

The background of the slide features a large, faint, light blue outline of the official coat of arms of the City of Anchorage. The coat of arms is a shield divided into four quadrants. The top-left quadrant shows a sailing ship on wavy lines representing water. The top-right quadrant shows a grizzly bear standing on its hind legs, holding a large fish in its paws. The bottom-left quadrant shows a cross with a smaller cross in the center. The bottom-right quadrant shows a grizzly bear's head facing left. Above the shield is a crown with five points, each topped with a flower. A banner at the bottom of the shield contains the text "ANNE FOR A".

# **AGENDA ITEM 12**

## **Household Recycling Charter: Compliant Collection Service**

**Falkirk Council**

**Title:** Household Recycling Charter: Compliant Collection Service  
**Meeting:** Executive  
**Date:** 28 November 2017  
**Submitted By:** Director of Development Services

**1. Purpose of Report**

- 1.1 The purpose of this report is to provide an update on the current situation in relation to the processing of the Council's blue bin material as well as present the next steps to provide a Household Recycling Charter compliant service.

**2. Recommendation(s)**

**2.1 The Executive is asked to:-**

**(1) consider how it wishes to proceed given the content of this report.**

**(2) authorise the Director of Development Services to take any necessary action to implement the decision including, if necessary, to accept the funding offered by Zero Waste Scotland and implement the relevant charter compliant collection system.**

**3. Background**

- 3.1 In June 2017, a report was presented to the Executive with details of the processing of the waste material collected in the blue bin (which contains paper, card, metals, plastics and cartons; also known as co-mingled dry recyclate) as part of the Council's segregated kerbside collection service. The report also outlined the next steps to provide a revised service which would meet the requirements of the Scottish Government's Household Recycling Charter (the Charter) to which the Council is a signatory.
- 3.2 The Executive authorised officers to submit a funding application to Zero Waste Scotland (ZWS) to allow the authority to provide a charter compliant collection service and to provide details of the funding application outcome.
- 3.3 The Executive also authorised officers to develop an implementation plan which incorporates a review of the current collection system and stakeholder engagement.

#### **4. Update on Processing of Blue Bin Material**

- 4.1 The cost of processing this material at our own facility at Roughmote continues to be in the region of £40 per tonne (approximately £500,000 per annum). At this time, processing this material using an external contractor ranges from £42 per tonne to £85 per tonne (£525,000 to £1,062,500 per annum).
- 4.2 Changes in the requirements of the output quality from a co-mingled dry recyclate material has increased the costs of processing it. Whilst this cost remains lower when conducted at the Council operated facility rather than processed externally, the Council would be in a better position if the input material was split into separate collections of paper/card and metals/plastics/cartons to maximise the quality of output material that can be achieved.
- 4.3 By introducing these separate collections, this enables the Authority to return towards the original budgeted position and also aligns the collection service to the requirements of the Charter to which the Council was the first signatory.
- 4.4 As noted in the report to the Executive in June 2017, it is anticipated that costs associated with sorting co-mingled dry recyclate will increase as a higher quality product continues to be demanded by the national and international marketplace.
- 4.5 In 2015, the UK exported 14 million tonnes of waste and scrap for recycling or recovery abroad. Of this, around 4.5 million tonnes was exported to China. In July this year, China notified the World Trade Organization that it intends to limit the import of a number of materials by the end of 2017. The UK government and other stakeholders in the recycling industry are examining the impact of these measures; as part of the supply chain within the industry the Authority, and others across the UK, are likely to be affected by the measures.

#### **5. Charter Compliant Collection Service**

- 5.1 Given the foregoing, the Council needs to mitigate against rising processing costs due to issues of quality by aligning the bin collection service with the requirements of the Charter in order to maximise the quality of material collected and processed.
- 5.2 The Charter requires the design of our household waste collection services to establish common collection systems, as appropriate, for paper, card, glass, plastics, metals, food and other commonly recycled materials deemed feasible (e.g. textiles, small WEEE, nappies) across Scotland.
- 5.3 A Code of Practice (CoP) has been created alongside the Charter which aims to enshrine *“the current best practice to deliver cost effective and high-performing recycling services”*
- 5.4 Noted within the CoP document is the requirement for containers namely:
  - “ a) *Separate containers shall be provided to each property for the following:*
    - I. Paper and card;*
    - II. Metals, plastics and cartons*

- b) *Collection of these containers shall take place from the kerbside or nearest safe point of collection close the property.*
- c) *At the point of collection, the contents of each container will either be sorted into constituent materials (i.e. kerbside sort) or placed into separate compartments of a single vehicle or into separate vehicles for primary sorting at a site (i.e. transfer station or Materials Recovery Facility – MRF).*
- d) *Separate containers for glass shall be provided to each property or alternatively within the community for communal use.*
- e) *Separate containers shall be provided for food waste collection in all areas where the Waste (Scotland) Regulations 2012 require a collection.*
  - i. *Where food is collected in the same container as garden waste, the Council shall not be required to separate the materials.*
- f) *The weekly volume of recycling to be provided to each property for each material where kerbside collection takes place should exceed the following:”*

| <b>Material</b>                                                                                                                                                                                                                                                                       | <b>Weekly Volume</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Paper/card                                                                                                                                                                                                                                                                            | ≥40 litres per week  |
| Metals/plastics/cartons                                                                                                                                                                                                                                                               | ≥70 litres per week* |
| Glass                                                                                                                                                                                                                                                                                 | ≥20 litres per week  |
| Food waste                                                                                                                                                                                                                                                                            | ≥20 litres per week  |
| * A standard 240 litre wheeled bin collected every 4 weeks equates to 60 litres per week. Should a household require a larger wheeled bin for metals/plastics/cartons, this will be accommodated using a 360 litre bin which can be provided on request thus complying with the code. |                      |

There is no weekly volume requirement for garden waste as this is not a statutory service and requirements for its collection are not contained within the Charter or associated code of practice.

