Public Document Pack



<u>To</u>: Councillor Jean Morrison MBE, <u>Convener</u>; and Councillors Cooney, Corall, Delaney, Donnelly, Jackie Dunbar and Finlayson.

Town House, ABERDEEN, 24 November, 2015

ZERO WASTE MANAGEMENT SUB COMMITTEE

The Members of the **ZERO WASTE MANAGEMENT SUB COMMITTEE** are requested to meet in Committee Room 4 - Town House on **TUESDAY, 1 DECEMBER 2015 at 2.00 pm.**

FRASER BELL HEAD OF LEGAL AND DEMOCRATIC SERVICES

BUSINESS

- 1 Apologies
- 2 Minute of Previous Meeting of 6 October 2015 (Pages 5 8)
- 3 <u>Code of Practice Household Recycling in Scotland</u> (Pages 9 86)
- 4 Review of Energy from Waste Business Case (Pages 87 134)
- 5 Zero Waste Project Update (Pages 135 172)
- 6 Dates for 2016 (Pages 173 174)
- 7 <u>Date of Next Meeting 23 February 2016</u>

Website Address: www.aberdeencity.gov.uk

Should you require any further information about this agenda, please contact Kate Lines, tel. 01224 522120 or email klines@aberdeencity.gov.uk

Briefing for Elected Members on the Importance of EHRIAs

As an elected member, you will know you have an important role to play in championing equality within and outside Aberdeen City Council. There is also a scrutiny role for you to ensure that equality considerations are included in the decision making and governance of the council.

In exercising your duties as an elected member, you will make decisions which shape the council budget as well as the practice, strategies, plans and policies of the council. You have to make sure that the relevant equality implications are considered and so need to have sufficient information to satisfy our legal requirement to pay "due regard" to equality. Since public authorities subject to the equality duties are also likely to be subject to the obligations under the Human Rights Act, our impact assessment tool also considers the potential impact our decisions could have on human rights – Equality and Human Rights Impact Assessment (EHRIA).

EHRIA forms are included in the agenda pack, and this is important as it ensures that the impact of any proposals being considered by the Committee is clear at the point of decision making. These are included at the back of the report, as an appendix. Committee members should feel able to ask questions of report authors in relation to EHRIA forms, including questions about why an impact assessment has not been carried out / is not included.

There is an onus on elected members to make sure that EHRIAs are robust and give appropriate weighting in decision-making processes. In recent guidance from the Equality and Human Rights Commission, relevant case law examples show the Courts stating that, the public authority had to demonstrate that it had paid 'due regard' to its equality obligations.

Policies and practices should be assessed for impact across the three parts of the public sector duty (eliminate unlawful treatment, advance equality of opportunity and foster good relationships).

These duties do not prevent us from taking many difficult decisions such as reorganisations and relocations, redundancies, and service reductions, nor do they stop us from making decisions, that may affect one group more than others. Whilst we have a duty to involve groups of people who have protected characteristics, this does not give them the right of veto regarding any of our budget proposals or other council decisions.

What the equality duties do is enable us to demonstrate that we are making decisions in a fair, transparent and accountable way, considering the needs and the rights of different members of our communities.

The EHRIA will allow you to see that people with protected characteristics are enjoying equal access to our services, and where they are not, or are over / under-represented, or are not getting as good a service, the EHRIA gives the opportunity to do something to resolve the situation.

The equality target groups, or people with protected characteristics, include age, disability, gender reassignment, marriage or civil partnership, pregnancy and maternity, race, religion or belief, sex (gender) and sexual orientation.

The sort of questions to ask yourself as you read an EHRIA might include:

- How might the proposal impact on ethnic minority communities, including Gypsy / Travellers?
- How might the proposal impact on people with a disability?
- Would the impacts on women and men or the Transgender community differ?
- Would the proposal affect ethnic minority women and men in the same ways?
- Would the proposal affect women and men with disabilities in the same ways?
- What about age considerations when thinking about impacts?

It is important to remember that the potential impact is not just about numbers. Evidence of a serious impact on a small number of individuals is just as important as something that will impact on many people. You should also think about how individual proposals might relate to one another. This is because a series of changes to different policies or services could have a severe impact on particular protected groups.

The EHRIA is therefore an invaluable tool to assist you in ensuring that the interests of all groups are properly taken into account when difficult choices about resources are required.

A case study on "Southall Black Sisters – the need to impact assess decisions" is set out below.

Southall Black Sisters (SBS) provides specialist services to Asian and Black Caribbean women, particularly in relation to domestic violence issues.

In June 2007, Ealing council announced proposals to move away from funding particular organisations (such as SBS), towards commissioning services (including domestic violence services) following a competitive bidding exercise.

During discussions about criteria for commissioning domestic violence services SBS had highlighted the adverse impact the criteria could have on pre-existing domestic violence services provided to women from ethnic minority communities, and so an equality impact assessment should be carried out.

Ealing carried out belated impact assessments on proposals before deciding to proceed with the existing domestic violence services commissioning criteria, resulting in two SBS service users launching a judicial review of the decision.

Ultimately, Ealing conceded these submissions and withdrew from the case. However, in an oral judgement, Lord Justice Moses reiterated the importance of undertaking an equality impact assessment, and also the importance of carrying out an impact assessment before policy formulation.

Should you require any help with EHRIAs please contact me at sandrab@aberdeencity.gov.uk or 01224 523039 or Faiza at fnacef@aberrdeencity.gov.uk or 01224 523183.



ZERO WASTE MANAGEMENT SUB COMMITTEE

ABERDEEN, 6 October 2015 - Minute of Meeting of the ZERO WASTE MANAGEMENT SUB COMMITTEE. <u>Present</u>:- Councillor Jean Morrison MBE, <u>Convener</u>; and Councillors Cooney, Corall, Delaney, Jackie Dunbar, Finlayson and Thomson (as substitute for Councillor Donnelly).

The agenda and reports associated with this minute can be located at the following link:

http://committees.aberdeencity.gov.uk/ieListDocuments.aspx?Cld=439&Mld=3654&Ver=4

Please note that if any changes are made to this minute at the point of approval, these will be outlined in the subsequent minute and this document will not be retrospectively altered.

APOLOGIES

1. Apologies were intimated on behalf of Councillor Donnelly.

MINUTE OF PREVIOUS MEETING OF 23 JUNE 2015

2. The Sub Committee had before it the minute of the previous meeting of 23 June 2015.

The Sub Committee resolved:-

to approve the minute as an accurate record.

NATIONAL WASTE POLICY UPDATE

3. The Sub Committee had before it a report by the Director of Communities, Housing and Infrastructure which provided an update on policy issues relevant to the waste sector in Scotland and how these may impact on Aberdeen City.

The report recommended:-

that the Sub Committee notes the contents of the report and provides feedback to officers which can help inform future consultation responses.

The Waste and Recycling Manager advised that the Scottish Government Zero Waste Taskforce has developed a draft Recycling Charter aimed at achieving a more consistent recycling collection service across Local Authorities in Scotland. The Charter and Code of Practice are expected to be finalised by November 2015 and then local authorities will be invited to sign up. The exact details of the code of practice are yet unknown and officers will be looking to analyse the final draft and report back to the Sub Committee to see if there is opportunity to sign the Charter. Once the details of the

ZERO WASTE MANAGEMENT SUB COMMITTEE 6 October 2015

code of practice are known then Aberdeen City's strategy may need to be analysed to align with other local authorities but it wouldn't be expected to be immediate.

The Waste and Recycling Manager also advised on the Circular Economy Consultation issued by the Scottish Government. The document asks for responses to a number of proposed actions aimed at improving the economy and maximizing value from resources. Officers will contribute a response to this.

The Sub Committee resolved:-

- (i) to note the content of the report; and
- request that the clerk look into options to reduce the size of the agenda due to the size of EHRIA forms attached to some reports.

COMMUNAL MIXED RECYCLING PROJECT UPDATE

4. The Sub Committee had before it a report by the Director of Communities, Housing and Infrastructure which updated the members on progress with the planning and implementation of the communal mixed recycling project to residents across Aberdeen City.

The report recommended:-

that the Sub Committee considers the contents of the report and provides feedback to officers on the implementation plan and timescales.

The Waste Collection Services Manager advised that Aberdeen City Council have put in a bid from the Tenement Infrastructure Fund (TIF) to help roll out communal general waste and recycling facilities to 550 properties in Torry, Kincorth, Old Aberdeen and Mastrick. The timescales are not reliant on the funding and even if the bid is unsuccessful the project will still be going ahead.

The Sub Committee were advised that surveys of each individual site for the new communal mixed recycling container are due to be completed by December 2015. Consultation with the roads department and housing service is also being undertaken before the project is rolled out in 5 phases in January 2016, as detailed in appendix 1 of the report.

The main channel of communication with residents regarding the project will be in the form of a letter and leaflet. It was clarified to members that leaflets are available in other languages on request and that the leaflets were heavily pictorialized for ease of understanding.

The Sub Committee resolved:-

to note the contents of the report.

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ZERO WASTE PROJECT ALTENS EAST UPDATE

5. The Sub Committee had before it a report by the Director of Communities, Housing and Infrastructure which updated the Sub Committee on the progress of the Altens East element of the Zero Waste Project.

The report recommended:-

that the Sub Committee notes the contents of the report.

The Waste and Recycling manager advised that they were running a week behind on the agreement for the Waste Management Services contract. The planning application for the site has been submitted and is due for consideration at the December Planning Committee. There has been a slight delay to the planning process due to a change in the design which was found to be more cost effective.

The Sub Committee:-

- (i) to note the contents of the report; and
- (ii) to request that the Waste and Recycling Manager circulate drawings for the Altens East site to the members.

ZERO WASTE PROJECT JOINT WORKING UPDATE

6. The Sub Committee had before it a report by the Director of Communities, Housing and Infrastructure which updated members on the progress of the Energy from Waste Joint Working element of the Zero Waste Project.

