# **Transport and Environment Committee**

# 30 August 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 waste sent to landfill and on increasing the amount of waste recycled for the period April - June 2016.

The total arisings of waste in this period were 57,478 tonnes, a decrease of 0.5% on the same quarter in the previous year.

The amount of waste disposed of to landfill or refuse derived fuel (RDF) in the reporting period (31,393 tonnes) is down 3% versus the equivalent period last year. The amount of waste recycled in this reporting period (26,085 tonnes) has increased compared to the same period in 2015/16. The year to date recycling rate increased to 45.4%, an increase of 1.4% on the same period last year.

The forecast end of year recycling rate for 2016/17 is 44.2%, 2.2% greater than the 42% achieved in 2015/16.

#### Links

Coalition Pledges <u>P44, P49,</u> <u>P50</u> Council Priorities <u>C017,</u> <u>C018, C019</u> Single Outcome Agreement <u>S04</u>



# Landfill and Recycling

### 1. **Recommendations**

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

## 2. Background

#### Landfill and recycling

- 2.1 At the meeting of the Transport and Environment Committee on 15 January 2013, members requested regular updates on performance in reducing the amount of waste sent to landfill and increasing recycling.
- 2.2 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 the annual landfill tonnage to 118,000 tonnes and to increase the percentage of waste that is recycled to 50%.
- 2.3 Significant progress in implementing the changes required to deliver service improvements and landfill savings have been made since the initial introduction of managed weekly collections in September 2012, and the phased introduction of an enhanced kerbside recycling service, commencing in September 2014 (now completed).

#### Complaints

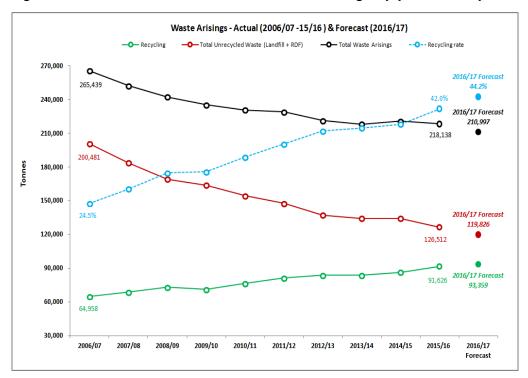
- 2.4 At the meeting of the Transport and Environment Committee on 27 August 2013, members requested that these performance reports also provide an update on complaints made regarding waste services.
- 2.5 There are 243,000\* residential dwellings in Edinburgh which receive multiple refuse and recycling 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.
- 2.6 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.

\* source: Corporate Address Gazetteer

# 3. Main report

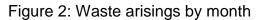
#### Waste arisings

- 3.1 Year to date waste arisings are 57,478 tonnes, 0.5% less than in the same period last year.
- 3.2 It is forecast that the total arisings for 2016/17 will be 210, 977 tonnes, a reduction from 218,138 tonnes in 2015/16.
- 3.3 Figure 1: Actual and forecast annual waste arisings by year, and by outlet



#### Table 1: Annual waste arisings by month

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	YTD
2013/14	17,250	20,231	19,529	19,726	20,699	17,490	19,102	16,658	16,306	19,053	14,563	17,523	218,131	57,010
2014/15	19,208	20,224	20,659	21,144	18,746	19,466	18,692	15,936	16,563	17,285	15,062	17,728	220,715	60,091
2015/16	19,424	18,333	20,003	19,533	20,759	18,694	18,796	15,489	16,372	16,658	16,008	18,068	218,138	57,760
2016/17	17,691	20,467	19,321											57,478
% difference previous year	-8.9%	11.6%	-3.4%											-0.5%





#### Unrecycled waste

- 3.4 Waste which cannot be recycled is disposed of as landfill waste or diverted as refuse derived fuel (RDF). Any waste treated as RDF will be included in waste arisings data, and is counted as having been disposed rather than recycled, but does not attract Landfill Tax.
- 3.5 At present due to market conditions the majority of waste which is not recycled will be sent to landfill. It is currently assumed that this will continue throughout the year.
- 3.6 We forecast that 119, 826 tonnes of unrecycled waste will be disposed of via landfill in 2016/17. This exceeds Capital Coalition Pledge 49 which sets out a target of reducing landfill tonnage to 118,000 tonnes.
- 3.7 In the year to date, 31,393 tonnes of unrecycled waste has been collected. This is 3% less than the same period in the previous year but 3.4% higher than forecast. April and June tonnages were below forecast with May exceeding forecast (see Table 2). Contributing factors to the higher than forecasted unrecycled tonnages are being investigated and include increased contamination from kerbside recycling and a drop in mechanised street sweepings tonnages being processed at Levenseat Recycling.

