

## Waste and Recycling Strategy

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### Transport, Infrastructure and Environment Committee

13 September 2012

#### 1 Purpose of report

- 1.1 To provide Committee with an update on the delivery of the Waste and Recycling Strategy.
- 1.2 To advise of work being undertaken to redesign and improve kerbside collection services.

#### 2 Summary

- 2.1 The Waste and Recycling Strategy was approved by the Transport, Infrastructure and Environment Committee in November 2010.
- 2.2 This report provides a review of progress against the original objectives, while outlining the direction of travel in the coming year. In particular it outlines the review of kerbside recycling collection services which aims to maximise the range of materials collected while being as simple as possible to use.

#### 3 Main report

##### Background

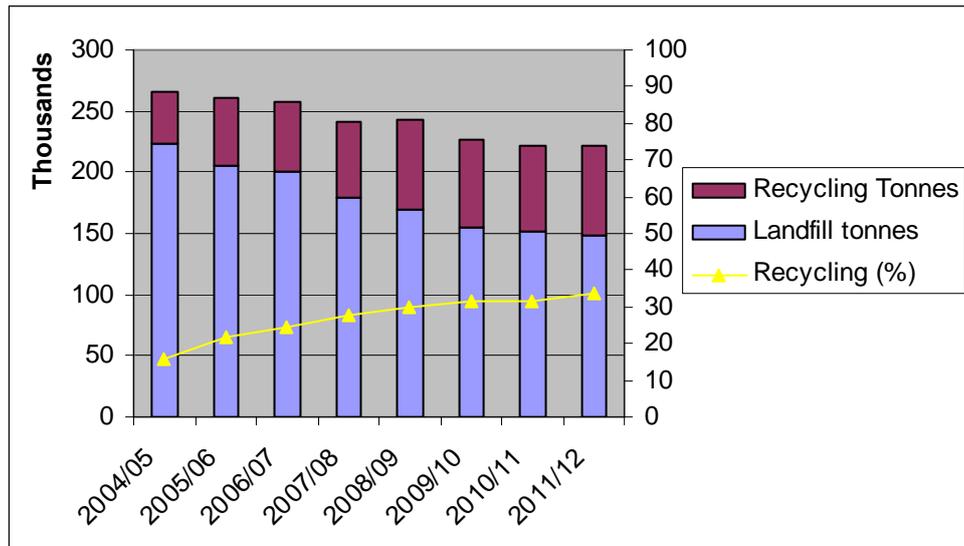
- 3.1 The original Waste and Recycling Strategy as approved by Committee in November 2010 sought to support an over-arching set of principles. Namely that where waste cannot be prevented at source it should as far as possible be reused or recycled; that no waste should go directly to landfill; and that landfill would only be used for residual waste that has no other value. The strategy included specific targets to increase the percentage of waste that is recycled to 50% by 2015 and to at least 60% by 2017.
- 3.2 There are two main components for delivering the strategy. The first of these is to expand the range of materials collected for recycling, improve access to recycling services, and to design services in such a way that participation in recycling increases. This includes increasing the range of materials that can be recycled through kerbside collections while reducing the frequency of landfill waste (green wheeled bins) collections. The latter being necessary to drive the behavioural change by residents that will make recycling the primary means of disposing of household waste. These are supported by activities to promote

waste prevention and reuse, as well as education and community engagement on waste reduction and recycling more generally.

- 3.3 The second component is to ensure that any remaining waste will be sent for treatment prior to landfill in order that additional recyclable materials can be recovered and any residual material that cannot be recycled is used to generate energy. The amount of waste then sent to landfill would be minimised, in line with the Zero Waste Plan for Scotland and the associated Zero Waste Regulations.
- 3.4 The treatment of residual waste is being taken forward by the Zero Waste Project, a joint procurement initiative with Midlothian Council which is on track to develop facilities at Millerhill for the treatment of segregated food waste by 2015 and mixed residual waste by 2017.
- 3.5 Since the production of the Council's Waste and Recycling Strategy the Scottish Government has published its Zero Waste Regulations which contain the legislative requirements for the delivery of its Zero Waste Plan. These include:
- a ban on sending biodegradable waste to landfill to be introduced by 2020.
  - a requirement for Councils to separately collect (from general landfill waste) paper and card, plastic, glass and metals by 2013 from both households and businesses;
  - a requirement for businesses to separate glass, metal, plastic, paper and card and food by 2013, with small businesses having until 2015 to separate out food;
  - a requirement to remove dense plastics and metals from residual waste prior to incineration, taking effect in 2015.
- 3.6 Carbon Metric – The Scottish Government are also introducing a new system of measuring recycling performance. Instead of the traditional measurement in tonnes and percentages the new carbon metric system will aim to better reflect the environmental benefit associated with the different types of recyclable materials and their end use. For example aluminium has a higher carbon metric value than garden waste and glass recycled back into bottles has a higher value than glass recycled into the aggregate which is used for road construction.