The report recommended:-

that the Sub Committee-

- (a) note the contents of the report; and
- (b) approve the proposed expenditure for the procurement of external financial advisors, external technical advisors and a Project Director.

The Waste and Recycling manager advised that Aberdeen City, Aberdeenshire and Moray Councils have agreed in principle to pursue a joint solution for the treatment of residual waste produced by the three authorities. Officers from the three local authorities have been working to develop an Inter- Authority Agreement (IAA) that if adopted will commit them to undertaking a joint procurement of an energy from waste facility to be built in Aberdeen. The scope of the IAA is currently being established and is expected to be reported to the December Council meeting.

He also advised that they are looking to form a Stakeholders group to engage with communities regarding the project.

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If the project goes ahead the three local authorities will be working together and sharing the cost of capital but it will be proportionate against the amount of waste from each authority.

External Legal Advisors have been appointed to act for the three authorities under the Legal Framework to assist in preparing an initial IAA and to prepare any further agreements and develop the procurement strategy required to allow the authorities to commence the process for a suitable contractor to build and potentially operate a EfW Plant.

The Sub Committee resolved:-

to approve the recommendations.

DATE OF NEXT MEETING

- 7. The Sub Committee noted that the next meeting was scheduled for 1 December 2015
- Councillor Jean Morrison MBE Convener

Agenda Item 3

ABERDEEN CITY COUNCIL

COMMITTEE Zero Waste Management Sub-Committee

DATE 1 December 2015

DIRECTOR Pete Leonard

TITLE OF REPORT Code of Practice – Household Recycling in

Scotland

REPORT NUMBER ZWSC/7629

CHECKLIST COMPLETED Yes

1. PURPOSE OF REPORT

The purpose to this report is to update the Zero Waste Sub Committee on the development of the Code of Practice on Household Recycling in Scotland and to highlight some of the potential implications for Aberdeen City Council.

2. RECOMMENDATIONS

It is recommended that the Sub-Committee notes the contents of the report and provides feedback to officers which can be help inform the process and the ultimate decision on whether the Council will sign up to the Code of Practice.

3. FINANCIAL IMPLICATIONS

There are no financial implications as a result of this report.

4. OTHER IMPLICATIONS

It is highly likely that there will be significant policy and resource implications for the Council in the future if the authority decides to commit to the Code of Practice. The main implications are outlined later in this report.

5. CODE OF PRACTICE – HOUSEHOLD RECYCLING IN SCOTLAND

5.1 Background

5.1.1. The Zero Waste Taskforce developed a Charter for Household Recycling in August 2015 aimed at achieving more consistent recycling collection services and standards across Scotland. The Charter is a one page document which sets out high level principles for recycling service delivery (see Appendix 1). It falls in line with the principles of the waste hierarchy (waste prevention,

- recycling and re-use) and strives to encourage commitment to increased participation in services, improved resource management, sustainable employment and investment in the economy.
- 5.1.2 Supplementary to the Charter is a Code of Practice which is currently being developed and is expected to be finalised by late 2015. Officers from the authority attended a 2 day summit meeting which was facilitated by representatives from the Scottish Government, Zero Waste Scotland and CoSLA in September 2015. This event was attended by 31 of the 32 Scottish local authorities where the potential contents of the Code of Practice were discussed. Options for a single collection method were presented at the meeting. Following this event a draft Code of Practice document was produced for consultation in October 2015 (Appendix 2). Officers prepared and submitted a response to this consultation.
- 5.1.3 It is expected that the final Code of Practice will be produced and approved by the end of 2015 and that the Charter and Code of Practice will be sent to all local authorities to consider whether they wish to sign up to it.
- 5.2 Draft Code of Practice
- 5.2.1 The Code of Practice is based on achieving seven defined outcomes. These are not prioritised in any particular order. The outcomes are:
 - 1. Achieve high quantities of recycling and minimises non-recyclable waste.
 - 2. Support the circular economy through maximising high-quality materials.
 - 3. Cost effective services for local government.
 - 4. Keep citizens, staff and contractors safe and healthy.
 - 5. Services that encourage participation from citizens.
 - 6. Comply with regulations.
 - 7. Services that support Scottish and local employment.
- 5.2.2 The Code of Practice is a comprehensive document and covers design and operation of services, materials collected for recycling, policies, communications and workforce development.
- 5.2.3 Any authority signing up to the CoP would be required to commit to a number of mandatory essential commitments and work towards a further set of desirable commitments. The list of the essential and desirable commitments is lengthy but those essential commitments that are of particular significance are:

1	Separate containers are provided to each property for:
	Paper & card
	Metals, plastics & cartons
	Organic Waste
2	Separate containers for glass shall be provided to each property or alternatively

	within the community.
3	Weekly container volume for recycling for kerbside collection should exceed: Paper/card – 40 litres Metals/plastics/cartons – 70 litres Glass – 35 litres Food waste – 20 litres
4	At the point of collection, the contents of each container will either be sorted into constituent parts or placed in separate compartments or vehicles for sorting at site.
5	Separate containers for the same materials as above provided for communal collections also.
6	Households with kerbside access should be limited to a maximum capacity for residual waste of 80 litres per week
7	Communal collections limited to a maximum of 70 litres per week for residual waste.

The basic requirement of the Code of Practice is for provision of a kerbside sort service, keeping glass separate from all other materials. There is a clear conflict with this approach and Aberdeen City Council's Waste Strategy where the planned service is to provide a fully co-mingled recycling service, including glass in a single 240 litre wheeled bin.

- 5.2.4 We have concerns about the approach that is being taken with the Code of Practice in terms of its promotion of a kerbside sort system for the following reasons:
 - 1. Health & safety: kerbside sorting is higher risk due to the increased manual handling requirements.
 - 2. Capacity: from experience, we know that householders do not produce recyclables in similar volumes for each material stream, therefore any kind of multiple container approach leads to capacity problems.
 - 3. Practicality: a kerbside sort collection or multi-container collection is not possible to provide in many high density areas due to space issues both internally and externally.
 - 4. Convenience: a single container is easier and simpler to use and therefore is likely to yield higher participation rates and can be provided in many areas where multiple containers cannot.

Whilst it is fair to say that the overall quality of materials collected from a comingled collection is lower, this is offset by higher yields and the quality issues can be mitigated by a high-quality materials recycling facility of the type that is planned for Aberdeen.

6. IMPACT

This report does not recommend any changes to services at this stage and therefore has no impact, however, the following provides a brief outline of what the potential impacts of signing the Charter in its current form would be.

Improving Customer Experience – many residents in the city would not have access to a kerbside collection service for glass and would be required to store multiple recycling containers within their properties.

Improving Staff Experience – the increased manual handling requirement of a kerbside sort collection will have impacts on staff.

Improving our use of Resources – a kerbside sort service would result in higher quality materials being collected but the volume collected would likely be less and the cost of collection would be higher. There will be significant costs associated with making a transition to new services as well as the impact on investments already made in respect of MRF capacity in Aberdeen.

Corporate – the Charter is not in line with the Council's Waste Strategy and this would require to be redrafted or amended.

Public – this change of direction would require to be communicated with the public and would mean a change of service to those households who have recently moved to a co-mingled collection. Additionally, the Council's Waste Strategy is a public document and has been communicated widely – further communication would require to be done for a change of approach of this nature.

An Equality and Human Rights Impact Assessment (EHRIA) form is not required for this report, however, if the future services were to change in the manner described above an EHRIA would be required.

7. MANAGEMENT OF RISK

7.1 No risk register has been completed for this report. At this stage there are no direct implications for the Council from the policy developments outlined in the report.

8. BACKGROUND PAPERS

Appendix 1. Draft Recycling Charter Appendix 2. Draft Code of Practice

9. REPORT AUTHOR DETAILS

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Waste Strategy Manager

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Charter for Household Recycling in Scotland

This charter is a declaration of our organisation's intent to provide services that deliver local and national benefits, encouraging high-levels of citizen participation in waste prevention, recycling and reuse.

We, as leaders in local government and the main providers of services to households, acknowledge that significant progress has been made in achieving greater value from recycling and reusing household waste over the past 10 years. We also acknowledge that further progress is required to achieve better national and local outcomes.

We welcome the opportunity to make a commitment to our future waste, recycling and reuse services that will build on the progress achieved to date to ensure that waste is considered a resource and our services support sustainable employment and investment within the Scottish economy.

We recognise the opportunities of a more circular economy and better resource management to support sustainable employment and investment in the economy for the benefit of Scotland and its local communities.

We commit:

- To improve our household waste and recycling services to maximise the capture of, and improve the quality of, resources from the waste stream, recognising the variations in household types and geography to endeavour that our services meet the needs of all our citizens.
- To encourage our citizens to participate in our recycling and reuse services to ensure that they
 are fully utilised.
- To operate our services so that our staff are safe, competent and treated fairly with the skills required to deliver effective and efficient resource management on behalf of our communities.
- To develop, agree, implement and review a Code of Practice that enshrines the current best practice to deliver cost effective and high-performing recycling services and tell all of our citizens and community partners about both this charter and the code of practice.

Signatories		
	Council Leader	
	Chief Executive	
Scottish Ministers welcome this declaration and will work in partnership with the signatoric and their representatives to support the delivery of these commitments.		
Cabinet Secretary for Rural Affairs, Food and Environment		

To achieve this, we will do the following:

Designing our services

- We will design our household collection services to take account of the Code of Practice
 (CoP) for the variety of housing types and geography in our community. In doing so, over
 time, we will 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.
- 2. We will ensure that *all citizens have access to services* for recycling to include paper, card, glass, plastics, metals and food. Thus, we will ensure that all citizens, whether at the kerbside or within their local community, are provided with adequate volumes of containers in line with the Code of Practice (CoP).
- 3. We will ensure that our household collections give *consistent definition of materials* (paper, card, glass, plastics, metals and food) that can be competently recycled in line with the Code of Practice (CoP). Thus, we will eradicate discrepancies on what can and cannot be recycled in different localities across Scotland.
- 4. We will reduce the capacity provided for waste that cannot be recycled to give the appropriate motivation to our citizens to recycle. Thus, we will ensure that all citizens, whether at the kerbside or within their local community, are limited to non-recyclable (i.e. black bag/general waste/residual waste) waste volumes in line with the established Code of Practice (CoP).