## **6. Funding Outcome**

- 6.1 Following authorisation at the Executive in June 2017, officers applied to ZWS for funding to provide a charter compliant collection service.
- 6.2 The application was principally based on the procurement of an additional container therefore enabling the collection service to provide one container for paper/card and one container for metals/plastics/cartons (as opposed to providing one container for this material which is currently the case and is non-aligned with the Charter (refer to paragraph 5.4). Zero Waste Scotland confirmed that an application on this basis could be considered by them in this current funding round as any award could be committed during the current financial year.

[illegible]

- 7.4 Scenario 1 would see residents receive an additional 240 litre container. This would see 4 wheeled bins in total, in addition to the kerbside box and food caddy. Due to the material being collected separately in wheeled bins it is anticipated that this scenario would see the authority potentially achieve a significant saving in running costs, mainly attributed to the lower cost of processing the material but also linked to operational efficiencies (1 wheeled bin collected per week). The staffing and vehicle arrangements would remain the same.
- 7.5 In scenario 2, residents would receive a stackable set of kerbside boxes on a trolley that would replace the existing Council blue bin with all materials from the blue bin being transferred to the new 'trolley box' service. In this scenario, the time taken to collect the material is longer than collecting a wheeled bin due to the increased sorting at the kerbside. Accordingly this scenario would be more expensive to operate and require an increase to the existing service budget. The Council currently collects the blue bin and contracts the collection of the black box containing glass and small electricals (alongside the food waste caddy, textiles and absorbent hygiene products). To implement this scenario the Council would require to either conduct the trolley box collection service in-house or add the material to its existing kerbside recycling contract. If conducting in-house, significant expenditure would be required for a change in the type of vehicles and additional staff. If adding to the existing contract for the black box, the service would need to be re-tendered due to the variation in the original contract requirements and additional expenditure on the contract. Funding would be required to purchase the additional boxes and trolleys. This option would also leave the Council with c70,000 surplus blue bins.
- 7.6 In scenario 3, the blue bin is used for paper and card only, collected on a 4-weekly frequency with householders receiving a trolley box for metal/plastics/cartons collected fortnightly. This is considered a hybrid model between scenarios 1 and 2. Although not to the same extent as scenario 2, the time taken to collect the material remains longer than when collected in one wheeled bin due to the increased sorting at the kerbside. Accordingly this scenario would be more expensive to operate than the budgeted position. Similar to scenario 2, the Council currently collects the blue bin and contracts the collection of the black box containing glass and small electricals (alongside the food waste caddy, textiles and Absorbent Hygiene Products). To implement this scenario the Council would require to either conduct the trolley box collection service in-house or add the metals/plastics/cartons to its existing kerbside recycling contract. If conducting in-house, significant expenditure would be required for a change in the type of vehicles and additional staff. If adding to the existing contract for the black box, the service would need to be re-tendered due to the variation in the original contract requirements and additional expenditure on the contract. Funding would be required to purchase the additional boxes and trolleys. This option would in effect have the same footprint as 4 wheeled bins.
- 7.7 Scenario 4 would see residents receive an additional 140 litre grey bin for the collection of non-recyclable waste however this would be collected on a fortnightly basis. The existing wheeled bin (green) would be used to collect metals/plastics/cartons. This would therefore see 4 wheeled bins in total, in addition to the black box and grey caddy. The wheeled bins would be collected in-house however additional staff and vehicles would be required over scenario 1. Due to the material being collected separately in wheeled

bins it is anticipated that this scenario would see the authority potentially achieve a saving in running costs, mainly attributed to the lower cost of processing the material. However, as residents will receive an additional 10 litres of non-recyclable waste capacity per week, this is anticipated to lead to less participation in recycling. It is also unclear at this stage whether ZWS would fund this type of scenario.

