# **Transport and Environment Committee**

## 10am, Tuesday, 15 March 2016

## **Landfill and Recycling**

Item number 8.3

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 December 2015.

Whilst total annual waste arisings increased in 2014/15 by 1.2%, monthly arisings to date (April to December 2015) are 2% lower than for the same period in 2014/15.

The amount of non recyclable waste disposed of in the period April to December is down 6.4% on the same period in 2014/15. The projected tonnage of landfill to year end is 111,751, which is less than the Capital Coalition Pledge target of 118,000 tonnes.

The percentage of waste recycled in the period April to December 2015 has increased compared to the same period in 2014/15, with the average recycling rate to date increasing by 2.8% to 43%. 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 <u>SO4</u>



# Report

## **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 and is now fully rolled out to all eligible households.

#### **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 complaint 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.

<sup>\*</sup> source: Corporate Address Gazetteer

#### **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).

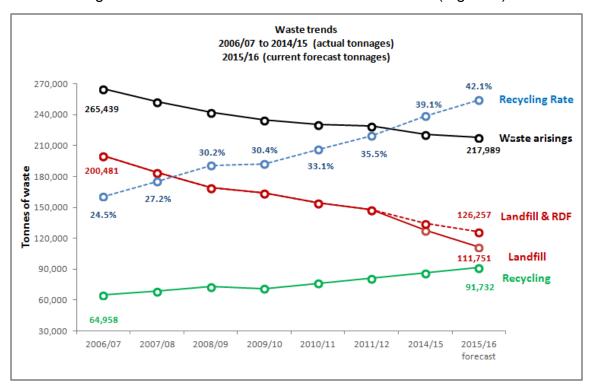


Figure 1 - waste trends 2006/7 to 2015/16 (forecast)

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

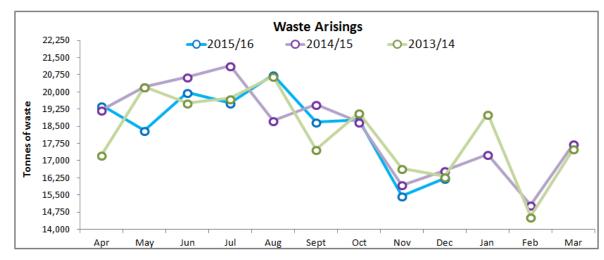


Figure 2 - waste arisings by month

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.

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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. In the two month period November to December 2015, overall waste arisings at Community Recycling Centres have reduced by approximately 1,300 tonnes.

#### 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 111,751 tonnes of non recyclable waste will be disposed of via landfill and 14,506 tonnes diverted as RDF in 2015/16, with the overall tonnage of non recyclable waste forecast to be 126,257 tonnes (Table 1). If achieved, this is 8,073 tonnes (6%) 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 to the diversion of some non recyclable waste as RDF, is forecast to be achieved in 2015/16.

	Non recyclable waste			Recycle	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	111,751	14,506	126,257	91,732	42.1%	217,989
Difference	-15,828	7,755	-8,073	5,346	3.0%	-2,727

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 <a href="https://www.zerowastefuture.com">www.zerowastefuture.com</a>.

#### Citywide recycling rate

3.8 The citywide recycling rate for 2015/16 is currently forecast to be 42.1%. This is less than the 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 5,346 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 17,263 tonnes more waste to be diverted from landfill and recycled in addition to what is currently forecast. This would require the current tonnage of recyclable material to increase by 19%.
- 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 December 2015 and the year to date is detailed in Table 2. A breakdown of the recycling by collection stream is detailed in Figure 3.

