Transport and Environment Committee

10am, Tuesday, 17 March 2015

Landfill and Recycling

Item number	7.11		
Report number			
Executive/routine			
Wards	All		

Executive summary

This report updates the Committee on performance in reducing the amount of waste being sent to landfill and increasing recycling.

Waste sent to landfill in the period April – December 2014 is down 4% on the same period in 2013/14. The projected tonnage of landfill to year end is 129,000 tonnes. This would be a reduction of 2.7% on waste sent to landfill in 2013/14 but is 4,044 tonnes higher than initially predicted for the financial year 2014/15.

The amount of waste recycled in the period April - December 2014 has increased by 4.3% over the same period in 2013/14.

Phases 1 and 2 of the new kerbside recycling service are showing an average 110% higher recycling yield and 30% landfill waste reduction on the new routes.

The costs per tonne of landfill, and total landfill costs, are detailed in the report.

Links

Coalition pledges Council outcomes P44, P49, P50 CO17, CO18, CO19

Single Outcome Agreement <u>SO4</u>



Landfill and Recycling

Recommendations

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

Background

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.

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- 2.2 Capital coalition Pledge 49 outlines the commitments 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 (from 132,564 tonnes in 2013/14), and to increase the percentage of waste that is recycled to 50%.
- 2.3 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 roll-out in September 2014.

Complaints

- 2.4 At the meeting on 27 August 2013, members requested that the performance reports also include updates on complaints made about waste services.
- 2.5 There are 236,000 properties in Edinburgh which receive multiple refuse and recycling collections. On average there are approximately 90,000 collections a day and 460,000 collections a week. Current complaint targets are based on the the number of collections carried out, but are not adjusted for seasonal variation.

Main report

Waste Arisings

3.1 The tonnage of total waste has been falling in recent years, with consistent reductions in waste arisings experienced since 2009/10 (Table 1). Given this recent pattern, it was anticipated that waste arisings would fall by approximately 2.2% in 2014/15.

Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15 (predicted)	2014/15 (forecast)
Tonnage total waste (waste arisings)	242,220	235,162	231,723	228,883	221,084	218,481	213,693	224,000
% change		-2.9%	-1.5%	-1.2%	-3.4%	-1.2%	-2.2%	2.5%

Table 1: Waste arisings 2009 onwards

- 3.2 However, this year to date (April to December 2014), waste arisings are currently 2.2% higher than for the same period in 2013/14 (Chart 1). A recent benchmarking review with other Scottish Local Authorities has highlighted that this change from a pattern of decreasing waste arisings, is consistent with current trends, with a number of Local Authorities reporting either static or increasing waste arisings this financial year.
- 3.3 It is now predicted that end of year waste arisings will be greater than the 218,481 tonnes recorded in 2013/14, with year end waste arisings of 224,000 tonnes currently forecast. This is approximately 10,300 tonnes more than anticipated prior to the start of financial year 2014/15 (Table 1). Whilst this anticipated increase has negatively impacted on the original estimate for landfill tonnage, a reduction on landfill tonnage compared to 13/14, and an increase in the recycling rate, is forecast.

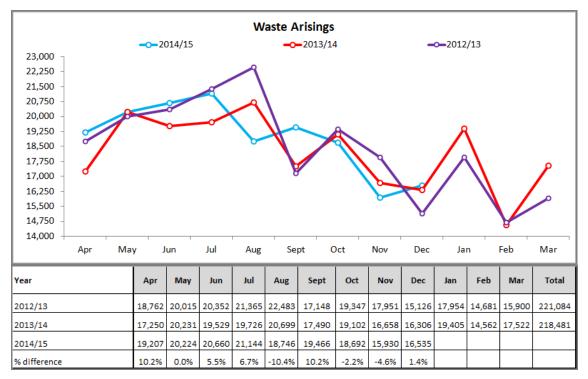


Chart 1 - Waste arisings 2012/13 - 2014/15

Landfill Waste

- 3.4 Landfill tonnage to date (April to December 2014) was 96,819 tonnes. This is a reduction of 4,000 tonnes, or 4%, on the same period in 2013/14 (Table 2).
- 3.5 The projected tonnage of landfill to the year end, taking into account seasonal fluctuations, is 129,000 tonnes. This would be a reduction of 2.7%, or 3,564 tonnes, on the year 2013/14. However, due to anticipated year end increases in waste arisings, it is above the 124,956 tonnes initially predicted for financial year 2014/15 (Table 2).