- 7.8 As no scenario was selected in June 2016, there was no change to the existing arrangements which meant that the co-mingled dry recyclate continues to be collected in the blue bin every two weeks.
- 7.9 In relation to the food waste and garden waste collections, the authority currently collects these materials separately. It is noted that some other authorities in Scotland collect these materials together. There are a number of barriers for this authority to conduct this at present namely;
- In order to treat the material appropriately, we would need to design and build our own in-vessel composting (IVC) facility at significant cost (and stop the current Council-operated open windrow composting).
  - As there is no current treatment facility in the Falkirk area to directly drop the material off at, we would require a bulking facility in Falkirk (and invest in ensuring that it is compliant with Animal By-Products Regulations in relation to handling food waste material) and then send the material for treatment outwith the district by an external contractor for example at Binn Farm, Perth or Levenseat, Forth.
  - We currently handle c8,000 tonnes of garden waste and c5,000 tonnes of food waste. The cost per tonne of treating the garden waste mixed with food waste is higher than treating the garden waste separately and all of the tonnage would be subject to the higher charge. The current treatment costs for the separate collections is c£379,000 per annum. The co-mingled material would be required to be treated by IVC at a cost per annum of c£520,000 (an increase of c£141,000).
  - The garden waste collection is non-statutory. Co-mingling with food waste would mean that this removes the possibility of ceasing the garden waste collection.
  - The garden waste collection could be a chargeable service (as per Controlled Waste Regulations). Co-mingling with food waste adds complexity with charging for this service as a food waste collection is statutory (as per Waste (Scotland) Regulations) and non-chargeable to residents.
  - There are implications for the contractual arrangements in place with our collector of food waste and our food waste treatment provider.
- 7.10 The current Council collection system is based on using wheeled bins. It is noted that at least 6 local authorities in Scotland provide a 4 wheeled bin collection service including East Renfrewshire, Moray, Stirling, Fife, North and South Lanarkshire. Using a wheeled bin system would require a minimum of 3 wheeled bins for a charter compliant service (1 for non-recyclable waste, 1 for paper/card and 1 for metals/plastics/cartons) with the addition of an optional wheeled bin for the non-statutory collection of garden waste.

## 8. Next Steps

- 8.1 Appendix 3 provides an overview of the current and potential collection arrangements.
- 8.2 This document highlights that, to become charter compliant with the kerbside collection system in the most cost effective way for the Authority, the collection system would be implemented as follows;

| Charter Compliant Collection Service | Container:<br>Size, Colour, Type         | Frequency     | Materials                                                                                     |
|--------------------------------------|------------------------------------------|---------------|-----------------------------------------------------------------------------------------------|
|                                      | 23 litres<br>Grey caddy                  | Every week    | Food waste                                                                                    |
|                                      | 55 litres<br>Black box                   | Every 2 weeks | Glass, small electricals, textiles and household batteries, Absorbent Hygiene Products (AHP)* |
|                                      | 240/360 litres<br>Blue wheeled bin       | Every 4 weeks | Metals, plastics & cartons                                                                    |
|                                      | 240 litres<br>(Colour 'tbc') wheeled bin | Every 4 weeks | Paper and card                                                                                |
|                                      | 240 litres<br>Green wheeled bin          | Every 4 weeks | Non-recyclables                                                                               |
|                                      | Optional Container (Non-Statutory)       |               |                                                                                               |
|                                      | 240 litres<br>Brown wheeled bin          | Every 4 weeks | Garden waste                                                                                  |

*\* AHP is collected in a white sack from the kerbside adjacent to the black box. The vehicle used for this collection has separate compartments to segregate the collected glass, textiles, AHP, small electricals and household batteries.*

This represents scenario 1 described in paragraph 7.4 above.

- 8.3 The charter compliant collection service outlined above would enable the authority to access the funding available and reduce the budgetary pressures of a co-mingled dry recycle collection.
- 8.4 As the first signatory of the Charter, providing this common collection system would meet our obligations.
- 8.5 If agreed, this new system would be fully communicated to householders in advance of rolling the system out in phases across the district from summer 2018. An audit has been undertaken of the properties that are deemed suitable to transition to the new system. Some flatted properties may not be deemed suitable at present but over time their suitability will be reviewed.
- 8.6 Although affected by other variables, it is anticipated that should the new system be introduced, the Authority's recycling and composting rate will increase from the current figure of 51.3% due to the improved quality of recycle.



- 8.7 The non-statutory garden waste collection could either continue as 4 weekly collection service in the summer months and on demand in the winter or could become an optional container and/or a chargeable service. Angus Council and Highland Council have introduced a charge for their garden waste collection and other local authorities in Scotland are reviewing their position in this regard with Midlothian Council, West Lothian Council and Edinburgh Council including a charge in recent budget saving proposals.

## **9. Consultation**

- 9.1 Within the PDP process in 2016 (which was conducted to review the options open to the authority relating to the Charter and are similar to those being reviewed within this report), a stakeholder engagement exercise was conducted with members of the public. None of the scenarios was dismissed by the public at the time.
- 9.2 Additionally, the information and analysis contained in Appendix 1 provides feedback on a number of areas in relation to the current collection service.

## **10. Implications**

### **Financial**

- 10.1 Until the charter compliant collection service is introduced, the budget for processing co-mingled dry recyclate will continue to be under financial pressure. Changing the collection system to be aligned with the charter would also bring the processing of the material towards the allocated budget. Appendix 2 outlines the relative financial implications for each of the scenarios as reported in June 2016.

### **Resources**

- 10.2 A further 10 processing staff have been employed in order to process the material from the current collection system. These staff will remain in place until the charter compliant collection service is introduced, when a review of staffing requirements will be completed. Subject to the foregoing scenario 1, as described in paragraph 7.3, could be delivered using existing staff resources. All other scenarios would require an additional resource.

### **Legal**

- 10.3 None.

### **Risk**

- 10.4 The funding available from ZWS is limited and, as other Councils submit their own applications in future, should the offer of funding not be accepted at this time, available funding is likely to be reduced in the future.
- 10.5 It is not clear at this time whether funding would be available for the introduction of a container for non-recyclable waste (as per PDP scenario 4).