UNRECYCLED - LANDFILL & REFUSE DERIVED FUEL					
Year	Apr	May	Jun	YTD	
Unrecycled 2014/15	11,365	11,453	11,303	34,121	
Unrecycled 2015/16	10,956	10,293	11,116	32,366	
Unrecycled 2016/17	9,800	11,502	10,092	31,393	
% difference previous year	-10.6%	11.7%	-9.2%	-3.0%	
Forecast	10,114	10,115	10,142	30,371	
Diff btwn actual and Forecast (tonnes)	-314	1,387	-51	1,022	
% diff btwn actual & Forecast	-3.1%	13.7%	-0.5%	3.4%	

Table 2: Unrecycled waste: actual, forecast, % difference.

#### **Recyclable waste**

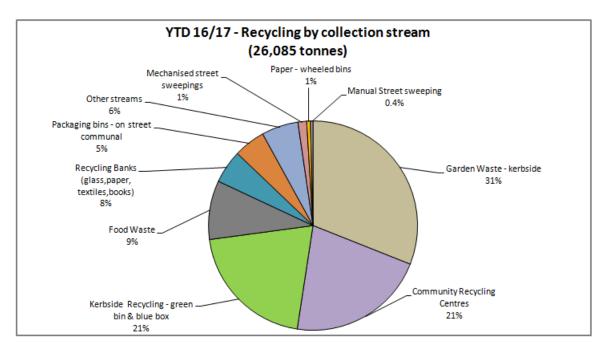
- 3.8 The citywide recycling rate for 2016/17 is currently forecast to be 44.2%, against the Capital Coalition Pledge 49 target of 50%. This will be a 2.2% improvement on the 42% achieved in 2015/16.
- 3.9 Table 3 shows the year to date recycling rate is 45.4%, an increase of 1.4% on the same period last year.

Year	Apr	May	Jun	Total	YTD
2013/14	36.8%	42.6%	44.3%	38.4%	
2014/15	40.8%	43.4%	45.3%	39.1%	
2015/16	43.6%	43.9%	44.4%	42.0%	44.0%
2016/17	44.6%	43.8%	47.8%		45.4%
% points difference on previous year	1.0%	-0.0%	3.3%		1.4%

## 3.10 A breakdown of recycling tonnages by collection scheme is provided below:

	Recycling	g Stream Sur	nmary				
	Jun-15	Jun-16	Change	YTD (2015/16)	YTD (2016/17)	YTD C	hange
Recycling Stream	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	% change
Garden Waste - kerbside	3,223	3,358	134	8,027	8,088	60	1%
Community Recycling Centres	1,764	1,889	125	5,910	5,587	-322	-5%
Kerbside Recycling - green bin & blue box	1,525	1,772	246	4,396	5,333	938	21%
Food Waste	652	847	195	1,894	2,373	478	25%
Recycling Banks (glass,paper,textiles,books)	531	416	-115	1,569	1,341	-228	-15%
Packaging bins - on street communal	299	388	89	894	1,275	381	43%
Other streams	294	340	46	967	1,483	515	53%
Mechanised street sweepings	343	139	-204	1,018	353	-666	-65%
Paper - wheeled bins	174	50	-124	507	148	-360	-71%
Manual Street sweeping	80	30	-50	210	105	-105	-50%
Total Recycling	8,887	9,229	342	25,394	26,085	691	2.7%
Recycling rate	44.4%	47.8%	3.3%	44.0%	45.4%	1.4%	3.2%

Table 4: Recycling stream summary versus previous year



#### Figure 3: Recycling by service

3.11 Table 4 shows that improvements in recycling performance have been seen both in the kerbside recycling service, and the kerbside and communal food recycling service with year to date increases in tonnage compared to the same period last year of 21% and 25% respectively.