	December (2014)	December (2015)	Change	YTD Apr - Dec (2014)	YTD Apr - Dec (2015)	YTD C	Change
Recycling Stream	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	% change
Community Recycling Centres	1,286	1,057	-229	18,088	16,945	-1,143	-6%
Food Waste	537	803	266	4,248	6,348	2,100	49%
Garden Waste - kerbside	593	730	136	20,211	20,007	-204	-1%
Kerbside Recycling - green bin & boxes	1,495	1,988	493	11,285	14,835	3,550	31%
Recycling Banks (glass,paper,textiles,books)	780	480	-300	6,468	5,836	-631	-10%
Packaging bins - on street communal	308	344	37	2,765	2,756	-9	-0.3%
Other streams	256	248	-8	3,381	2,857	-524	-16%
Mechanised street sweepings	239	219	-20	2,582	2,498	-84	-3%
Total Recycling	5,494	5,868	375	69,027	72,083	3,056	4%
Recycling rate	33.2%	36.0%	2.8%	40.2%	43.0%		2.8%

Table 2 – recycling by waste collection stream

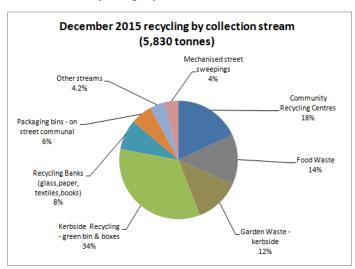


Figure 3 – total recycling by waste collection stream December 2015

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 49% and 31% respectively. Other streams have experienced reductions, for example, 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 2.8% improvement in the recycling rate was achieved in the period April to December 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 4.

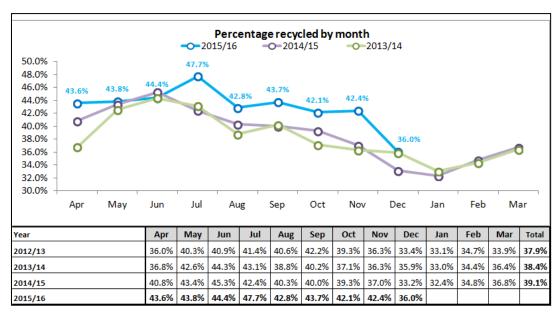


Figure 4 – recycling rate by month

### Recycling - New kerbside bin/box recycling service

- 3.13 All phases of rolling 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 has been successfully delivered, with the final phase to 8,000 rural and difficult to access households (which included colony properties) rolled out in December 2015. All eligible households in the city with a wheeled bin landfill service now 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 31% compared to last year. On average 77% of eligible households are presenting their green recycling bin for collection.
- 3.15 In November 2015, the existing multi material box service accounted for 4% of the recycling collected at the kerbside and highlighted that the service was being used by a relatively small number of households. The 50,000 potential users (21% of total households) of the box service are located in flatted properties primarily serviced by on street communal landfill bins. The fact that these relatively large numbers of potential service users were generating a small amount of recycling meant that continuing the provision of the box service was not financially viable. Many of these properties have existing provision to recycle paper, mixed packaging and food using the on street communal bin system. Where properties do not have adequate on street bin provision, these bins are being delivered to provide on street provision 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 mirrors that collected in the green recycling bin.
- 3.16 Replacement of the red and blue box service for householders out with the World Heritage Site is being undertaken in a two phase process which commenced in October.
- 3.17 In addition, following a tenemental pilot carried out in 2015, Waste Services are looking to further enhance the on street recycling service to achieve:
  - an emphasis on balancing the bin capacity provided for recycling versus landfill; and
  - an increase in the number of points at which glass can be recycled on the kerbside.

### **Enhancement to World Heritage Site recycling services**

3.18 Householders in the World Heritage Site (modernising waste area) now receive a new enhanced kerbside recycling collection which commenced 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 50% more food waste collected in December 2015 than was collected in December 2014. Residents have re-engaged with the service, with increases in the tonnage of kerbside waste recorded at each phase of the new recycling service bin/ box rollout (Figure 5).