#### **Progress to date**

- 3.7 Appendix 1 details progress against specific commitments in the original strategy but it is possible to highlight some key achievements. The graph below shows progress in reducing the total amount of waste being collected and the increase in the percentage of waste being recycled. In the period 2004/05 to 2011/12 the total amount of waste collected has reduced by 16% from 265,201 tonnes to 222,028 tonnes while the percentage of waste recycled has more than doubled from 15.6% to 33.5%.



- 3.8 While this demonstrates that considerable progress has been made in terms of reducing dependence on landfill, recycling performance in 2011/12 is below the 42% originally envisaged in the strategy. This is partly due to the delay in reducing the frequency of kerbside collections of landfill waste but also due to changes in the composition of waste. For example the decline in the printed news media (7% reduction in 2011/12) has had the effect of reducing the amount of paper that is collected and recycled. Similarly industry is increasingly using lighter weight packaging partly in response to UK government initiatives.
- 3.9 Since the publication of the strategy the range of materials collected for recycling has increased. Kerbside recycling collections have been extended to include plastic bottles, batteries and most significantly food waste. Food waste, paper and packaging recycling collections using communal containers are also being made available to tenemental flats and other forms of high density housing.
- 3.10 On 10 September a new system of managed weekly collections was introduced. Following the expansion of kerbside recycling collections which enables residents to recycle up to 70% of their household waste, the collection frequency of individual green wheeled landfill bins has been reduced from weekly to fortnightly. Experience in other local authorities has shown that reducing the frequency of landfill waste collections leads to, on average, a 5% increase in recycling. The full year effect in Edinburgh would be to increase recycling to 38%. The full year effect of food waste collections and other recycling service enhancements should then push the recycling rate to above 40%.
- 3.11 The Zero Waste Project remains on track to deliver its objectives. The procurement of a food waste treatment facility is well advanced with bidders being invited to submit final tenders. It is anticipated that the food waste treatment facility at Millerhill will be operational by the end of 2015. The procurement of the larger mixed waste treatment facility is in the initial dialogue phase and is working to an anticipated service commencement date of April 2017. When the treatment facility becomes operational all residual

mixed waste will be sent to Millerhill where it will undergo mechanical and biological treatment to recover further materials that can be recycled. The majority of the remaining residues can then be used as a fuel for an Energy from Waste (EfW) plant which will generate both heat and electricity. The location of the EfW plant will be dependent on the outcome of the procurement process but both Midlothian and the City of Edinburgh Councils recognise the value of local on-site energy generation.

### **Next Steps**

- 3.12 The next steps in the Strategy will be based around continuing to support waste prevention and reuse initiatives, promoting participation in recycling schemes, further developing the existing recycling services, and completing the development of the residual waste treatment facilities.
- 3.13 In order to enhance recycling services and further increase participation Waste Services have been working with Zero Waste Scotland who have commissioned AMEC (a technical waste management consultancy) to carry out a full review of the kerbside collection arrangements. The aim of the review is to:
- increase the range of materials collected to maximise environmental performance both by weight and carbon diversion;
  - optimise ease of use for residents to encourage participation, while still complying with the quality of material objectives required by the Zero Waste Regulations;
  - investigate the opportunities for the integration of services (e.g. collection of multiple materials on one vehicle) to deliver efficiencies;
  - Cost effectiveness and opportunities to generate revenue through the sale of materials.
  - Opportunities for the kerbside recycling collection to be reflected by other collections (e.g. tenement recycling, trade waste recycling).
- 3.14 Currently the kerbside collection of dry recyclables, the red and blue box scheme, is provided by an external contractor. This contract is due to expire in 2013 therefore providing an opportunity to review the future delivery and design of these services.
- 3.15 The review involves the development and evaluation of 12 different options or scenarios for the design of kerbside recycling services and the identification of a preferred solution. An interim report by AMEC has been produced and is currently being considered by SfC.
- 3.16 Further detailed modelling is underway looking at costs, income generation, the potential for co-mingled recycling and the type of vehicles required. Customer research will also be carried out so that the preferences and views of service users can also be taken into account. This will inform the final shape of the service and the outcome will be reported to a future committee.

- 3.17 Implementation of any changes coming out of the review service would take place during the second half of 2013.

### **Financial Implications**

- 3.18 Currently the cost of sending waste to landfill is approximately £100 a tonne and in 2011/12 the Council spent £13.3m on landfill. Landfill Tax increases annually by £8 per tonne and the potential cost of failing to increase recycling beyond current levels could rise to £15.4m by next financial year. Efforts to increase recycling will help the Council reduce expenditure on landfill.
- 3.19 The introduction of a system of managed weekly collections will also help realise landfill savings of £1.4m and savings on collection costs of £773,000 in 2012/13

## **4 Equalities Impact**

- 4.1 An Equalities and Human Rights Pre Assessment has been carried out; this suggests the proposed changes are likely to support improved access to services. Targeted consultation is being carried out with stakeholder organisations which will be used to inform the implementation of the enhanced service.

## **5 Environmental Impact**

- 5.1 The diversion of waste from landfill represents an environmental improvement, with a reduction in carbon emissions and more efficient use of finite natural resources.