- 10.6 There is a possibility that the requirement to change the collection system in line with the Charter becomes mandatory and as a signatory of the Charter, the authority's current co-mingled dry recyclate collection would be contrary to this.

### **Equalities**

- 10.7 None.

### **Sustainability/Environmental Impact**

- 10.8 None other than already mentioned within the report.

## **11. Conclusions**

- 11.1 Until a charter compliant service is introduced, the Council will continue to incur higher costs than necessary for processing co-mingled dry recyclate at its Council operated facility.
- 11.2 Further additional budgetary and processing pressures may be experienced from the marketplace in the coming months due to the need for higher quality material required by the supply chain.
- 11.3 A funding offer has been received from Zero Waste Scotland for the authority to procure an additional 240 litre wheeled bin and transition to a charter compliant collection system.
- 11.4 A charter compliant collection system has been presented in paragraph 8.2, with an optional container for the garden waste collection. This system would enable the authority to access the funding available and reduce the budgetary pressures of a co-mingled dry recyclate collection and represents the most cost effective method of delivering a charter compliant service. This will, however, mean the introduction of a new 240 litre container to most of the area's households.

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Director of Development Services

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## **APPENDICES**

Appendix 1 – Information and analysis of current arrangements

Appendix 2 – Scenarios contained in Policy Development Panel 2015/16

Appendix 3 – Considerations in relation to the current and potential collection system

### **List of Background Papers:**

**The following papers were relied on in the preparation of this report in terms of the Local Government (Scotland) Act 1973:**

- **Policy Development Panel Meetings – 3 & 11 Nov 2015 and 15 Dec 2015, 23 Mar 2016 and 12 May 2016**
- **Executive Committee – 6 June 2016 & 13 June 2017**
- **Household Recycling Charter for Scotland**
- **Code of Practice – Household Recycling in Scotland**

## Appendix 1: Information and Analysis of Current Waste Collection Service Arrangements

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### Four weekly cycle green bin

- *Is this the best option for all residents?*

As previously presented, the costs associated with each green bin collection option are set out below:

| Operations Staff                                 | No. of Vehicles | Actual cost          |
|--------------------------------------------------|-----------------|----------------------|
| Front Line Green <b>(4-Weekly Collection)</b>    | 3               | £429,000.00          |
| Staff Cover 15%                                  | -               | £31,725.00           |
| Vehicle Cover 50%                                | 1.5             | £67,500.00           |
| Disposal Cost                                    | -               | £2,095,800.00        |
|                                                  |                 | <b>£2,624,025.00</b> |
| Front Line Green <b>(3-Weekly Collection)</b>    | 5               | £715,000.00          |
| Staff Cover 15%                                  | -               | £52,875.00           |
| Vehicle Cover 50%                                | 2.5             | £112,500.00          |
| Disposal Cost                                    | -               | £2,324,142.40        |
|                                                  |                 | <b>£3,204,517.40</b> |
| Front Line Green <b>(Fortnightly Collection)</b> | 6               | £858,000.00          |
| Staff Cover 15%                                  | -               | £63,450.00           |
| Vehicle Cover 50%                                | 3               | £135,000.00          |
| Disposal Cost                                    | -               | £3,063,939.84        |
|                                                  |                 | <b>£4,120,389.84</b> |

There are approximately 72,000 properties on the four-weekly collection cycle. Since the introduction of the service, we have worked with householders to ensure that they have a collection that meets their needs whilst still delivering the four-weekly collection that was required by the budget setting process in February 2016.

An audit was undertaken of the properties that were deemed suitable to transition to a four-weekly green bin service. The majority of the properties not currently deemed suitable are flatted properties. Over time their suitability will be reviewed.

- ***Has contamination of blue bin increased/decreased***

As part of the transition to our own Materials Recovery Facility (MRF) we were required to conduct sampling in line with the MRF regulations. As a result of this detailed sampling of input material, it has been noted that the non-recyclable material in the blue varies from 10 to 25%. This has remained relatively consistent before and after the change to a four-weekly cycle of the green bin.

Within our service standard available on the website and introduced prior to the change to a three-weekly green bin collection cycle, the following is outlined with respect to dealing with contamination and what we expect from householders:

- *To use the bins and containers provided for the correct materials and to ensure the maximum amount of your waste is recycled or composted*
- *Your green bin may not be emptied if it contains recyclable material or food waste*
- *If your bin contains the wrong material, we will advise you by placing a sticker on the bin/container. This bin will not be uplifted. Any contamination must be removed and placed in the correct container.*
- *We will then arrange to uplift the bin on your next scheduled collection, once we have been notified that contamination has been removed.*
- *Householders that contaminate bins on a second occasion will be sent a postcard/ letter advising them of the contamination issue as well as the action above. A third occasion will result in a visit by a Council officer who will discuss the contamination issue directly with the householder.*

- ***Has recyclable material in green bin increased/decreased***

One of the largest proportions of recyclable material in the green bin identified by waste composition analysis was food waste. We have noted an increase of ~1000 tonnes of food waste captured via the grey caddy collection since the change to a four-weekly cycle.