Deliver consistent policies

- 5. We will ensure that our local policies, in line with the Code of Practice (CoP), encourage citizens to recycle by reducing the collection of waste that cannot be recycled (i.e. excess waste/side waste).
- 6. We will ensure that our local policies *provide citizens with sufficient capacity for their waste*, recognising that some households will produce more waste than others, in line with the Code of Practice (CoP).
- 7. We will ensure that our local policies *direct our collection crews to not collect containers for waste that cannot be recycled that clearly contain recyclable materials* (including paper, card, glass, plastics, metals and food) in line with the Code of Practice (CoP).
- 8. Where citizens have not followed our collection advice and policies, we will ensure our *policies for communicating and taking corrective action are delivered consistently* in line with the Code of Practice (CoP).
- 9. We will ensure that policies for *bulky or excess waste encourage citizens to recycle and reuse*, where this is practicable to do so.

Operating our services

- 10. We will *collect household waste when we have said we will* and ensure materials are managed appropriately upon collection.
- 11. We will manage materials so that the *highest possible quality is attained and we seek to accumulate value* by working with partners to encourage inward investment for our economy.

- 12. We will *record complaints and alleged missed collections* and ensure that we respond to these in line with the Code of Practice (CoP).
- 13. We will *listen to special requests or challenges* that citizens are having in relation to household waste collections and ensure that we respond to these in line with the Code of Practice (CoP).
- 14. We will deliver services so that they *take account of current policies with regards to environmental crime, litter and flytipping* in line with the Code of Practice (CoP).
- 15. We will deliver services so that our *staff and citizens are not endangered or at risk from harm* in line with the Code of Practice (CoP).

Communicating our services

- 16. We will *clearly explain to all citizens* what services we provide by providing information on a regular basis. This will take recognition of different housing types, collection routes and service availability and be as specific to each property as necessary, in line with the Code of Practice (CoP).
- 17. We will *deliver service information directly* to citizens periodically in line with established Code of Practice (CoP).
- 18. Where we need to *change our services for any reason, we will communicate with citizens directly*.
- 19. We will *provide clear instructions to citizens on what can and cannot be recycled*, giving clear explanations where materials cannot be competently recycled.
- 20. We will communicate with citizens when they have not understood our services to *improve* awareness and reduce contamination of recyclable materials.
- 21. We will **record accurate information** on the amount of waste collected and the destinations, as far as practicable, of these materials in order to give confidence to citizens that it is being properly managed.

Citizens

To aid with the delivery of this charter and the Code of Practice, we expect our citizens to participate in the recycling, re-use and non-recyclable waste services that we deliver, using them in accordance with the policies communicated to them, and hence assisting in improving both the quality and the quantity of materials provided for recycling.

Partners

In committing to this charter we request that our partners in national and local government, the resource management industry, retailers, manufacturers, packagers, the third sector and others provide leadership and support in helping us deliver this commitment.

This charter is a clear statement of local government's intent to encourage high-levels of citizen participation in waste prevention, recycling and reuse. All of our partners will have a part to play in utilising the influence they have on our citizens to compliment this intent.

Furthermore, our partners are requested to assist the development of the Code of Practice by providing expertise, information and evidence wherever possible.

The following commitments have been given by each of our partners:

Scottish Government

- To provide the leadership in supporting the delivery of this commitment.
- To provide the necessary policy framework to support local government in delivering the commitments in this Charter and the associated Code of Practice
- To liaise with partners to support the local government delivery of this commitment.
- To support the national behaviour change process required to deliver the foundations of a circular economy

Zero Waste Scotland

- To provide the evidence, research, benchmarking and examples required to deliver the commitments in this Charter and the associated Code of Practice
- To provide support, advice and guidance to local government that allows successful implementation of changes to services.

SEPA

- To advise local government on the regulatory impacts of the commitments in this Charter and the associated Code of Practice.
- To regulate waste and recyclate processors to ensure compliance with relevant legislation, particularly with respect to achieving appropriate destinations and markets for material.

Retailers, brands and packaging manufacturers

- To provide information to inform specifications for local government that will encourage consistent collections
- To provide technical, public relations and consumer behaviour advice to local government and its partners.
- To consider what resources, 'in kind', including behaviour changing measures, or financial, they can provide to support the delivery of the Charter.
- To inform, advise and guide local government and its partners on the technical scope of this Charter and related Code of Practice

The resource management industry

- To provide information to inform specifications for local government that will encourage consistent collections which consistently achieve high quality recycling and reuse.
- To support local government by providing targeted information and data that allows them to reduce contamination and improve public participation and confidence in recycling and reuse.
- To provide leadership and public support for the Charter and the related Code of Practice.

The third sector

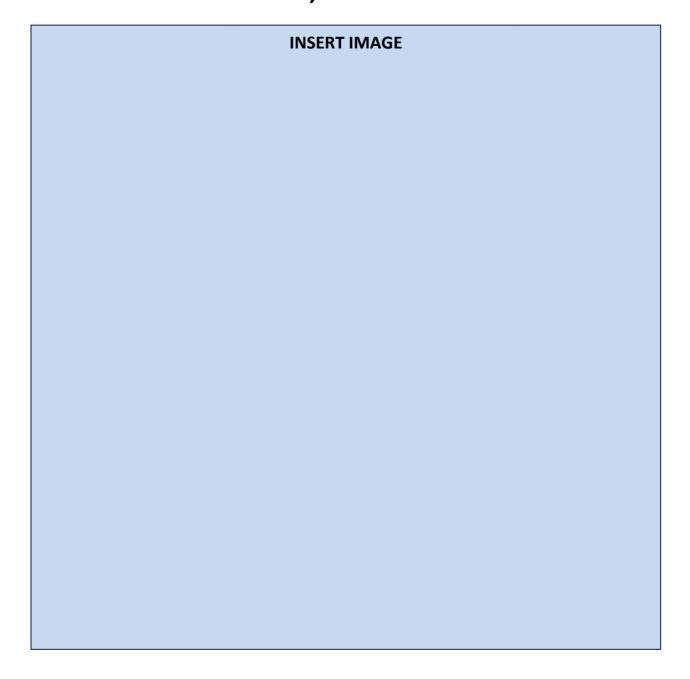
- To provide leadership within the Third Sector on waste prevention, recycling and reuse and work in partnership with local authorities to develop the Code of Practice and support the effective delivery of the commitments in the Charter.
- To work with the Scottish Government and local authorities to promote effective communication
 with communities, groups, organisations and individuals on waste prevention, recycling and reuse
 and facilitate engagement in the design and development of services in line with the commitments
 in the Charter.
- To encourage and support practical action by communities, groups, organisations and individuals at a local level on waste prevention, recycling and reuse in line with the commitments in the Charter

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CODE OF PRACTICE Household Recycling in Scotland

Version 1, October 2015



Foreword

HEADING: fff

SUB-HEADING

1. TEXT

SUB-HEADING

2. TEXT

Contents

No table of contents entries found.

Section 1: Using this Code of Practice

This Code of Practice (CoP) is intended to be used by local authority waste managers in Scotland. Throughout the CoP, there is general text that provides context to the section and references to further reading. There is then 'Essential' and 'Desirable' requirements, which shall be interpreted in the following manner:

ESSENTIAL

These requirements are vital in the effort to achieve consistency across waste and recycling services in Scotland. The adoption of these requirements is mandatory and the Council should prioritise the progression of these elements.

DESIRABLE

These requirements are important in the effort to achieve consistency across waste and recycling services in Scotland. The adoption of these requirements is something that Councils shall consider after they have met the essential requirements.

Finally, there is also reference to elements that have not been captured within this CoP. These sections outline other factors that were discussed or considered but at this time have not been included within the scope of the CoP.

ELEMENTS NOT CONSIDERED

These requirements are important in the effort to achieve consistency across waste and recycling services in Scotland. The adoption of these requirements is something that Councils shall consider after they have met the essential requirements.

Section 2: Outcomes

A Zero Waste Taskforce was formed between 2014 and 2015 with the aim to identify ways in which parties could work together to create the conditions for investment in the waste industry in Scotland whilst supporting local authorities to deliver efficient and accessible services. One of the outputs from the Taskforce was the voluntary Household Recycling Charter and within this, there was a recognition of the potential advantages of local authorities developing more consistent and coherent waste collection services, leading to both more efficient services and increased quality and quantity of recycling collected. The Household Recycling Charter was approved in August 2015¹. The charter makes 21 ambitious commitments from local government that will achieve an agreed set of outcomes, listed below.

- To improve our household waste and recycling services to maximise the capture of, and improve the quality of, resources from the waste stream, recognising the variations in household types and geography to endeavour that our services meet the needs of all our citizens.
- To encourage our citizens to participate in our recycling and reuse services to ensure that they are fully utilised.
- To operate our services so that our staff are safe, competent and treated fairly with the skills required to deliver effective and efficient resource management on behalf of our communities.

The Code of Practice contains a more detailed set of outcomes that will deliver the aspirations of the Household Recycling Charter. The outcomes that will be delivered by this Code of Practice are:

OUTCOME ONE: ACHIEVE HIGH QUANTITIES OF RECYCLING AND MINIMISES NON-RECYCLABLE WASTE

Recycling more and wasting less is good for the Scottish economy and for local government. This Code of Practice seeks to increase quantities of recycling and reduce the amount of waste that cannot be recycled being disposed in less favourable ways.