- 3.12 Other schemes have experienced reductions in recycling performance, for example mechanised street sweepings have reduced the amount of materials recycled by 65%. The Council's waste contractor was unable to remove the waste from Powderhall at the agreed frequency which led to a build up the materials at the facility. To ensure the Council remained compliant to the site's conditions of license a decision was made for the Council to arrange haulage and dispose of the waste via landfill. The Council has met with the Contractor to discuss the situation and all efforts will be made to avoid this situation occurring again.
- 3.13 A summary of the current and past recycling rates by month is detailed below:

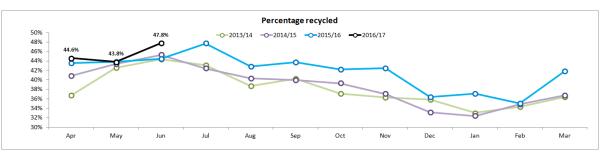


Figure 4: Monthly recycling performance by year

3.14 Performance by month can vary up or down each year due to a range of factors (e.g. the impact of weather on the garden waste service which is one of the biggest single streams). Nevertheless the first quarter of the year has seen an increase in recycling rates compared to the same period in previous years.

### **Recycling: Food Waste**

- 3.15 Large increases continue in the tonnage of food waste collected for recycling, with an increase of 25% in this quarter compared to the the previous year. Year to date, 2,373 tonnes of food waste has been collected, with the highest monthly tonnage to date since the service commenced of 847 tonnes being recorded in June 2016.
- 3.16 Food is now being reprocessed at the new anaerobic digestion facility at Millerhill. Steps are being taken to allow the separate reporting of kerbside and communal bin materials. In this period a combined figure only has been provided.

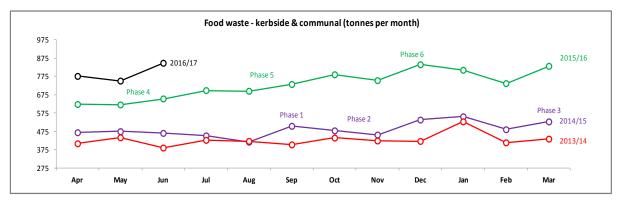


Figure 5: Combined food recycling tonnages by month

### **Kerbside Recycling**

3.17 Similarly the new kerbside recycling service demonstrates an upward trend overall. This service is now fully rolled out and bedded in across the city.

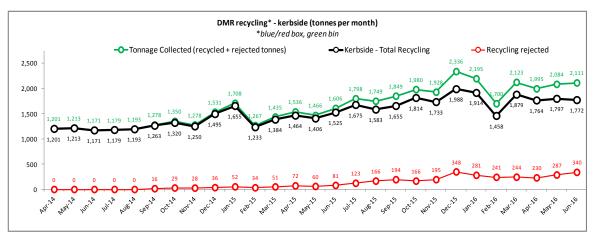
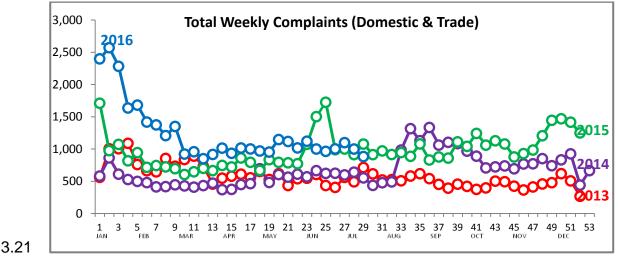


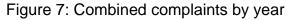
Figure 6: Kerbside green bin and blue box recycling tonnages by month

- 3.18 The amount of materials rejected has also increased. The reasons for this need to be explored further. It may reflect improvements in the sorting processes to improve the quality of collected materials, or a reflection of processors becoming stricter about the materials they will accept in response to market conditions, or it could be householders presenting more contaminated recycling. It should be noted that a new contract will be let this year for the sorting and recycling of these materials.
- 3.19 Following the roll out of this service to mainly low density households (i.e. mainly to detached and semi-detached housing stock) a priority for the year ahead will be enhancements to the communal bin services provided to tenemental and flatted properties, and in particular on street recycling.