- ***Fly-tipping increase since introduction?***

There has not been a noticeable increase of fly-tipping since the introduction of the four-weekly cycle. A report to the Scrutiny panel in February 2017 is contained on the Council website.

Updates to the report include:

- Table in Paragraph 4.2  
Period 2016/17, Number of Requests = 6,584; Income Received = £98,760
- Table in Paragraph 4.3  
Period 2016, Number of Fly-tipping Incidents = 1,736
- Table in Paragraph 4.4  
Period 2016/17, Number of Lines = 4,138; Recharge Cost = £142,214
- Table in Paragraph 4.12  
Period 2016/17, Number of Lines = 786; Recharge Cost = £59,159

- ***Estate management, working effectively in relation to fly-tipping rather than proactively?***

Please refer to the aforementioned report to the Scrutiny panel for details and also answer above.

## Education and Publicity

- ***Should residents be reminded of what can and can't go in the blue bin?***

When the green bin collection cycle changed from every two weeks to every three in 2014/15, a pack was provided to householders that included a visual guide of what can and can't go in the blue bin. Also included was a 'What Goes Where Wheel' assisting residents as to which containers materials should go into.

In October 2016, a further information guide was provided to every household affected by the change to a four-weekly cycle. It again highlighted what materials can and can't go in the blue bin.

The Council website contains details of what can and can't go into the blue bin. We also regularly communicate to householders via email and on the doorstep as to the correct materials. Articles relating to recycling are also included within the Falkirk Council News and in the Falkirk Herald periodically.

- ***How can we inform all residents of bin uplift dates and if collections are late, bad weather resource etc***

Every household has a collection calendar which is available online with a function to download or print this and also add to a smart-phone which sets reminders for the days of collection.

The Contact Centre are provided with details on a daily basis of any operational issues in order to inform the public at first point of contact.

In addition, were significant issues in a particular Ward area, the service has provided details to the Members in the Ward area affected.

Also, the Council website has the ability to provide alerts regarding issues with the collection service. We can also use the Councils Twitter feed to inform residents about any collection issues.

## Brown Bin

- ***Is the new two weekly uplift proving popular***

Tonnages for kerbside collected brown bin material are noted below:

| Period                                            | Tonnes                          |
|---------------------------------------------------|---------------------------------|
| 2014 (Fortnightly service)                        | 9,278                           |
| 2015 (Fortnightly service)                        | 9,212                           |
| 2016 (Four-weekly service)                        | 7,221                           |
| 2017* (Fortnightly service (Apr to Sep) to date ) | 5,014 to date (8,077 projected) |

\* Four-weekly service from Jan to Mar and Oct to Dec

- ***Has the amount of garden waste increased in relation to uplift frequency***

Please refer to the answer provided above.

- ***How many residents use their brown bin regularly?***

Please refer to the answer provided above. Residents also have access to the two HWRCs to dispose of their garden waste.

- ***Does the amount of garden waste require two weekly service***

In 2016 when the brown bin service changed to every four weeks, the option of an additional brown bin was introduced (annual charge of £50) for households that felt they required additional capacity. In 2016, 96 households requested an additional brown bin.

This would suggest that the amount of garden waste does not require a two weekly service albeit there are times in the year when more garden waste is produced. Residents continue to have access to the two HWRCs to dispose of their garden waste.

#### **Missed Bins**






- ***Reasons behind missed bins, what are the causes of this?***

Bins may be missed on the day of collection as a result of vehicle breakdown, extreme weather events, localised road maintenance, genuine operator error or by late presentation by the householder (i.e. we request within the service standard that containers are presented by 6.45am).

Where a missed bin occurs, we request that householders report this within 24 hours and we will return to collect it. Householders can report missed bins via the My Falkirk portal on the Council website.

Appendix 2: Details of Collection Service including Costs of Budgeted Position and Scenarios 1 to 4

BUDGETED POSITION (2016/17)

| Non-Recyclable Waste                                                              | Co-mingled Dry Recycling                                                          | Glass, Textiles, Small WEEE and Nappies/AHP                                         | Food                                                                                | Garden                                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| 4-Weekly                                                                          | Fortnightly                                                                       | Fortnightly                                                                         | Weekly                                                                              | 4-Weekly                                                                            |

|         |                                                        | COST              |
|---------|--------------------------------------------------------|-------------------|
| REVENUE | Staffing and Vehicle Costs                             | £3,410,000        |
|         | Container Replacements                                 | £220,182          |
|         | <b>Collection Cost</b>                                 | <b>£3,630,182</b> |
|         | Dry Recycling Income/Cost                              | £278,660          |
|         | Organics Gate Fees                                     | £367,650          |
|         | Residual Waste Disposal                                | £2,199,028        |
|         | Haulage & Transfer                                     | £33,138           |
|         | <b>Disposal/ Treatment Cost</b>                        | <b>£2,878,476</b> |
|         | <b>Total Revenue (Collection + Disposal/Treatment)</b> | <b>£6,508,658</b> |
| CAPITAL | Service Change Comms                                   | £110,250          |
|         | Vehicles                                               | £0                |
|         | Containers                                             | £0                |
|         | <b>Capital Cost</b>                                    | <b>£110,250</b>   |

OVERVIEW OF BUDGETED POSITION (2016/17)

At Council on the 17 February 2016 members agreed to implement a 4-weekly collection of the brown bin (garden waste) and the green bin (non-recyclable waste). As such as part of this review officers modelled this budgeted position. The service is illustrated above with cost details opposite.