OUTCOME TWO: SUPPORT THE CIRCULAR ECONOMY THROUGH MAXIMISING HIGH-QUALITY MATERIALS

High-quality recycling, typically defined as 'closed loop' recycling, generally achieves higher value in global, European and UK markets. There is also greater opportunity for investment in reprocessing industry where there is a ready supply of high-quality materials available to the market in consistent formats and standards. This Code of Practice seeks to provide consistent, high-quality materials for the market, supporting the work of the Scottish Materials Brokerage Service.

OUTCOME THREE: COST EFFECTIVE SERVICES FOR LOCAL GOVERNMENT

¹ http://www.cosla.gov.uk/news/2015/10/household-recycling-charter-agreed

Local government spends £368m every year² on waste and recycling services. This Code of Practice seeks to deliver services that make financial sense for most Scottish Councils in the medium to long term.

OUTCOME FOUR: KEEP CITIZENS, STAFF AND CONTRACTORS SAFE AND HEALTHY

The services delivered by local government impact on the lives of citizens, staff and the contractors who all make the services work effectively. This Code of Practice seeks to ensure that services being delivered recognise and manage any hazards to the safety and health of these groups.

OUTCOME FIVE: SERVICES THAT ENCOURAGAE PARTICIPATION FROM CITIZENS

At the heart of all high-performing services is a recognition that the need for citizens to understand and use the services available to them is vital. This Code of Practice seeks to ensure that the waste and recycling services being delivered to citizens are easily understood and communicated in language and formats that they understand to allow them the ability to participate fully.

OUTCOME SIX: COMPLY WITH REGULATIONS

Local government has a duty to meet a wide range of legislative requirements. In the context of this Code of Practice, the Waste (Scotland) Regulations 2012 are most relevant and this Code of Practice will ensure that these regulations are met.

OUTCOME SEVEN: SERVICES THAT SUPPORT SCOTTISH AND LOCAL EMPLOYMENT

Local government employs an estimated 2,670³ people to deliver waste and recycling collections services. This Code of Practice will seek to deliver services that support employment in Scotland and within local areas either through collection services or from the onward sorting or sale of materials.

² Audit Scotland (2013/14). Indicator: Environmental Services. [Online]

http://www.improvementservice.org.uk/benchmarking/environmental.html [Accessed October 2015].

³ Estimated number of drivers and loaders required to undertake kerbside waste and recycling collections from households (calculated by Zero Waste Scotland, 2015).

Section 3: Designing household waste & recycling services

This section provides guidance on the key principles to be considered for designing waste and recycling services that will follow the current established best practice. The design of services is most fundamental to the performance and operation of the services thereafter and is believed to be the most important factor in achieving the outcomes of the household recycling charter.

3.1 ESTABLISHING COMMON COLLECTION SYSTEMS

The household recycling charter states:

We will design our household collection services to take account of the Code of Practice (CoP) for the variety of housing types and geography in our community. In doing so, over time, **we will establish common collection systems**, as appropriate, for paper, card, glass, plastics, metals, food and other commonly recycled materials as deemed feasible(e.g. textiles, small WEEE, nappies) across Scotland.

3.2 HOUSEHOLDS CLASSIFICATION

There are a number of different household types across Scotland, located in different geographies, each with their own unique design and community. However, for the purposes of this CoP, efforts have been made to classify households in broad categories, which will allow definitions for established common collection systems to be given.

HOUSEHOLDS WITH ACCESS TO THE KERBSIDE

These are the most common households in Scotland⁴. Access to the kerbside is important for waste collection as individual containers can be placed out and returned for collection to specific properties. How has this been determined? Where did the information come from?

HOUSEHOLDS WITHOUT ACCESS TO KERBSIDE OR WITH SHARED CONTAINERS

Many properties, as a result of the historical design, do not permit direct access to the kerbside for individual properties to place containers for waste collection. Examples of these types of properties include terraced houses, flats, tenements and maisonettes. As a result of not having direct access to the kerbside without pulling containers through the property, waste collection in such households may need to vary from the main waste and recycling collection.

Some properties will have been given containers to share with their neighbours for logistical reasons. Examples of this would be flatted properties, tenements and rural properties where space constraints mean that waste storage is shared.

HOUSEHOLDS THAT ARE DIFFERENT, CHALLENGING OR REMOTE

There is a recognition within this CoP that some geographical areas will not fit in with the descriptions given above and there will be exceptions where a 'standard' service is not appropriate. This is often because of the challenges with operating a service to the property or because of the cost of delivering a service. As a basic rule, if it is possible to deliver a refuse service then surely it

⁴ Detached & Semi-Detached properties were 48% of total households. Flats were 30% and Terraced properties were 21%. Scottish Neighbourhood Statistics (2013). Standard Reporter. [Online] <a href="http://www.sns.gov.uk/Downloads/Downlo

should almost always be possible to deliver a recycling service of some kind provided that the container is suitable and the service is as safe and convenient as the refuse service and therefore has a high enough participation rate to warrant a regular collection. Providing a refuse collection but not a recycling collection gives out the wrong message of the priority we give to recycling.

We believe that we should be aiming for as few variations in service as possible across housing types.

For the purposes of the CoP such properties are defined in the following list, although it is recognised that this is not exhaustive and there will be other property types that could be categorised as being different, challenging or remote:

Rural properties: Within the Scottish Government 6-fold Urban/Rural classification⁵, these properties are most likely to be found categorised as Category 6 (Remote Rural), which is settlements of less than 3,000 population that is greater than 30 minutes drive from the nearest town of more than 10,000 population. This amounts to 6.1% of Scottish households. There will also be small pockets of households within Category 5 (Accessible Rural) where access to specific properties requires driving down narrow or private roads. Many of these are properties with access to the kerbside as they are in hamlets or villages. This needs further definition.

City Centre: Although difficult to define accurately, many city centre locations, where many households are co-located next to or above commercial properties are likely to require almost bespoke services due to restricted access times and availability of suitable kerbside storage for containers.

Islands: Although rural in nature, so likely captured above, waste and recycling collections from island locations often incurs additional expense resulting from transport and shipping costs. The CoP recognises that this is a factor for Councils to consider when designing waste and recycling services.

Special housing: Across most Council areas there will be properties that are difficult to access or provide a regular service to. Often the reasons for this are due to the design of the properties, the access (e.g. via private roads) or the conditions (e.g. over-grown lanes). In many cases, bespoke services have been created for these properties and they may require further consideration.

I do not think these classifications are correct for this document. Given that the preferred option being proposed is a kerbside sort then we should break down the housing types into "kerbside sort suitable" and kerbside sort non-suitable". Only two classifications are required which are then defiened - suggested criteria is:

Suitable

Properties located on streets where there is a road with a footpath or other suitable space for roadside working.

⁵ Scottish Government (2013/14). Scottish Government Urban Rural Classification 2013-2014. [Online] http://www.gov.scot/Publications/2014/11/2763/downloads [Accessed October 2015].

Properties that have space to store the container(s) listed within the curtilage of their property. This may be a shared space (under the ownership/control of the residents, or an individual yard/garden/driveway space.

Not Suitable

Properties with no roadside space or footpath to allow kerbside sorting.

Properties with insufficient space to store the container(s) listed within the curtilage of their property.

It would be interesting to do some work on the numbers that fall into each of these categories?

Options for the not suitable properties would then be proposed along the lines later in this document?

3.3 A MODEL FOR BEST PRACTICE COLLECTIONS

In the process of developing the Household Recycling Charter, there was a recognition of the potential advantages of local authorities developing more consistent and coherent waste collection services, leading to both more efficient services and increased quality and quantity of recycling collected. To understand the potential for more consistent collection services, a modelling exercise was undertaken by Zero Waste Scotland, with input from a core group of waste management officers, COSLA and Scottish Government officers, to determine the most appropriate collection system that would benefit Scotland as a whole in achieving the stated seven outcomes.

The seven outcomes should be prioritised so that we can be confident that the chosen model is the best fit.

3.4 MODELLING METHODOLOGY AND STUDYING CURRENT PRACTICE

The methodology for undertaking the modelling is provided in Appendix C. Further to this, the results of this modelling were discussed at meetings of the core group of waste managers, SOLACE leads and the Code of Practice Summit⁶ with 31/32 waste managers in September 2015. The scenarios considered were based on the current practice in Scotland and from the approaches adopted elsewhere in the UK, notably in Wales, where the Municipal Sector Plan⁷ was published in 2011.

Whilst the modelling work established what would be the best collection service for Scotland in the context of the seven outcomes, there is a recognition in this approach that the following assumptions have had to be made:

 $^{^6}$ The Code of Practice Summit was held in Stirling on ${\bf 10}^{\rm th}$ and ${\bf 11}^{\rm th}$ September 2015 with waste managers from 31 local authorities in attendance.

⁷ Welsh Assembly Government (2011). The Welsh Municipal Sector Plan. [Online] http://gov.wales/docs/desh/publications/110310municipalwasteblueprinten.pdf [Accessed October 2015].

- a) The same costs for vehicles, containers, gate fees and material sales income has been applied to all Councils. All costs were derived from a survey of 15 local authorities in August 2015.
- b) Standard depreciation of 7 years on vehicles, assumed to be purchased not leased, has been applied.
- c) No benefits from collaborative procurement or shared services have been accounted for within the model.

As a result, Councils are reminded that this modelling exercise was to demonstrate the potential for more consistent collection service across Scotland and therefore, each Council will have to assess the actual costs of implementing the 'Collection Model' and the associated policy, operational and communications requirements that will support this.