## **6 Conclusions**

- 6.1 Positive progress has been made in the promotion of waste prevention and reuse, while service improvements supported by ongoing public engagement continue to deliver increased recycling performance.
- 6.2 A further step change in performance is anticipated to commence this year with the continued introduction of food waste collections and the associated changes to collection frequencies. It is expected that the managed weekly collections will drive behavioural change and support a significant increase in recycling.
- 6.3 A review of recycling services is taking place and an interim report has on options for the future provision which will potentially enhance ease of use and increase the range of materials collected has been produced. The outcome of the review will be reported to Committee in due course.
- 6.4 Overall the strategy remains on track to deliver 50% recycling by 2015 and 60% by 2017.

## 7 Recommendations

### 7.1 Committee is asked to:

- a) note the positive outcomes achieved to date through the delivery of the Waste and Recycling Strategy;
- b) note the on-going review of recycling services and the intention to present a further report on the outcome.

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Appendices	1 Progress Against Specific Actions In The Original Strategy
Contact/tel/Email	Angus Murdoch, Strategy and Recycling Officer 0131 469 5427 / angus.murdoch@edinburgh.gov.uk
Wards affected	All
Single Outcome Agreement	NO 14: We reduce the local and global impact of our consumption and production. LO: % of municipal waste collected by the authority during the year that was recycled and composted. LO: Council municipal tonnage sent to landfill
Background Papers	None *

## Appendix 1: Progress Against Specific Actions In Original Strategy.

ACTION	DESCRIPTION	COMMENTS
<b>Increasing Access To Recycling</b>		
Flats	Retrofit off street sites Retrofit enhanced on street sites Enhanced services in City Centre	More than 60 sites delivered with as many again under discussion. This will also be linked to delivery of communal food collections. Successful pilots delivered in City Centre and more being developed.
Tailored Solutions	Local solutions for limited access properties	Continue to offer flexible solutions such as “presentation points” to overcome issues such as narrow streets, etc. During roll out of food waste some kerbside properties will be offered communal bins where this is more convenient for customers.  Reusable bags piloted as alternative to full size kerbside collection boxes is space restricted.
Commercial Waste	Pilot Recycling Collections and Expand Routes	Trade Waste offer collections of paper, packaging, cardboard and confidential paper.
Recycling Points	Schools	All schools can receive recycling as part of their waste collection.
Street Litter	Recycling On The Go	Neighbourhoods have been trialling various initiatives including recycling from barrow beats, segregated bins and underground bins.  Waste Services have carried out pilots of sorting litter following delivery to Powderhall for disposal.
<b>Increasing Materials for Recycling</b>		
Food	Pilot for 20,000 households Further roll out Develop anaerobic digestion facility	Successful application funding has seen service roll out to 135,000 kerbside properties. Roll out ongoing to 100,000 flats.  Competitive Dialogue ongoing to deliver facility by 2015.
Plastic Bottles	Addition to kerbside collection	Added January 2011.

Household Batteries	Addition to kerbside collection	Added January 2011.
Mixed Plastics	Addition to recycling services	No bids were received during tender, but this is being revisited during the restructuring of kerbside collection services.
Waste Electrical and Electronic Equipment		Kerbside collections are being investigated during restructuring of these collections.
Community Recycling Centres	Additional materials	New supplier found for paint following closure of existing provider; also piloting carpets and plasterboard. Investigating mixed plastics.
Street Litter	Reprocessing prior to landfill	Pilots carried out and options for contract under investigation.
Mechanical Street Sweepings	Reprocessing prior to landfill	In place and delivering in excess of 90% diversion.
<b>Increasing Participation</b>		
Kerbside Collection	Enhanced capacity of kerbside service Restructure collection frequencies	80 litre sack provided alongside plastic bottle collection (additional boxes provide an alternative); food caddy provided; new collection frequencies coming in September 2012, and revised services following kerbside review.
Edinburgh Branding	Introduce on new leaflets and services	Introduced; now used alongside Recycle for Edinburgh (part of national campaign).
Incentive Schemes	Pilot schemes to reward desired behaviour.	4 tailored pilots carried out to reward recycling via: communal tenement bins; kerbside collection; Community Recycling Centres; garden waste. Evaluation by Zero Waste Scotland being carried out.
Residual Waste Treatment	Development mixed waste treatment facility in partnership with Midlothian Council.	Tender being progressed; remains on track to open by 2017.
Community Engagement	Direct Engagement Roadshows Targeted Campaigns	Continues; in the most recent year, this has primarily been focussed around food waste collection.
Education	Community Waste Action Grant Programme	£37 581 distributed (December 2010-March 2011). 39000 directly involved, and 712 527 indirectly. 265 tonnes direct diversion estimated.

<b>Other Service Improvements</b>		
Replace Sack Collections	City Centre	Pilots carried out successfully. Developing programme to roll out recycling, bins and gull proof bags further.
Develop Strategic Transfer Points		Not currently required; kept under review.
Rezoning and rerouting collection services.		April 2011: garden waste re zoned around Neighbourhoods and residual waste moving to double shifting.
Trade Waste Service		Marketing pack launched April 2011. Pricing reviewed and aiming to maximise tonnage recycled. Will be investigating further options to increase the income generated by this service.
Bin maintenance programme		Under development.