With respect to compliance with the Recycling Charter, the Councils current budgeted position would not be compliant. This is because this service does not provide one container for paper/card and another container for plastics/metals/cartons. Instead the service utilise one container (blue bin) to collect this material.

Once the frequency change from 3-Weekly to 4-Weekly green bin takes place, it is anticipated that the recycling performance would marginally improve from the current position to the budgeted position.



## Appendix 2: Details of Collection Service including Costs of Budgeted Position and Scenarios 1 to 4

### SCENARIO 1: 4-Weekly Collection of Wheeled Bins

| Non-Recyclable Waste                                                              | Paper and Card                                                                    | Plastic, Metal and Cartons*                                                        | Glass, Textiles, Small WEEE and Nappies/AHPs                                        | Food                                                                                | Garden                                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 4-Weekly                                                                          | 4-Weekly                                                                          | 4-Weekly                                                                           | Fortnightly                                                                         | Weekly                                                                              | 4-Weekly                                                                            |

|         |                                                         | COST              |
|---------|---------------------------------------------------------|-------------------|
| REVENUE | Staffing and Vehicle Costs                              | £3,410,000        |
|         | Container Replacements                                  | £278,757          |
|         | <b>Collection Cost</b>                                  | <b>£3,688,757</b> |
|         | Dry Recycling Income/Cost                               | (£205,068)        |
|         | Organics Gate Fees                                      | £367,650          |
|         | Residual Waste Disposal                                 | £2,199,028        |
|         | Haulage & Transfer                                      | £33,138           |
|         | <b>Disposal/ Treatment Cost</b>                         | <b>£2,394,748</b> |
|         | <b>Total Revenue (Collection + Disposal/Treatment)</b>  | <b>£6,083,505</b> |
| CAPITAL | Service Charge Comms                                    | £110,250          |
|         | Vehicles                                                | £0                |
|         | Containers                                              | £1,171,500        |
|         | <b>Capital Cost</b>                                     | <b>£1,281,750</b> |
|         | <b>Revenue Variation from 2016/17 Budgeted Position</b> | <b>(£425,153)</b> |

### OVERVIEW OF SCENARIO 1





Scenario 1 would see residents receive an additional 240L grey bin for the collection of Non-Recyclable Waste. This would then see the existing wheeled bin (green) be used to collect plastic/metal/cartons. This would see 4 wheeled bins in total, in addition to the kerbside box and food caddy.

Due to the material being collected separately in wheeled bins it is anticipated that this scenario would see the authority potentially achieve a significant saving in running costs, mainly attributed to the lower cost of processing the material but also linked to operational efficiencies (1 wheeled bin collected per week). To implement this scenario the Council would need to bid for funding for the purchase of the new wheeled bins which is anticipated to be c£1,171,500. At the moment the criteria for funding or levels of funding are not available to the authority.

\* To ensure the service is compliant with the Recycling Charter the Council would provide additional capacity to residents for plastic/metal/cartons upon request.

## Appendix 2: Details of Collection Service including Costs of Budgeted Position and Scenarios 1 to 4

### SCENARIO 2: Weekly Collection of Kerbside Boxes

| Non-Recyclable Waste                                                              | Paper, Card, Plastic, Metal, Cartons, Textiles, Small WEEE, Nappies/AHPs and Glass | Food                                                                                | Garden                                                                              |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| 4-Weekly                                                                          | Weekly                                                                             | Weekly                                                                              | 4-Weekly                                                                            |

|                                                         |                                                        | COST              |
|---------------------------------------------------------|--------------------------------------------------------|-------------------|
| REVENUE                                                 | Staffing and Vehicle Costs                             | £4,261,500        |
|                                                         | Container Replacements                                 | £202,543          |
|                                                         | <b>Collection Cost</b>                                 | <b>£4,464,043</b> |
|                                                         | Dry Recycling Income/Cost                              | (£273,558)        |
|                                                         | Organics Gate Fees                                     | £367,650          |
|                                                         | Residual Waste Disposal                                | £2,199,028        |
|                                                         | Haulage & Transfer                                     | £33,138           |
|                                                         | <b>Disposal/ Treatment Cost</b>                        | <b>£2,326,257</b> |
|                                                         | <b>Total Revenue (Collection + Disposal/Treatment)</b> | <b>£6,790,301</b> |
| CAPITAL                                                 | Service Change Comms                                   | £110,250          |
|                                                         | Vehicles                                               | £0                |
|                                                         | Containers                                             | £2,040,000        |
|                                                         | <b>Capital Cost</b>                                    | <b>£2,150,250</b> |
| <b>Revenue Variation from 2016/17 Budgeted Position</b> |                                                        | <b>£281,643</b>   |

### OVERVIEW OF SCENARIO 2

In this scenario residents would receive a stackable set of kerbside boxes that would replace the existing Council blue bin with all materials from the blue bin being transferred to the new trolley box service.






In this scenario, the time taken to collect the material is considerably longer due to the increased sorting at the kerbside. As such this scenario would be more expensive to operate and require an increase to the existing service budget. This scenario would be fully compliant with the Charter.

