FALKIRK COUNCIL

Subject:SUSTAINABLE WASTE COLLECTIONMeeting:FALKIRK COUNCILDate:11 DECEMBER 2013Author:DIRECTOR OF DEVELOPMENT SERVICES

1. BACKGROUND

- 1.1 Since 2003 the communities of Falkirk have made huge progress in the way in which we manage our waste. This has led us to become one of the top performing Councils in the country, with a recycling rate in excess of 50%. However, the legislative and policy changes introduced by Scotland's Zero Waste Plan (ZWP) and the Waste (Scotland) Regulations 2012 (WSR) means that, as a Council, we must continue to improve the environmental performance of our waste collection service. To summarise, the ZWP and WSR have added the following obligations on all Scottish local authorities:
 - I) Recycle/compost/prepare for reuse:
 - 50% of household waste by 2013;
 - 60% of household waste by 2020; and
 - 70% of all wastes by 2025.
 - II) Mandatory separate collection of recyclable material (glass, card, paper, food waste, metals and plastics).
 - III) Landfill bans on specific material, landfill limits of 5% of waste by 2025 and a ban on sending biodegradable waste to landfill by the end of 2020.
- 1.2 The ZWP and WSR have introduced a step change in the thinking and approach to waste within Scotland. The policy focus has moved away from addressing municipal waste simply through avoiding its landfill, to the more ambitious aim of managing waste as a valuable material resource that needs to be retained within the economy to enable us to move towards a zero waste, resource efficient society.
- 1.3 Consequently, Falkirk's recently approved Zero Waste Strategy 2012 2022 provides the framework to help manage the waste within the Council's control and forms the basis of how we can help achieve a more resource efficient society, enabling the Council to maximise the environmental and economic benefits of this approach for the communities of Falkirk.
- 1.4 It was agreed at The Council meeting held on 23 January 2012, that following the introduction of the food waste collection service, the Council would require to review the waste collection service holistically to ensure compliance with the WSR. The purpose of the review would be to examine:
 - Collection frequencies and bin capacity
 - Account for changes in statutory requirements
 - Overall cost of service

2. COUNCIL WASTE COLLECTION SERVICE REVIEW

- 2.1 To complete the aims of the review as detailed above it was essential to understand the nature of the waste we collect, as such the review assessed the following:
 - a) The composition of household waste
 - b) The volume of household waste

By investigating each of these it enabled officers to look at the collection services we currently provide and highlight the actions that are required to improve services for the future.

2.1.1. a) Composition of Household Waste

The review highlighted that, despite offering what is regarded as one of the most comprehensive recycling services in Scotland, approximately 60% of the material we currently send to landfill could and should be recycled using existing kerbside collection services. Clearly, as we move towards a more sustainable society, this level of inefficiency causing loss of value and resources is unacceptable. The key finding from the composition of household waste was that a significant tonnage of recyclable material is still going to landfill which is noted below;

Recyclable Materials	Appropriate Container	Recyclable Material in Non-Recyclable (Green) Bin			
Materials	Container	Percentage (%)	Tonnage (tonnes)		
Food	Silver Caddy	32	9,668		
Paper, Card, Metal, Plastics	Blue Bin	16	4,685		
Glass, Household Batteries, WEEE	Black Box	6	1,850		
Textiles & Shoes	Textile Bag	5	1,373		
Garden	Brown Bin	1	418		
	TOTALS	60%	17,993 tonnes		

Non-Recyclable (Green) Bin Composition Analysis (2013)

This highlights that the Council is currently providing waste collection services that are not being fully utilised by residents. This must change in order for the Council to meet its zero waste obligations and also reduce the ongoing financial impact of landfilling recyclable materials.

2.1.2. b) Volume of Household Waste

Prior to 2003, households in the Falkirk area were provided with a single 240ltr container collected weekly. Since then a number of services have been introduced that now sees up to 5 containers and a textile bag being collected on varying cycles. The provision of additional kerbside collection services has increased the overall capacity available to a typical household from 240ltr per week prior to 2004 to over 430ltr per week in 2013.

This represents an increase of over 80% in capacity now provided via a range of containers. The review concluded that the volume of the non-recyclable bin is excessive if existing recycling services were to be fully utilised.

- 2.2 When the current three bin system was successfully introduced in 2004 it provided a fortnightly collection of the green bin, recognising that 'sizing' non recyclable capacity appropriately for householders i.e. matching the size of bin and frequency of collection was a key requirement for a successful recycling collection. It is known that moving to fortnightly collections of non recyclable waste improved the Councils recycling/composting rate by 29.6% (from 6.4% in 2002/03 to 36.0% in 2007/08). With the addition of many new recycling services since 2004, particularly the collection of food waste, it is now time to take account of these new services and resize the green bin service accordingly.
- 2.3 It should be noted that the Council would face significant implications should the current performance and utilisation of recycling services remain at existing levels. The implications of 'doing nothing' can be summarised as follows:
 - The cost of sending collected household waste to landfill is due to rise from $\pounds 2.3$ million this year to $c_{\pounds}2.7$ million in 2014/15
 - Future non compliance with the regulations
 - Increasing collection costs to account for the statutory requirements to collect recyclable materials (especially food waste) would amount to a sum in excess of $\pounds 290,000$

To break this down further, it costs the Council $c \not \leq 8,000$ per day to landfill our household waste. Next year that cost will be $c \not \leq 10,000$ per day. A waste analysis completed in September confirmed that this cost should only be $\not \leq 3,400$ per day if every recycling system was used successfully. On an annual basis, this equates to over $\not \leq 1.4$ million in unnecessary waste disposal costs and c18, 000 tonnes of wasted recyclable material. Clearly this means the priority of the Council should be to improve efficiencies across all collection services to encourage maximum diversion of these recyclable resources away from landfill.