	YTD Apr-Dec 2014	YTD Apr-Dec 2013	YTD Apr-Dec Difference		14/15 Pledge Target	14/15 Year End Forecast	13/14 Year End Actual	Fored difference	
	tonnes	tonnes	Tonnes	%	tonnes	tonnes	tonnes	Tonnes	%
Landfill	96,819	100,819	4,000	4	118,000	129,000	132,564	-3,564	-2.7%

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9,500 - 9,000 - 8,500 - Apr Year 2012/13	Apr 12,014	May 11,954 11,619	Jun 12,033	Jul 12,513	Aug 13,344	Sept 9,917	Oct 11,743	Nov 11,568	Dec 10,066	Jan 12,007	Feb 9,584	Mar 10,507	Total 137,249

Table 2: Landfill Tonnages - actual YTD and anticipated 14/15

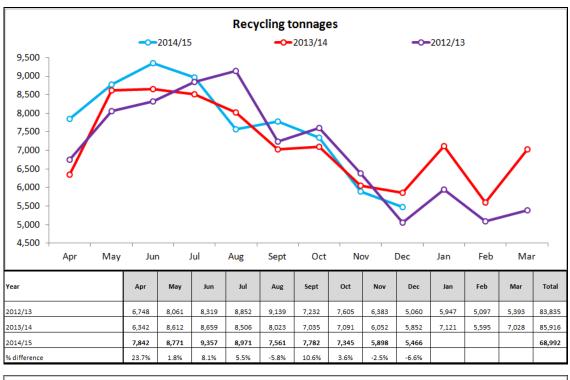


Recycling

3.6 The percentage of waste recycled (including street sweepings) between April and December 2014 was 40.2% compared to 39.5% for the same period in 2013/14 (Table 3 and Chart 3). Based on these figures, and taking into account seasonality factors, it is currently anticipated that the end of year recycling rate for 2014/15 will be 39.4%, a 0.1% increase over the 39.3% achieved in 2013/14.

	YTD 2014	(Apr-Dec)	YTD 2013	3 (Apr-Dec)	Difference		
	Tonnes	% Rate	Tonnes	% Rate	Tonnes	% Rate	
Recycling	68,992	40.2%	66,172	39.5%	2,820	0.7%	

Table 2: Percentage of waste recycled 2013/14 & 2014/15



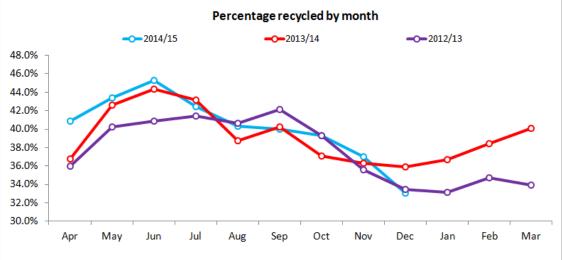


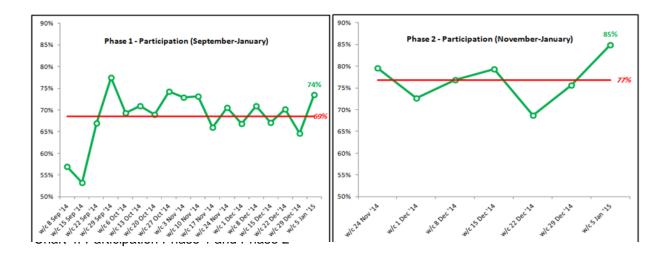
Chart 3: Recycling Tonnages 12/13, 13/14 & 14/15

3.7 The first two phases of a five phase programme to roll-out a new kerbside bin and box recycling service (a replacement to the existing red and blue box service) to 140,000 residents has commenced. This is a major change to

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recycling provision in the city, with the first phase rolled out to 20,000 households in September 2014 and the second phase to a further 20,000 households in November 2014.

- 3.8 The new kerbside service simplifies the recycling process for residents and increases the range of materials collected. The full roll-out will be completed by October 2015 and it is anticipated that, once fully rolled out, the new service will increase the overall citywide recycling rate to in excess of 46%. This figure will be subject to continuous review now the new service has commenced.
- 3.9 As can be seen in Chart 4, residents have engaged positively with the new service, with participation consistently above 70%. Further, recycling yields for the new service are 110% higher, increasing from a citywide average of 1.9kg/hh/wk to 4kg/hh/wk in December 2014 in the new service areas. More information regarding the engagement work undertaken with householders is detailed in section 9.1.