To implement this scenario the Council would need to re-tender its existing kerbside recycling contract to accommodate the changes due to the predicated change in expenditure for collection and would require funding to be available to purchase the boxes. It is anticipated the funding required would be c£2,040,000. As per Scenario 1, the details of the funding are not available at this time.

This scenario is anticipated to have the joint highest recycling rate potential.

## Appendix 2: Details of Collection Service including Costs of Budgeted Position and Scenarios 1 to 4

### SCENARIO 3:

| Non-Recyclable Waste                                                              | Paper and Card                                                                    | Plastic, Metal, Cartons, Textiles, Small WEEE, Nappies/AHPs and Glass              | Food                                                                                | Garden                                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| 4-Weekly                                                                          | 4-Weekly                                                                          | Fortnightly                                                                        | Weekly                                                                              | 4-Weekly                                                                            |

|         |                                                         | COST              |
|---------|---------------------------------------------------------|-------------------|
| REVENUE | Staffing and Vehicle Costs                              | £3,736,000        |
|         | Container Replacements                                  | £259,318          |
|         | <b>Collection Cost</b>                                  | <b>£3,995,318</b> |
|         | Dry Recycling Income/Cost                               | (£273,558)        |
|         | Organics Gate Fees                                      | £367,650          |
|         | Residual Waste Disposal                                 | £2,199,028        |
|         | Haulage & Transfer                                      | £33,138           |
|         | <b>Disposal/ Treatment Cost</b>                         | <b>£2,326,257</b> |
| CAPITAL | <b>Total Revenue (Collection + Disposal/Treatment)</b>  | <b>£6,321,576</b> |
|         | Service Charge Comms                                    | £110,250          |
|         | Vehicles                                                | £0                |
|         | Containers                                              | £1,980,000        |
|         | <b>Capital Cost</b>                                     | <b>£2,090,250</b> |
|         | <b>Revenue Variation from 2016/17 Budgeted Position</b> | <b>(£187,082)</b> |

### OVERVIEW OF SCENARIO 3

In this scenario, the blue bin is used for paper and card only collected on a 4-weekly frequency with householders receiving a trolley box for plastics/metal/cartons collected fortnightly. This is considered a hybrid between scenarios 1 and 2.







This scenario would be compliant with the Charter. Although not to the same extent as scenario 2, the time taken to collect the material is still longer than when collected in one bin due to the increased sorting at the kerbside. As such this scenario would be more expensive to operate than the budgeted position however, the dry recycling income/cost offsets this revenue.

The Council would need to re-tender its existing kerbside recycling contract to accommodate the changes due to the predicated change in expenditure for collection and would require funding to be available to purchase the boxes. It is anticipated the funding required would be c£1,980,000. As per Scenario 1 and 2, the details of the funding are not available at this time.

This scenario is anticipated to have the joint highest recycling rate potential.

## Appendix 2: Details of Collection Service including Costs of Budgeted Position and Scenarios 1 to 4

### SCENARIO 4:

| Non-Recyclable Waste                                                              | Paper and Card                                                                    | Plastic, Metal and Cartons*                                                        | Glass, Textiles, Small WEEE and Nappies/AHPs                                        | Food                                                                                | Garden                                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Fortnightly                                                                       | 4-Weekly                                                                          | 4-Weekly                                                                           | Fortnightly                                                                         | Weekly                                                                              | 4-Weekly                                                                            |

|                                                         |                                                        | COST              |
|---------------------------------------------------------|--------------------------------------------------------|-------------------|
| REVENUE                                                 | Staffing and Vehicle Costs                             | £3,598,000        |
|                                                         | Container Replacements                                 | £278,757          |
|                                                         | <b>Collection Cost</b>                                 | <b>£3,876,757</b> |
|                                                         | Dry Recycling Income/Cost                              | (£201,063)        |
|                                                         | Organics Gate Fees                                     | £342,031          |
|                                                         | Residual Waste Disposal                                | £2,297,599        |
|                                                         | Haulage & Transfer                                     | £28,980           |
|                                                         | <b>Disposal/ Treatment Cost</b>                        | <b>£2,467,547</b> |
|                                                         | <b>Total Revenue (Collection + Disposal/Treatment)</b> | <b>£6,344,304</b> |
| CAPITAL                                                 | Service Change Comms                                   | £110,250          |
|                                                         | Vehicles                                               | £480,000          |
|                                                         | Containers                                             | £1,171,500        |
|                                                         | <b>Capital Cost</b>                                    | <b>£1,761,750</b> |
| <b>Revenue Variation from 2016/17 Budgeted Position</b> |                                                        | <b>(£164,354)</b> |

### OVERVIEW OF SCENARIO 4

Scenario 4 would see residents receive an additional 140L grey bin for the collection of Non-Recyclable Waste however this would be collected on a fortnightly basis. The existing wheeled bin (green) would be used to collect plastic/metal/cartons. This would therefore see 4 wheeled bins in total, in addition to the kerbside box and food caddy.

Due to the material being collected separately in wheeled bins it is anticipated that this scenario would see the authority potentially achieve a saving in running costs, mainly attributed to the lower cost of processing the material. However, as residents will receive an additional 10L of non-recyclable waste capacity per week, this is anticipated to lead to less participation in recycling. Funding for the purchase of the new wheeled bins would be required (and additional vehicles) anticipated to be c£1,651,500. Presently, the criteria for funding or levels of funding are not available to the authority.