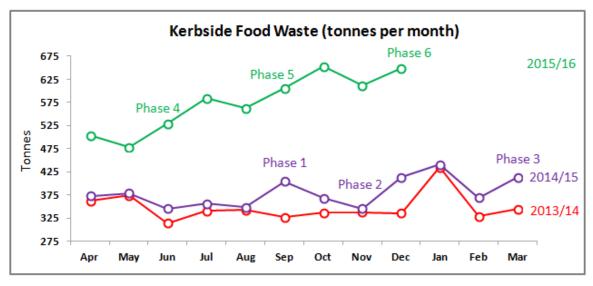


Figure 5 – kerbside food waste tonnages, April 2013 to December 2015

### **Complaints**

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

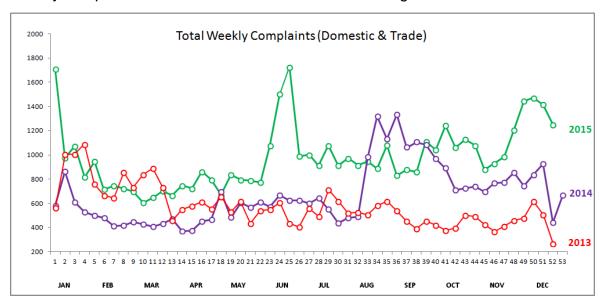


Figure 6 – weekly complaint number 2012-2015 by month

- 3.21 On average to date (April to December), 1,012 complaints a week were received by Waste Services. With approximately 480,000 collections a week, this translates to 0.21% 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 December 2015 by collection stream is detailed in figure 7.

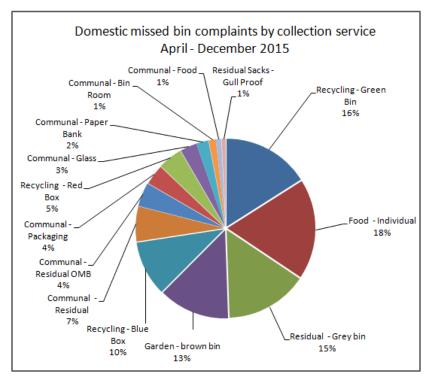


Figure 7 – complaint breakdown by collection stream

- 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 31% 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 December 2015, 10,802 more missed collection complaints were recorded than in the same period in 2014. Of these, increases in complaints regarding recycling services accounted for 76% of the increase (8,233 additional complaints).
- 3.24 As outlined in section 3.19, the service continues to experience significant increases in kerbside food waste, with tonnages in the period April to December 49% higher than the same period in 2014. Whilst this is positive for recycling, 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 later part of 2015/16.
- 3.25 Reporting missed collections via the Council website, rather than phoning the contact centre, is becoming increasingly popular, with 1,928 complaints (32%) recorded by residents in this manner in December 2015. Steps to improve the accuracy and validity of complaints received via the website is ongoing, as currently complaints received via the web include residents who 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 & 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 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. Quarterly 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 decreased in Quarter 3, 2014/15.
- 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 to 3 of 2015/16.

	2014-15				2015-16			
Disposal Costs	Quarter 1 (Apr- Jun)	Quarter 2 (Jul-Sep)	Quarter 3 (Oct-Dec)		Quarter 1 (Apr- Jun)	Quarter 2 (Jul-Sep)	Quarter 3 (Oct-Dec)	
Refuse Derived Fuel (RDF)	£55,210	£168,940	£186,679		£682,390	£289,335	£252,878	
Landfill	£3,575,719	£3,693,154	£3,170,648		£2,858,095	£3,275,643	£3,044,740	
Freight / Haulage	£239,482	£274,379	£260,465		£204,138	£337,601	£346,365	
Total quarterly disposal costs	£3,870,411	£4,136,473	£3,617,793		£3,744,623	£3,902,579	£3,643,983	

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 communication methods. Written information is available through leaflets and electronic media. Road shows and door knocking 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 have supported the implementation of all phases of the new bin/box recycling service. Communication materials were sent to all residents who were receiving changes to their recycling service in the final phase of the project.
- 9.2 The team have also worked with the Waste Strategy team to resolve and answer customer enquiries while residents adjust to the changes in service. Recycling Advisors have been assisting the team and have carried out visits to offer help and advice to residents.

## **Background reading/external references**

10.1 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		
	<b>P49</b> – Continue to increase recycling levels across the city and reducing the proportion of waste going to landfill		
	<b>P50</b> – 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 Appendices	SO4 – Edinburgh's communities are safer and have improved physical and social fabric N/A