3. MOVING FORWARD

3.1 The completion of the collection service review allowed officers to look at the waste we produce, which, in turn, allows officers to propose a collection system that maximises recycling, reduces disposal costs, and ensures compliance with the regulations. The review highlighted a total of seven options that were each considered (see Appendix 1). In light of the regulations and other issues detailed above, officers then identified the following three collection system options for more detailed consideration:

	Collection Frequency				Ŋ		Annual Cost Compared With Current Service		
Option	Non-Recyclable	Co-Mingled Recycling	Garden Waste	Black Box & Textiles	Food Waste Recycling	Weekly Collection Capacity (litres)	Potential Recycling Rate (%)	2014/15 (£)	2015/16 (£)
1	3 Weekly	F	F	F	W	393	60.8	-£258,826	-£385,543
2	3 Weekly	W	F	F	W	513	63.8	-£9,035	-£167,898
3	4 Weekly	F	F	F	W	373	66.9	-£487,890	-£754,561

The three collection systems for consideration as detailed above are summarised as follows;

- **Option 1:** Residual waste collection reduced from fortnightly to 3-weekly results in a weekly capacity of 393ltr, a likely increase in the recycling rate of 6.5% with a cost difference to the current service of $-\pounds 258,826$ in 2014/15 and $-\pounds 385,543$ in 2015/16
- **Option 2:** Residual waste collection reduced from fortnightly to 3-weekly and comingled recycling collection increased from fortnightly to weekly results in a weekly capacity of 513ltr, a likely increase in the recycling rate of 9.5% with a cost difference to the current service of $-\pounds$ 9,035 in 2014/15 and $-\pounds$ 167,898 in 2015/16
- **Option 3:** Residual waste collection reduced from fortnightly to 4-weekly results in a weekly capacity of 373ltr, a likely increase in the recycling rate of 12.6% with a cost difference to the current service of $-\pounds$ 487,890 in 2014/15 and $-\pounds$ 754,561 in 2015/16
- 3.2 A decision on the preferred option requires to be reached. In order for the changes described above to work, we would require residents to participate fully in the recycling services at their disposal. Repeatedly the residents of Falkirk have demonstrated an understanding of the importance of recycling, as demonstrated by our high standing in the recycling tables. On previous occasions they have adapted quickly to reduced green bin capacity, quickly finding, despite initial concerns, that it was indeed adequate. They have also adapted quickly to any new recycling services.

- 3.3 However it will be essential for the Council to approach the introduction of the proposed system in the same way as we approached the introduction of the three bin system in 2004, and, as such, this will require a period of intense education and awareness raising to highlight the importance of using the service properly and the benefits that can be achieved, for both the community and the environment. If the proposals put before members today are agreed, officers will complete a detailed Implementation Plan for consideration at future meetings.
- 3.4 It is important to stress that the proposed changes would not see residents being provided with any additional containers. The authority already has all the systems in place to ensure the collection of high quality recyclate material and therefore requires only for the existing services to be fully utilised. There will also be some properties such as high rise flats that will not be part of this change; these will be identified in the Implementation Plan.

4. IMPLICATIONS

Policy

4.1 The review of the waste collection service is in line with national zero waste policy and legislation and will assist the delivery of the Councils Zero Waste Strategy. This strategy is widely recognised as good practice within the resource management industry and the measures outlined in this report will help to ensure the correct sizing of non recyclable waste capacity. This will act as a proven incentive for increased recycling rates and help move towards a zero waste, resource efficient Falkirk.

Financial

4.2 The continual landfilling of material resources that could be recycled will see the authority continue to pay excessive disposal costs. The proposal contained within the report will assist in the avoidance of these costs.

Legal

4.3 The collection service review and subsequent actions will ensure compliance with the Waste (Scotland) Regulations 2012 and assist in meeting the ZWP and EU Waste Framework Directive recycling targets.

Personnel

4.4 None

5. CONCLUSION

5.1 The management, collection and handling of waste is becoming increasingly challenging in a society that continues to recognise the need to be more sustainable. Since 2003 services have developed in Falkirk to such an extent that a significant proportion of waste material collected can now be diverted from landfill. The report has highlighted the challenges the authority face in relation to achieving statutory targets and also the continual increase in the cost of landfill.

- 5.2 By optimising how we manage, collect and process resources, Falkirk's communities can continue to excel in their commitment to become a more sustainable society. At the same time we can reduce and limit the increasing costs associated with the misuse of scarce resources. The measures proposed in this report, to revise the system for the collection of recyclable and non-recyclable materials, will help to meet this challenge. In their implementation it will be essential that the Council continues to encourage community support for the zero waste journey by using education and awareness raising messages and offering assistance where needed to help householders understand the reasons why climate change, resource use and waste reduction are important issues for Falkirk and society as a whole.
- 5.3 An initial equality and poverty impact screening assessment (EPIA) has been carried out and identifies no impact on groups protected under the Equality Act 2010.

6. **RECOMMENDATIONS**

It is recommended that the Council:

- 5.1 note the outcome of the collection service review
- 5.2 consider the proposed collection options as detailed in paragraph 3.1
- 5.3 upon selecting a collection option authorises the directors of Development Services & Corporate and Neighbourhood Services to develop a detailed implementation plan for approval at a future meeting

DIRECTOR OF DEVELOPMENT SERVICES

DATE: 2nd December, 2013

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LIST OF BACKGROUND PAPERS

- 1 Scotland's Zero Waste Plan
- 2 Waste (Scotland) Regulations 2012
- 3 Falkirk Zero Waste Strategy 2012-2022
- 4 Falkirk Council Report 23 January 2012
- 5 Collection Service Review : Shortlisted Options Report October 2013
- 6 2013 Waste Composition Analysis