\* To ensure the service is compliant with the Recycling Charter the Council would provide additional capacity to residents for plastic/metal/cartons upon request.

This scenario is anticipated to have the lowest recycling rate potential.

## APPENDIX 3

### CURRENT AND POTENTIAL STATUS OF THE RECYCLING AND WASTE COLLECTION SERVICE






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#### 1. INTRODUCTION

- 1.1 This note provides a summary of the current status and potential status of the recycling and waste collection service in relation to alignment with the Charter for Household Recycling in Scotland.

#### 2. CURRENT STATUS OF RECYCLING AND WASTE COLLECTION SERVICE







- 2.1 The current status is illustrated below:

| Non Charter Aligned Container                                                      | Charter Aligned Containers                                                         |                                                                                     |                                                                                      | Non-Statutory                                                                        |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Paper, Card, Metals, Plastics and Cartons                                          | Glass, Textiles, Small Electricals, Household Batteries (& Nappies)                | Food Waste                                                                          | Non-Recyclable Waste                                                                 | Garden Waste                                                                         |
|  |  |  |  |  |
| Fortnightly                                                                        | Fortnightly                                                                        | Weekly                                                                              | 4-Weekly                                                                             | 4-Weekly                                                                             |

- 2.2 As shown above, the blue bin is currently not aligned with the requirements of the Charter. This is in relation to the mixture of recyclable materials in one container. The Charter requires paper and card to be separate to metals, plastics and cartons.
- 2.3 In addition, the Charter does not require the collection of garden waste as it is deemed to be a non-statutory service (and can be chargeable). The collection of garden waste does however contribute to the recycling/composting rate.
- 2.4 The black box collection allows for the collection of glass which is required by the Charter. In addition to the requirements of the Charter it includes the collection (in the same resource recovery vehicle) of textiles, small electricals and household batteries and an Absorbent Hygiene Product collection (predominantly for nappies)).
- 2.5 Food waste and non-recyclable waste containers are both Charter aligned.

### 3. POTENTIAL STATUS OF RECYCLING AND WASTE COLLECTION SERVICE

3.1 The potential status, and to become fully Charter aligned, is illustrated below:

| Charter Aligned Containers                                                        |                                                                                   |                                                                                   |                                                                                    |                                                                                     | Optional Container                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Metals, Plastics and Cartons                                                      | Paper and Card                                                                    | Glass, Textiles, Small Electricals, Household Batteries (& Nappies)               | Food Waste                                                                         | Non-Recyclable Waste                                                                | Garden Waste                                                                        |
|  |  |  |  |  |  |
| 4-Weekly                                                                          | 4-Weekly                                                                          | Fortnightly                                                                       | Weekly                                                                             | 4-Weekly                                                                            | Fortnightly (Chargeable)                                                            |

3.2 Full alignment with the Charter requires the mixture of paper, card, metals, plastics and cartons to be separated into a container for paper and card and a container for metals, plastics and cartons. All other containers would remain the same.

3.3 The garden waste collection would be an optional container. It is a non-statutory service and is not required within the provisions of the Charter. It could also be a chargeable collection every fortnight.







### 4. SERVICE COSTS

4.1 By changing from the current status to the potential status (Charter aligned service), the costs in terms of collection would be neutral. This is in relation to the work associated with collecting paper, card, metals, plastics and cartons being split across the collection crews i.e. instead of one bin collected every two weeks there are two bins collected every four weeks. There is no change in the staff numbers associated with the frontline domestic collection.

4.2 The garden waste collection, could move to a chargeable service. The charge would be set to cover the cost of providing the service and therefore could be cost neutral. This service would be proposed as fortnightly between March and November (then on-demand fortnightly between December and February). Alternatively, this could remain non-chargeable and on a four weekly cycle as per current budget.

## 5. IMPACT ON STAKEHOLDERS

- 5.1 An example collection cycle under the new charter-aligned collection service for the households is presented below:

|                                 | Metals,<br>Plastics and<br>Cartons                                                | Paper and<br>Card                                                                 | Glass,<br>Textiles,<br>Small<br>Electricals,<br>Household<br>Batteries<br>(& Nappies) | Food<br>Waste                                                                       | Non-<br>Recyclable<br>Waste                                                         | Garden<br>Waste                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Example<br>Collection<br>Cycle: |  |  |      |  |  |  |
| Week 1                          | ✓                                                                                 |                                                                                   | ✓                                                                                     | ✓                                                                                   |                                                                                     |                                                                                     |
| Week 2                          |                                                                                   | ✓                                                                                 |                                                                                       | ✓                                                                                   |                                                                                     |                                                                                     |
| Week 3                          |                                                                                   |                                                                                   | ✓                                                                                     | ✓                                                                                   | ✓                                                                                   |                                                                                     |
| Week 4                          |                                                                                   |                                                                                   |                                                                                       | ✓                                                                                   |                                                                                     | ✓                                                                                   |

- 5.2 In general terms, householders will be presenting one wheeled bin at a time alongside their food and/or box (this may not always be the case as it is dependent on the tonnage of material and route optimisation requirements).