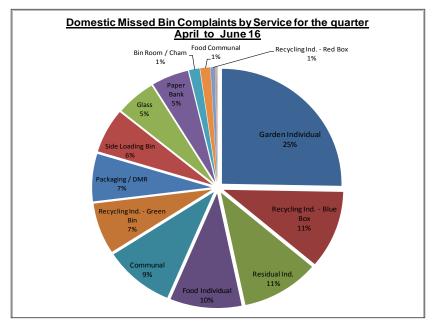
#### Complaints

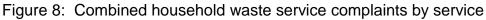
3.20 Weekly complaints numbers since 2013 are detailed below.





- 3.22 On average to date during April-June, 1,014 complaints a week were received by Waste Services. With approximately 480 000 collections a week, this represents 0.21% of collections resulting in a customer complaint. The majority of complaints relate to non-collection of waste but these include complaints made when the waste was presented late.
- 3.23 A breakdown of complaints for domestic waste services only during the first quarter is provided by collection stream:





- 3.24 Complaints have declined sharply over the course of the year to date as a result of measures reported previously such as crews and supervisors working in one area to gain better knowledge of their routes and rerouting of services.
- 3.25 In this quarter the biggest source of complaints has been garden waste reflecting the seasonal nature of this service (i.e. participation rates and tonnages increase significantly during spring and summer). Steps are being taken to reduce the level of complaints by reducing the use of agency staff and bringing in permanent and more stable staffing of these routes. A trial of new in-cab routing software which will improve information for crews on routes and bin locations will also commence in September. If successful this technology will be rolled out across the rest of the service.
- 3.26 Work will continue to further drive down complaints over the year ahead, with measures such as the removal of the trade waste collections providing more capacity to focus on the household waste collections which represent the majority of the waste we manage.

### 4. Measures of success

4.1 Achievement of the Council's targets for increasing recycling and reducing landfill, and minimising service complaints.

## 5. Financial impact

5.1 Unrecycled material is currently disposed of as RDF and as landfill. In addition, there are costs associated with transporting landfill waste by rail from the transfer station at Powderhall to the landfill site at Dunbar. Quarterly disposal expenditures for 2016/17, including a comparison with the same period in 2015/16, are detailed in Table 3 below.

	2015-16	2016-17
Disposal Costs	Quarter 1 (Apr- Jun)	Quarter 1 (Apr- Jun)
Refuse Derived Fuel (RDF)	£682,390	£5,799
Landfill	£2,858,095	£3,566,891
Freight / Haulage	£204,138	£317,516
Total monthly disposal costs	£3,744,623	£3,890,206

Table 3: Disposal Expenditure 2015/16, 2016/17

5.2 Although the amount of waste disposed of via landfill or refuse derived fuel in the reporting period (31,393 tonnes) is down 3% versus the equivalent period last year, the disposal costs have increased. This is due to a significant drop in waste being disposed of via RDF as a result of market conditions reducing demand for the product. This resulted in more waste being sent to landfill which is a more expensive disposal route.

# 6. 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 requirements that require to be taken into account.

# 7. Equalities impact

- 7.1 There are no direct equalities impacts resulting from this report.
- 7.2 The Waste Management service meets the public sector duty to advance equal opportunity by taking account of protected characteristics in designing services, and by seeking to make recycling services more accessible to all citizens.

# 8. 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.

## 9. Consultation and engagement

9.1 Consultation and engagement is carried out as new services are rolled out and this work continues to respond to customer enquiries around service changes, to both support and encourage residents to maximise the use of recycling services.

## 10. Background reading/external references

10.1 Not applicable

#### Paul Lawrence

#### Executive Director of Place

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#### 11. Links

<b>Coalition Pledges</b>	P44 Prioritise keeping our streets clean and attractive
	P49 Continue to increase recycling levels across the city and reduce the proportion of waste going to landfill
	P50 Meet greenhouse gas targets, including national target of 42% by 2020
<b>Council Priorities</b>	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 Not applicable