3.5 PREFERRED COLLECTION MODEL

INTRO REQUIRED

Figure 1 below shows the results of the modelling exercise for the scenario that meets all of the outcomes stated in Section 2. This model shall be considered by all Councils following this CoP. However sufficient flexibility to adapt this locally whilst still achieving a more consistent recycling service to citizens, is described in sections 3.5.1-3.5.6. The important factor in making services more consistent relates to the experience of the citizens. First, every citizen should understand what they can and cannot recycle in their collection service. Second, when they understand what is acceptable to be recycled the mix of materials and the way that they mix materials shall remain consistent across the country. This means that the container that citizens place each item in to is the most important decision we ask them to make and this is where consistency shall be focussed. Citizens no less about the way a service is operated or what happens to materials once they have placed their container out for collection. Thus, this CoP has retained some flexibility for Councils regarding the type of container used, the vehicles used, the frequency of collection and the operational parameters.

We agree that "the container is the most important decision we ask them to make". It is our experience that one of the main issues householders face is knowing which container to put which material in. The simpler this is the better participation there is.



As outlined earlier, Councils following this CoP are expected to evaluate their service against the Preferred Collection Model shown in *Figure 1*. However, it is also recognised that many Councils will be able to deliver container-consistency for citizens using a different recycling collection system.

Does this mean the trolley is optional?

3.5.1 Households with access to the kerbside

For 'Households with access to the kerbside', which covers the majority of properties in Scotland, where the Preferred Collection Model is not being followed, the following requirements shall be adopted within their service.

3.5.1.1 Essential contents

The service for these properties **shall adopt** the following requirements:

- a) Separate containers shall be provided to each property for the following:
 - Paper and card;
 - II. Metals, plastics and cartons
- b) Separate containers shall be provided for food waste collection in all areas where the Waste (Scotland) Regulations 2012 require a collection.
- c) Collection of these containers will take place from the kerbside or nearest safe point of collection.
- d) Separate containers for glass shall be provided to each property or alternatively within the community. These containers will facilitate the colour separation of glass to occur.
 - I. Where the Council is not providing a glass collection from each property, the Council is required to demonstrate that the alternative provision (i.e. from recycling points) is achieving the same quality and quantity of glass that would otherwise be collected from kerbside collection. This can be demonstrated through benchmarking with other Councils, comparing with historical data or monitoring waste composition analysis of non-recyclable waste to show capture rates of glass as outlined below.
 - The glass collected should achieve a minimum benchmark yield of 55kg/hh/year (to exclude tonnage rejected at a MRF or by a reprocessor), or alternatively the arisings of glass in the non-recyclable waste stream should not exceed a maximum benchmark yield of 15kg/hh/yr.
 - The glass should be of sufficient quality to allow closed loop recycling and be of comparable quality to materials collected separately.
 - The residual target will likely be the one that has to be used in many cases as it will be difficult for some authorities to be able to separate out the glass tonnage to make this calculation as in some places glass is co-collected with glass from trade collections and in some cases traders are allowed the use of public recycling points. How will this be accounted for? Can this glass be counted towards the target of 55kg/hh/yr? Where did the 55kg come from? (This seems quite a challenging target? In Aberdeenshire, total tonnage collected per annum was around 7000 tonnes which equates to around 55kg/hh/yr but that was when a glass included comingled service provided to 70,000 hh, as well a significant trade glass collection and one of the highest density recycling point services in the country. If the trade glass was discounted this would be difficult to achieve.)
 - II. Will some kind of methodology be produced on how to establish the level of glass in residual waste? Does this mean annual waste analysis or something more frequent? Where glass containers are not provided to each property the Council should provide a minimum capacity outlined of 10 litres per week for each

property within the community. In urban areas these should be within 5 minutes walking distance from each property.

• For example, for an area of 2,000 properties there would be a requirement for 20,000 litres per household per week of glass recycling provision. For these properties, the Council is expected to provide 16 x 1280 litre wheeled bins for glass recycling.

Should there not also be a 55kg/hh/yr target for this service too? (or 15 kg in residual).

We assume increased frequency of collection of fewer containers would also be acceptable?

How is 5 mins walking distance defined? Crow flies? What walking speed? It might be better to simply state a provision/population – for example, 1 recycling point for every settlement of over 150 properties. And in larger towns and cities, minimum of 1 recycling point for every 750 properties and provided these are regularly serviced that should be fine – this would give a much higher coverage of RPs than is currently the case. It is dangerous to define this closely as location of RPs is entirely down to finding suitable space. I think this level of provision in litres is not necessary and is far too much in any case. Where is the data that was used to reach this number? How does this compare with current provision across Scotland?

Why is it OK to not collect glass directly from households but not other materials? Could there be flexibility where an authority chooses to provide RPs or similar for, say, cans and instead uses that compartment on their vehicle for glass!!?? Perhaps we should simply require that glass is collected – that way the service is harmonised?

- III. Colour separation of glass can occur at a glass sorting facility if the Council can demonstrate through benchmarking with other Councils that the same quantity of glass will be available to enter high-quality recycling processes (i.e. remelt to glass containers) after sorting has taken place.
 - Benchmarking should focus on comparing historical data or monitoring
 waste composition analysis of non-recyclable waste to show capture rates of
 glass as outlined below. The glass collected should achieve a minimum
 benchmark yield of 55kg/hh/year (to exclude tonnage rejected at a MRF or
 by a reprocessor), or alternatively the arisings of glass in the non-recyclable
 waste stream should not exceed a maximum benchmark yield of
 15kg/hh/yr.
- e) The weekly volume of recycling to be provided to each property for each material where kerbside collection takes place should exceed the following:

Paper/Card	40 litres per
	week
Metals/Plastics/Cartons	70 litres per
	week
Glass	35 litres per
	week
Food waste	20 litres per
	week

Can we see the data this is based on? 35 litres per week for glass seems very high? That's a whole smaller sized kerbside box per week? From experience, the lack of capacity from kerbside box type systems is for plastic containers and possible cardboard, not glass. Is this simply because of

minimum box sizes or is there another reason? Might it be more flexible to provide a range so that authorities have the freedom to make informed choices that is better suited to the demographics and other variables in their area? Or it might be better to state a minimum **overall** recycling litre figure and how that is divided is up to the LA?

- f) At the point of collection, the contents of each container will either be sorted into constituent parts or placed into separate compartments or vehicles for sorting at a site.
 - For example, paper will be separated from card; plastics separated from metals and cartons; and glass will be colour-sorted.
 - For example, paper and card are placed into one compartment or a separate vehicle for sorting at a site OR metals, plastics and cartons are placed into one compartment or vehicle for sorting at a site OR glass is placed into one compartment or vehicle for sorting at a site.

Does this mean comingled is OK then? Materials placed into vehicle for sorting at a site where they will be sorted as prescribed above? Recycling vehicle is separate from refuse vehicle? We could buy pod vehicles and then recyclabes in one compartment and food in the other, separate compartments done! The above are only examples???

3.5.1.2 **Desirable contents**

The following procedures **should be considered** within the Councils ways of working:

- a) The collection of each recycling material stream is carried out on a weekly basis. Why? Is this based on need, convenience or what? Shouldn't we consider carbon footprint of collections? If fortnightly is sufficient why go weekly?
- b) To reduce vehicle congestion and carbon impacts of collection, one vehicle is used to collect all recycling in one pass from each property. Ah, so it does matter.....
- c) Separate containers for food waste recycling are provided in all areas that are not required to have a collection under the Waste (Scotland) Regulations 2012.
 - I. This will be based on the principle of a co-collecting food waste with dry recycling in a separate compartment within the vehicle.
 - II. This will be based on the principle of collecting from settlements that are on-route between two settlements that are legally required to have a food waste service provided under the requirements of the Waste (Scotland) Regulations 2012.
 - For example if vehicles are driving from town A to town B, both of which are required to have food waste service provision, and in doing so the vehicles drive through town C, it would be expected that the properties in town C would be provided with a collection.
- d) An association of colours to containers is beneficial to public engagement. Colours to be associated with each material stream are shown in the table below:

PAPER/CARD	Blue
METALS/PLASTICS	Green
GLASS	Purple
FOOD WASTE	Green
GARDEN WASTE	Brown

- I. When new services are being introduced the colours above **shall** be introduced.
- II. Where new services are not being introduced the Council shall consider means of implementing this colour system by other means wherever practicable.
- III. The colour association can be achieved by the procurement of whole containers in these colours or by changing lids that match these colour or by fixing prominent permanent stickers to the containers to identify the colour association. What about co-collection of FW with garden waste? Is that allowed?

Green for metals/plastics? And green for food too? Could that not become confusing?

What about mixed collections – if they exist (even if only from those LA's not signing up) it would be good for them all to have a colour too? And the private sector trade mixed collections could also adopt that? Would make sense to agree that through this process too?

e) The Council shall consider means whereby some or all collection vehicles are equipped to receive other items such as small Waste Electrical and Electronic Equipment (WEEE), Textiles, Batteries and Absorbent Hygiene Products (AHPs, also referred to as nappies).

3.5.1.3 Elements not considered for this CoP

The following elements of the service design are not specified within this CoP, although the list provided is not exhaustive. Therefore, Councils are invited to interpret their own needs for these aspects of their service.

- a) Garden waste services are not a legal requirement. Garden waste services have a big impact on recycling performance across Scotland and they are understood to be popular services for citizens. However, this CoP does not give specific advice on how each Council should be collecting garden waste. As a minimum, garden waste recycling shall be provided at Household Waste Recycling Centres by the Council.
- b) Density of recycling points is very varied across Scotland. Some arguments can be made for lower density of recycling points where a comprehensive kerbside recycling service is provided and conversely, some Councils have used recycling points to serve whole or parts of areas to supplement or sometimes replace kerbside collections. However, this CoP has not specified what provision should be made for recycling points other that the provision for glass recycling where a kerbside collection is not provided.