3.10 As part of the new kerbside recycling service, a new 140 litre landfill wheeled bins has been introduced to households across the phase 1 and phase 2 refuse routes. This is having a positive effect on reducing landfill, with tonnages reducing by an average of 30% since the start of the service on the new recycling routes (Chart 5).

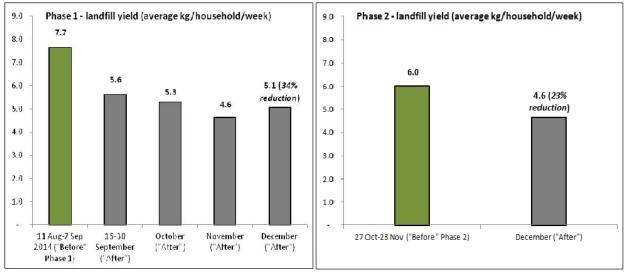


Chart 5 – Average landfill reduction, new recycling service routes

3.11 Table 3 provides further details on the overall recycling tonnage collected for the period April to December 2014, broken down by collection scheme.

Scheme	Dec-14	Dec-13	Dec Difference	% difference	Apr- Dec 2014/15	Apr -Dec 2013/14	YTD Difference	% difference
Kerbside Blue/Red Boxes	897	1165	-268	-23.0%	10002	10799	-797	-7.4%
Kerbside New Recycling Serbvice	597	n/a	n/a	n/a	1283	n/a	n/a	
Garden Waste	593	683	-90	-13.1%	20211	17566	2645	15.1%
Food Waste	537	423	114	26.9%	4248	3765	483	12.8%
Recycling Banks (textiles, books, glass & paper banks)	609	605	4	0.6%	5063	5154	-91	-1.8%
Packaging Banks	287	335	40	14.0%	2743	2456	287	11.7%
Communal Paper bins	172	166	-1	-0.5%	1405	1456	-51	-3.5%
Trade	229	292	7	1.3%	3002	3460	-458	-13.2%
CRC	1064	1553	-149	-10.5%	15159	15288	-129	-0.8%
Special Uplifts	222	172	49	22.4%	2929	2334	595	25.5%
Street Sweepings	239	430	-61	-15.9%	2582	3487	-905	-25.9%
Other	21	28	-9	-21.2%	365	407	-42	-10.4%
Total Recycling	5466	<mark>5852</mark>	-154	-2.5%	68992	<u>66172</u>	2820	4.3%

Table 3: Year to date (April – December) recycling by collection scheme 2014/15 & 2013/14

- 3.12 In the year to date, food waste has continued the increase experienced in recent months and has shown a 12.8% increase in tonnage collected. The service has experienced a large increase in requests for kerbside food waste caddies, since the introduction of the new recycling service in September 2014.
- 3.13 An increase has also been recorded against kerbside collected garden waste, compared to 2013. There has been a particularly high demand for the service this year, and the tonnage of waste collected is 15.1% greater than for the same period last year (April to December 2014).
- 3.14 On street packaging recycling has also shown an increase in use, with tonnage increasing by 14% in December 2014 and 11.7% in the year to date.

- 3.15 This Committee requested that further work be undertaken to identify the most effective and affordable option for enhancing and expanding communal recycling provision in the high density and tenemental housing areas of the city. Commencing in February 2015, two approaches to communal recycling are being piloted, namely:
 - Pilot 1 change and simplify the materials which can be placed in a communal recycling bin (combining paper and 'packaging' [plastic bottles, cardboard, cans]) and provide glass recycling (parts of Hillside area),
 - Pilot 2 in areas where side loading 3200 litre residual/landfill bins are used, change the mix of materials as in Pilot 1 above, and also increase recycling capacity and reduce landfill capacity (parts of Bellevue area).

Complaints

3.16 Weekly complaint numbers from January 2012 to December 2014 are detailed in Chart 7. The service experienced an increase in complaints in August 2014, due to a rise in complaints regarding missed kerbside collections of residual and food waste. To improve route efficiencies in refuse collection, new larger routes were rolled out across both these services in the week commencing 11 August 2014. The food waste service, in particular, suffered from disruption and experienced high complaint volumes due to a number of factors which included shift changes for crews.

