waste going to landfill P50 – Meet greenhouse gas targets, including national target of 42% by 2020
Council outcomes	CO17 – Clean – Edinburgh’s streets and open spaces are free of litter and graffiti CO18 – Green – We reduce the local environmental impact of our consumption and production CO19 – Attractive Places and Well maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm
Single Outcome Agreement	SO4 – Edinburgh’s communities are safer and have improved physical and social fabric
Appendices	N/A