Garden waste should be included. It is a hot topic and if the view is that garden waste is a good thing then shouldn't It be in the charter? And conversely, if garden waste collection is not such a good thing, shouldn't we be saying that we want to phase these out or even make them chargeable? Missed opportunity – this is one of the current systems that is often discussed with householders regarding why they get X service in this area but Y somewhere else.

Recycling points – but we have specified some numbers for glass – and, as above these would be better on density than litres per household. But I agree that provision of RP containers for other materials should be left to the authority to decide upon.

3.5.2 Households without access to the kerbside or with shared containers

In properties where access to the kerbside is limited or where the service has to be provided via shared containers due to space constraints the following requirements shall be adopted.

3.5.2.1 Essential contents

The service for these properties **shall adopt** the following requirements:

- a) In the first instance, efforts should be made to introduce the same service to these properties as will be delivered to those households with access to the kerbside detailed in 3.5.1. The Council shall provide evidence of any assessment that is carried out in this regard.
- b) What constitutes evidence? Who is this provided to and how/when?
- c) Separate containers should be provided to each property or group of properties for the following mix of materials. This can be achieved by individual or communal containers.
 - I. paper and card;
 - II. metals, plastics and beverage cartons
- d) Separate containers should be provided for food waste recycling to each property or group of properties as required within the Waste (Scotland) Regulations 2012. This can be achieved by individual or communal containers.
- e) Separate containers should be provided for glass in line with the requirements set out in 3.5.1.1d.
- f) If there is no room for all of the containers, can a mixed container be provided? Or is there a priority list if only some of the materials can be collected, e.g. paper comes first as there is more volume?
- g) Any guidance on recommended volumes of communal containers for these properties? We would expect this to differ from kerbside properties.

Any requirements on how far these facilities should be from the flats? e.g. could one RP service three multi story buildings for example? Or is a road end communal site in a rural area acceptable? Or anything goes?

3.5.2.2 **Desirable contents**

The following procedures **should be considered** within the Councils ways of working:

- a) The requirements set out in Section 3.5.1 shall be followed.
- b) Less frequent collection for these properties might be achieved through the provision of larger capacity containers, still exceeding the volumes set out in 3.5.1.1e, which facilitates communal collections.

3.5.3 Rural properties

Details of the types of property to be included within this category are provided in 3.1. In rural properties the following requirements shall be adopted.

3.5.3.1 Essential contents

The service for these properties **shall adopt** the following requirements:

- a) In the first instance, efforts shall be made to introduce the same service to these properties as will be delivered to those households with access to the kerbside detailed in 3.5.1. The Council shall provide evidence of any assessment that is carried out in this regard. What/how/who?
- b) Separate containers for food waste recycling are provided in all areas that are not required to have a collection under the Waste (Scotland) Regulations 2012.
 - I. This will be based on the principle of a co-collecting food waste with dry recycling in a separate compartment within the vehicle. Why can't it be co-collected with refuse?
 - II. This will be based on the principle of collecting from settlements that are on-route between two settlements that are legally required to have a food waste service provided under the requirements of the Waste (Scotland) Regulations 2012.
 - For example if vehicles are driving from town A to town B, both of which are required to have food waste service provision, and in doing so the vehicles drive through town C, it would be expected that the properties in town C would be provided with a collection.
- c) For dry recycling, the requirements set out in 3.1.4.1 sections b-e shall be followed. There will be further exceptions for the provision of glass recycling containers specifically as follows:
 - I. Where glass recycling containers are not provided to each property in rural areas and the alternative service provision via recycling points is being used, only settlements of greater than 100 properties will be required to have a recycling point for glass. Settlements of less than 100 properties shall still be advised of their nearest recycling point for glass.
 - II. Where glass containers are not provided to each property the Council should provide a minimum capacity outlined of 10 litres per week for each property within the community. In rural areas the proximity of these containers to each property shall be variable but efforts shall be made to have these as close to each property as is practicable.
 - III. Should there still be a minimum desirable distance to nearest RP? This is more of an issue in rural areas than urban, perhaps in rural areas there should be a minimum of, say, 5 miles? Again if we can provide a refuse collection in the area....although if comingling were allowed in this situation the likely yield would be much greater and make collection more efficient in more remote areas.

3.5.3.2 **Desirable contents**

The following procedures **should be considered** within the Councils ways of working:

- a) Where food waste service provision is not legally required and not possible through any other means, the Council shall take steps to provide food waste advice and support to the citizens in such properties.
 - I. Advice shall be provided on reducing food waste and home composting including the use of in-situ mini digesters (e.g. Green Cones⁸).
 - II. Support shall be provided by way of visits to the property and the guidance on choosing a suitable home composting unit.

3.5.4 City Centre properties

⁸ http://www.greatgreensystems.com/shop/green-cone/

Details of the types of property to be included within this category are provided in 3.1. In city centre properties the following requirements shall be adopted.

3.5.4.1 Essential contents

The service for these properties **shall adopt** the following requirements:

- a) In the first instance, efforts should be made to introduce the same service to these properties as will be delivered to those households with access to the kerbside detailed in 3.5.1. The Council shall provide evidence of any assessment that is carried out in this regard. The provision of dry and food waste recycling to each individual property may not be possible in city centre locations resulting from the lack of suitable storage on on-street restrictions on containers being placed for collection. Where collection is not possible from each property, communal collection shall still be available to all properties along the following principles:
 - III. Recycling containers for dry recycling, including glass, shall be provided within 5 minutes' walk from all properties. Although capacities for each material will be difficult to estimate in such environments, efforts should be made to ensure that adequate capacity for each material stream is available, based on the table in 3.5.1.1e, and monitoring of the fill levels for containers should take place.
 - IV. We need to see the data that produced these figures? High density areas like this will have very variable fill levels and in some cases are impacted on by "walk past" users, providing source segregated containers is therefore likely to lead to high levels of contamination. Impractical, inconvenient, not good enough.
 - V. For dry recycling, containers should be provided for the same mix of materials as set out in 3.5.1.1a.

3.5.4.2 **Desirable contents**

The following procedures **should be considered** within the Councils ways of working:

- a) The collection of non-recyclable waste and recyclable waste is often carried out more frequently in city centre areas. The Council shall consider what collection frequency is appropriate for these areas to enable recycling services to be provided.
 - For example, the collection of non-recyclable waste may have to be carried out on a weekly basis to permit sufficient space for recycling containers to be located and collected.

3.5.5 Island properties

Details of the types of property to be included within this category are provided in 3.1. In island properties the following requirements shall be adopted.

3.5.5.1 Essential contents

The service for these properties **shall adopt** the following requirements:

a) In the first instance, efforts should be made to introduce the same service to these properties as will be delivered to those households with access to the kerbside detailed in 3.5.1. Where, the preferred collection model cannot be provided, the requirements relating to rural properties, set out in 3.5.3, shall apply. The Council shall provide evidence of any assessment that is carried out in this regard.

3.5.6 Properties requiring special attention

Details of the types of property to be included within this category are provided in 3.1. In these properties the following requirements shall be adopted.

3.5.6.1 **Desirable contents**

The service for these properties **shall adopt** the following requirements:

- a) In the first instance, efforts should be made to introduce the same service to these properties as will be delivered to those households with access to the kerbside detailed in 3.5.1. The Council shall provide evidence of any assessment that is carried out in this regard. For these properties, occasionally the service cannot be provided for reasons, often related to:
 - Access to the property restricts vehicles;
 - Design of the property(s) that does not allow standard collections. In such cases, the Council shall consider a solution that is as close to the service for 'Households with access to the kerbside' as practicable.

3.6 THE MATERIALS COLLECTED

The range of materials collected in Scotland has traditionally varied greatly and has evolved over a number of years as technology and the materials citizens waste has changed. Collections have largely followed the market capacity to recycle materials but there are some instances for some materials where the markets for recycling are not resilient enough to give full confidence that all the material currently collected will be competently recycled. There is also a wide variation in the range of materials that citizens can recycle in their current household recycling collection, which causes frustration and confusion.

A standard specification for all of the core materials (food, paper, card, glass, metals and plastics) is provided in the following section to give consistent advice to citizens across Scotland on the materials they can recycle.

The household recycling charter states:

We will ensure that *all citizens have access to services* for recycling to include paper, card, glass, plastics, metals and food. Thus, we will ensure that all citizens, whether at the kerbside or within their local community, are provided with adequate volumes of containers in line with the Code of Practice (CoP); and

We will ensure that our household collections give *consistent definition of materials* (paper, card, glass, plastics, metals and food) that can be competently recycled in line with the Code of Practice (CoP). Thus, we will eradicate discrepancies on what can and cannot be recycled in different localities across Scotland.

3.6.1 HOW THE SPECIFICATION IS DETERMINED

To determine a common specification for the core materials to be collected, Zero Waste Scotland commissioned Anthesis LRS to carry out consultation⁹ of a number of key industry stakeholders. The results of this consultation were discussed at the Code of Practice Summit¹⁰ with waste managers and representatives from the waste industry¹¹ and interpretations of a common specification were drawn from those discussions.

3.6.2 SPECIFICATION FOR CORE MATERIALS

The following tables show the where items that are typically found in the domestic waste stream shall be accepted or not within containers for recycling. The tables show that whilst most materials are collected for recycling, there are some materials where the markets for these items is still developing or that by not collecting certain items would overly-complicate the decision for citizens to recycle. This is not something that is intended to be communicated to citizens as this would complicate messages to them and they should not be discouraged from placing all items listed in the 'Acceptable' columns into the relevant container.

⁹ Appendix A: Consultation on materials acceptance; Presentation by LRS Anthesis, August 2015.

¹⁰ Code of Practice Summit was held in Stirling on 10th and 11th September 2015 with waste managers from 31 local authorities in attendance.

¹¹ Representatives from Scottish Environmental Services Association (SESA), Viridor, The Resource Association and Packaging Recycling Group Scotland were in attendance for the session on materials specification.