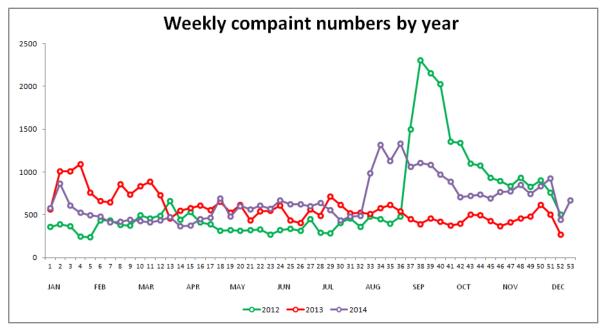


Chart 7: Total complaints per week 2012 to 2014

3.17 On average between April and December 2014, there were 726 complaints a week, 43% more than for the same period last year. With approximately 460,000 collections a week, this translates to 0.64% of collections resulting in a customer complaint.

- 3.18 It should be noted when comparing data with 2013/14 that, with the launching of online web forms in late 2014 to record missed collections, more opportunities have been created for customers to, both to log a complaint in the first instance, and to record missed collections when the customer contact centre is closed.
- 3.19 The service has implemented the following measures to reduce complaint numbers:
 - waste collection services are monitored on a daily basis to ensure that critical, route specific issues which are causing disruption are identified and addressed quickly;
 - a redesign of existing kerbside food waste routes to encompass increased participation, optimisation for route efficiency and improvement of the consistency of service provision, is ongoing; and
 - repeat complaints to the service are monitored on the day of collection by front line supervisors to ensure continuity of service and to reduce the need of further escalations.
- 3.20 It is anticipated that by implementing these measures there will be a reduction in complaint numbers and a continued improving picture over the next few months. This should ensure that the current decreasing trend in complaint numbers (Chart 7) will be maintained.

Measures of success

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

Financial impact

- 5.1 It was requested by committee at its meeting of 10 January 2015, that information on the cost per tonne of landfill be included in future performance reports.
- 5.2 Although the end of year landfill tonnage is predicted to reduce by 2.7%, compared to 2013/14 performance, the tonnage of waste landfilled is forecast to exceed the budget target.
- 5.3 Dependant on the waste stream, landfill waste is disposed of via a number of disposal contractors. On average, it costs £107 a tonne to landfill waste; however this does not include rail transport charges that apply to part of the waste stream. We anticipate that, for forecast end of year landfill tonnages of 129,000, landfill costs (excluding freight charges) will be in the order of £13,855,000.

5.4 The cost of disposal to treatment of recyclate is currently £45 per tonne. This figure is subject to ongoing change related to market volatility of recyclate costs, which are demand led.

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 Engagement and communications work is ongoing for the new kerbside recycling service. The Community Engagement team within Waste Services has supported two phases of implementing the new service to 40,000 households and is focussing on the third phase in March 2015 to a further 20,000 households. Support has included comprehensive targeted communications for residents, briefings for key stakeholders and community groups, events, and door to door engagement. As of January, 1277 properties have been visited to talk about the new service, and 1728 properties visited to provide extra advice after crews reported the wrong items in the recycling bin. The service has also

engaged with more than 665 people through a series of 30 events in areas of the new service.

- 9.2 Communications on the new recycling service have been well received by residents. A survey carried out in November for residents on Phase 1 found that 82% agreed or strongly agreed that the information that they received about the new service was easy to understand. This survey was undertaken for residents in Phase 2 in January 2015, and the results will be available for the next committee.
- 9.3 Waste Services is supporting each phase of the rollout with recycling advisors working alongside crews on both the recycling and residual routes. This assists in dealing with any immediate issues householders may have and also to accurately identity householders who would benefit from further guidance in utilising the new recycling service fully.
- 9.4 For areas of high density, such as flats and tenements with shared bins, Waste Services is undertaking two pilot projects commencing in February 2015 to encourage residents in these areas to recycle more and also to increase the amount of items that can be recycled. This is being supported by the Community Engagement team which is monitoring the two pilot areas, to capture feedback to inform any future changes.

Background reading/external references

N/A

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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

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	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