However, the table does help to clarify the specification that Councils may wish to discuss with their contractors regarding the onward sorting or processing of the collected materials. The headings used seek to give clarity on this:

Accepted

Items in this classification are typically recycled easily and shall be readily accepted in the relevant recycling container

Accepted where markets are emerging or non-collection would not meet citizen expectations:

Items in this classification are accepted within recycling containers either to make the service more convenient for citizens and where their inclusion doesn't jeopardise the onward processing of the materials <u>OR</u> the markets for these items is evolving and the collection of these items will support opportunities for further recycling in the future.

Unacceptable

These requirements are important in the effort to achieve consistency across waste and recycling services in Scotland. The adoption of these requirements is something that Councils shall consider after they have met the essential requirements.

The lists given in all of the tables below are not exhaustive.

3.6.2.1 Paper:

3.0.2.1 Paper.					
ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)				
Newspapers, magazines, pamphlets, directories, envelopes (fully intact including glue and windows) brochures, office paper, letters catalogues and unwanted mail	 Books – (reuse should be encouraged) Tissue/napkins (Heavily soiled, can go in food container) Laminated paper (Non-recyclable bin) Padded envelopes (Non-recyclable bin) Wet paper (Home composted or Non-recyclable bin) 				
ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS					
 Shredder paper (Difficult to handle at sorting facility) Wrapping paper (Difficult to handle at sorting facility) 					

3.6.2.2 **Card:**

ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
----------	--

Cereal boxes, brown corrugated packaging, sleeves from ready meals, toilet/kitchen roll tubes, greetings cards, egg boxes, toothpaste boxes etc, and brown corrugated packaging.

- Large corrugated boxes i.e. cannot fit in a wheeled bin (typically recycled at household waste recycling centres)
- Drinks and food cartons (placed in metals and plastics container for recycling).....
- Wet card.
-

ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS

None

3.6.2.3 **Glass:**

	-
ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
Bottles and jars from food and drink packaging (including metal tops),	 Ceramic items such as plates and plant pots (sometimes recyclable with 'inert' waste at HWRCs) Plate glass i.e. from windows (sometimes recyclable with 'inert' waste at HWRCs) Drinking glass (sometimes recyclable with 'inert' waste at HWRCs) Light bulbs (retailers or HWRCs)
ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS	
Corks from bottles (Not recyclable but integral to bottles)	

3.6.2.4 **Metals:**

ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
Tins and cans from food and drink packaging, aerosols	 Metal items not disposed of every day i.e. household furniture or cutlery (typically accepted in 'scrap metal' waste at HWRCs) Small electricals including cables (accepted at retailers and HWRCs). Batteries (accepted at retailers and HWRCs) Pouches (non-recyclable bin)

ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS

- Foil trays (Prone to food soiling and not sorted as easily)
- Aluminium/Tin foil (*Prone to food soiling and not sorted as easily*)

3.6.2.5 **Plastics:**

3.6.2.5 Plastics:	
ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
Bottles (including tops) from: food and drink products, shampoo/conditioner/shower gel/soap bottles, cleaning products, beauty products, tablet and medicines.	 Plastic bags and films i.e. shopping bags, bread bags and cling films (recycled at supermarkets where this service is available or disposed in non-recyclable bin) Bubble wrap (non-recyclable bin) Cartridges e.g. ink (refill or return to producer) Polystyrene (non-recyclable bin) Wrappers e.g. biscuit and crisp wrappers. (non-recyclable bin) Compostable packaging (food waste) Plastic nettings (non-recyclable bin) Toothpaste tubes (non-recyclable bin) Hard plastics including CD boxes, plastic coat hangers and plant pots (Reuse online or non-recyclable bin) Hard plastic including garden furniture and child's toys (Donation to charity or HWRC for reuse, recycling or disposal)
ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS	
 Small bottles from yoghurt drinks etc. (<i>Difficult to sort with machinery</i>). Food & drink pots, tubs and trays of all colours (<i>Markets evolving</i>) 	

3.6.2.6 **Cartons:**

_			
	ACCEPTED	UN	JACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
	Food and drink cartons (commonly manufactured by Tetra Pak, Elopak and SIG Combibloc) used for long-life milk, fruit juices, smoothies, dairy alternative milks, chopped tomatoes, passata, liquid baby milk, soup, pulses, custard, pet milk etc.	•	Pringles tubes (Non-recyclable) Plastic pots, tubs and trays (Plastic recycling) Dried baby formula packs (Non-recyclable) Pouches (Non-recyclable)

ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS

• Straws and caps that are bought as part of the carton package (Not recyclable but integral to packaging)

3.6.2.7 **Food:**

reprocess)

reprocess)

• Soiled kitchen roll (supports capture of more food but difficult to

ACCEPTED	UNACCEPTABLE (ALTERNATIVE PATHWAY SHOWN)
All cooked and uncooked food stuffs, including bones and carcasses dairy, vegetables and peelings, bread, rice and pasta, fish including bones and shells, tea bags and coffee grounds, eggs and eggshells, cakes and biscuits, leftovers and pet food	 Metal, plastic or glass packaging (should be recycled in other collection services) Liquids and oils.
ACCEPTED WHERE MARKETS ARE EMERGING OR NON-COLLECTION WOULD NOT MEET CITIZEN EXPECTATIONS	
 Compostable liners, plastic liners, paper or card liners (integral to recycling process but difficult to 	

3.7 WASTE THAT CANNOT BE RECYCLED

Waste that cannot be recycled is commonly called "black bag waste", "general waste" or "residual waste". The best definition of this waste is "non-recyclable waste", which reflects the fact that containers for such waste should only contain anything that is left after all efforts to recycle have been exhausted. This CoP refers to 'Non-Recyclable' waste from herein.

A recent WRAP study¹² highlighted that one of the most effective ways to encourage citizens to recycle is by restricting the volume of non-recyclable waste they can dispose of, alongside effective recycling services for the core materials and food waste. In recent years many Councils in Scotland have built services based on this evidence leading to a mix of frequencies and volumes of non-recyclable waste that are collected to encourage more participation in recycling services and thus, more materials being recycled. At the time of writing, two Scottish Councils are providing a 3-weekly collection for non-recyclable waste as part of a sustainable resource management system. This is the equivalent of 80 litres per week of non-recyclable waste for households with kerbside access.

The household recycling charter states: We will *reduce the capacity provided for waste that cannot be recycled* to give the appropriate motivation to our citizens to recycle. Thus, we will ensure that all citizens, whether at the kerbside or within their local community, are limited to non-recyclable (i.e. black bag/general waste/residual waste) waste volumes in line with the established Code of Practice (CoP).

3.7.1 DETERMINING THE OPTIMUM VOLUME OF NON-RECYCLABLE WASTE

Zero Waste Scotland commissioned Techview Ltd to undertake a study¹³ of the existing waste composition data, recycling performance and bulk density conversion factors to better understand the current and future capacity needs, measured by volume, for recyclable and non-recyclable waste. This work was reviewed by a core group of waste managers representing local government and the resulting discussions informed the position set out in the following section.

The tables below shows the current and future performance for a 'typical' household with kerbside access and flats.

Table 3.7.1a: Current and future capacity for non-recyclable waste at kerbside access households

Average arisings –	Kerbside Access	1 week	2-week	3-week	4-week	5-week	6-week
Current	0.11 bulk density	48.5	97.0	145.5	194.0	242.4	290.9
Future	0.11 bulk density	44.0	88.0	132.1	176.1	220.1	264.1

Table 3.7.1b: Current and future capacity for non-recyclable waste at flats

Average arisings – flats	1 week	2-week	3-week	4-week	5-week	6-week

http://www.wrap.org.uk/content/factors-influencing-recycling-performance

¹³ Zero Waste Scotland (2015). Kerbside arisings by household type [Not-published] [Accessed October 2015].

Current	0.11 bulk density	34.1	68.3	102.4	136.6	170.7	204.8
Future	0.11 bulk density	30.7	61.4	92.1	122.9	153.6	184.3

For households with kerbside access, this would suggest that 48.5L per week of capacity for non-recyclable waste is required for a typical household that is recycling average volumes of material each week. If these typical households were to increase the amount of recycling they present to align with those households that are the better performing, this capacity requirement would reduce to 44L per week.

We need to align this with the other services provided in an area – e.g. if an authority does not provide a garden waste collection, or food waste collection in areas where not required, this will impact. Also, availability of local HWRC facilities and bulky waste services (some bulky waste services do not collect black bags). For flats this would suggest that 34L per week of capacity for non-recyclable waste is required, reducing to 31L per week if higher performance is achieved. The lower yield for flats is typically explained by the size of the properties (i.e. tend to be less bedrooms) and the demographics (i.e. tend to be smaller families, single people).

For communal collections where the containers are placed in a publicly accessible area (and in many cases are located on-street), it is difficult to prevent others accessing the containers thereby reducing volumes in these areas could cause overflow. Not reflect reality. Within this research, higher performance was assumed to be achieved by the citizens having a better recognition of all the materials that they can recycle in their service. For example, many people recycle only newspapers and magazines without realising that directories, junk mail and paper packaging materials can all be recycled.

3.7.2 RECOMMENDED WEEKLY VOLUME OF NON-RECYCLABLE WASTE

On the basis of the evidence presented from the commissioned study, the current practice in some Councils where 'extended frequency' or 'reduced capacity' services for non-recyclable waste are in operation and following consultation with waste managers, the following recommendations are made.

3.7.2.1 Essential contents

The following requirements **shall** be included within the Councils' ways of working:

Households with kerbside access: A maximum of 80 litres per week per property for non-recyclable waste is provided to each property.

This can be achieved in a number of ways but by way of example, this would be the equivalent of a 240 litre wheeled bin being collected every 3 weeks or a 160 litre bin collected every 2-weeks. With the exception of 1 Council, every Council in Scotland provides at most a 2-weekly collection for non-recyclable waste to households with kerbside access.

Flats: A maximum of 70 litres per week per property for non-recyclable waste is provided to each property or group of properties where a communal service is provided.

This can be achieved in a number of ways but by way of example, this would be the equivalent of a block of 6 flats having 3x140 litre wheeled bins collected every week or 6x140 litre wheeled bins collected every 2-weeks or 1x1280 litre wheeled hin collected every 3-weeks.

litre bins don't currently exist so that is a red-herring!For flats – there may need to be a range or some other measure of provision instead of litres per week as per earlier comment regarding other services and public access. The requirement could be something like – "wherever a communal waste bin is provided, there should also be a communal recycling bin and food waste bin, ideally colocated but if this is not possible within xx metres of the waste container". Or some other guidance along the lines of ensuring food waste and recycling collections services are as convenient or more convenient than waste services.

3.7.2.2 Elements not included within this CoP

Councils are best placed to determine the frequency of collection, size of container and method of collection for non-recyclable waste in line with the recommended volumes. As such, this Code of Practice does not go further than recommending a maximum weekly volume for non-recyclable waste per household.

3.8 HOW DOES THIS SECTION DELIVER THE OUTCOMES?

A summary of the impact of this section against the outcomes for the Code of Practice are summarised in the table below.

OUTCOME ONE: ACHIEVE HIGH QUANTITIES OF RECYCLING AND MINIMISES NON-RECYCLABLE WASTE	
OUTCOME TWO: SUPPORT THE CIRCULAR ECONOMY THROUGH MAXIMISING HIGH-QUALITY MATERIALS	
OUTCOME THREE: COST EFFECTIVE SERVICES FOR LOCAL GOVERNMENT	
OUTCOME FOUR: KEEP CITIZENS, STAFF AND CONTRACTORS SAFE AND HEALTHY	
OUTCOME FIVE: SERVICES THAT ENCOURAGAE PARTICIPATION FROM CITIZENS	
OUTCOME SIX: COMPLY WITH REGULATIONS	
OUTCOME SEVEN: SERVICES THAT SUPPORT SCOTTISH AND LOCAL EMPLOYMENT	

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Section 4: Policies for household waste & recycling services

This section provides guidance on the policies that will be important in supporting a collection system that consistently achieve high citizen participation and support the design and operation of recycling services to deliver the outcomes of the household recycling charter.

4.1 POLICY DEVELOPMENT

Developing and publishing policies can ensure that services are operated transparently and fairly. This in turn can encourage citizens to participate in the service; maximising the quantity and quality of material collected for recycling. Developing consistent policies across Scotland ensures that citizens can expect services to be delivered and Councils shall benefit from following the current best practice that encourages behaviours that supports reuse and recycling.

Many Councils in Scotland already have policies in place to discourage excess waste (i.e. additional containers and bags out with containers) and promote recycling and reuse. This section provides guidance on the main factors that Scottish Councils should consider when developing local policies to support their waste and recycling collections.

The household recycling charter states:

We will ensure that our local policies, in line with the Code of Practice (CoP), encourage citizens to recycle by reducing the collection of waste that cannot be recycled (i.e. excess waste/side waste); and

We will ensure that our local policies *provide citizens with sufficient capacity for their waste*, recognising that some households will produce more waste than others, in line with the Code of Practice (CoP); and

We will ensure that policies for *bulky or excess waste encourage citizens to recycle and reuse,* where this is practicable to do so.

Does point 1 not contradict point 2?

4.2 EXCESS OR SIDE WASTE POLICY

4.2.1 Rationale

Research in preparing this CoP has suggested that most Scottish Councils have policies in place to encourage recycling by reducing the collection of non-recyclable waste. The most typical examples of this are policies to limit 'excess waste', 'side waste' and over-filled bins. Excess waste or side waste are common terms that describe additional items or bags of unsorted waste that is placed on, near or next to the regular collection container. Over-filled bins happen when the lid cannot be fully closed on a wheeled bin.

Such collection practices were tolerated by most Councils for a number of years but in recent years most Councils have implemented policies to prevent such behaviour, primarily to reduce the environmental and cost impacts of this waste being landfilled but also because of safety concerns. The safety concerns relate to manual handling, risk from sharps in unsorted bags and from the safe

operation of wheeled bins on comb-lifters upon vehicles. Does this also apply to recycling collections???

4.2.2 Essential contents of this policy

The following procedures **shall** be included within the Councils' ways of working:

- a) Policy shall clearly define the criteria when collection crews will consider waste to be excess, side waste or not within a container with the lid closed.
 - I. Excess or side waste is any material that is not within the confines of the provided wheeled bin. This can be loose or contained in bags but the defining point is that it has not been able to be presented in the provided container.
 - II. Where the waste has been placed in the wheeled bin but the lid cannot be easily closed by hand, this will be deemed to be an overfilled bin.
- b) The policy shall state what the consequences of placing excess/side waste or overfilled bins for collection will be.
 - I. The waste will not be collected on that occasion. Is that legal? Do we not have a duty to collect? I know many Councils do this in practice but I think we should get legal advice if this is to be a national guidance document.
 - II. Advice will be provided to the citizen on what to do next.
 - III. Advice will be given to the citizen on alternative places to dispose of extra waste (i.e. Recycling points or Household Waste Recycling Centres).
- c) A note of any incidents relating to excess/side waste or overfilled/overweight bins should be taken by the collection crew and passed to the supervisor.
 - I. To support the implementation of the policy, collection crews should not be instructed to return for excess/side-waste where a note of an incident has been taken and reported to a customer services function.
 - II. There needs to be allowance for local decision making in this as there are occasions where we would go back.
- d) A log of any incidents relating to excess/side waste or overfilled/overweight bins should be kept and maintained. This should be used to track any repeating patterns of behaviour to ascertain if further assistance is required. For how long? Will this become a KPI?

4.2.3 Desirable contents of this policy

The following procedures **should be considered** within the Councils ways of working:

- a) Policy should clearly define the criteria when collection crews will consider containers to be overweight. This will specify that any wheeled bin that cannot be easily moved by a single crew member to the point of collection, will be deemed overweight.
- b) Where excess/side-waste or overfilled non-recyclable wheeled bins have been left for collection, the extra waste should be placed back into the wheeled bin by the crew to avoid littering. Some form of notice should be placed on the bin or to the address using the bin to inform the resident for the reasons that waste has not been collected. So the bin has been emptied then? I thought we were leaving it if there was excess waste? I am confused. How do you put the excess bags back in a full bin?
- c) The notes of any incidents relating to excess/side waste or overfilled/overweight bins should be taken passed to the Council's customer services function to inform the resident should they make contact with the Council.
- d) Recyclable waste placed in non-conforming containers (e.g. bags of paper or loose cardboard) shall be collected on the first occasion with a note to inform the citizen of the ability to receive additional containers or take material to the HWRC. Thereafter such items

shall not be collected. Such items being presented should be placed in the recycling container with a note to inform the citizen of the reasons for non-collection and information provided to the citizen of the ability to receive additional containers or take material to the HWRC. Why not? Wht don't we just keep collecting it (but get an officer to make contact personally rather than leaving notes if there are repeating instances). Or we could just send them another container anyway. I disagree with leaving recyclables unless there is a good (H&S?) reason for it.

4.2.4 Elements not considered for this CoP

Where communal collections are adopted, policies for excess/side waste or overfilled/overweight bins are often less effective. This is related to the challenges with identifying the source of extra waste. Policies to tackle excess waste at communal collection points are not considered within this CoP as evidence of best practice in this area is limited. However, the policies should consider the following interventions:

- a) Look to include more stakeholders such as factors, property managers, caretakers, concierges, housing departments, and litter and flytipping functions within the Council.
- b) Communicate with all residents in the first instance to raise any concerns.

If this is this is the case, there is no point in specifying a maximum litre/hh for communals. LA's should then judge how best to deal with this.

4.3 BULKY OR SPECIAL WASTE COLLECTION POLICY

4.3.1 Rationale

Bulky or special waste collections have evolved in the last 10 years with many Councils now providing a chargeable service for bulky uplifts on a request basis. However, there are still a number of Councils that provide free bulky uplifts and this service has a high degree of variability across the country. On the evidence of those Councils that have introduced chargeable services the benefits of chargeable bulky/special uplift collections are:

- Reduced household waste arisings;
- Reduced revenue costs for delivery of bulky waste service
- Increased reuse and recycling via HWRCs

Work on developing comprehensive recycling and reuse services for bulky/special waste collections has been limited thus far and therefore this CoP recommends that further work is allowed to develop before giving a clear definition of best practice in this area.

4.3.2 Essential contents of this policy

The following procedures **shall** be included within the Councils ways of working:

- a) The service shall promote the use of the National Reuse Phoneline wherever practicable. For example, the customer services function dealing with in-bound phone calls should be aware of the National Reuse Phoneline and understand the protocols for directing appropriate calls to it.
- b) There is a clear communication of the policy to citizens covering the types of waste that are accepted (e.g. no asbestos, sharps etc.) and what to do with those wastes that are not

4.3.3 Desirable contents of this policy

The following procedures **should be considered** within the Councils ways of working:

- a) The policies in place shall include recycling and reuse wherever this is feasible to do so within the local context. As a minimum it is expected that the following steps are undertaken:
 - WEEE (including white goods, Large Domestic Appliances and fridge/freezers) are collected as a separate stream. This should be carried out in a non-compaction vehicle.
 - II. Upon collection, efforts are taken to recycle and reuse bulky waste. This typically is carried out using mechanical and hand sorting processes.
- b) Separate collections are put in place to maximise reuse. This will require collections of suitable wastes in non-compaction vehicles with adequate protection from the weather (e.g. box-van). This will also require engagement with service providers that can prepare items for reuse.
- c) Appropriate charging mechanisms have been considered. In particular this should consider charging for waste derived from 'fixtures and fittings' or 'household improvements' (i.e. DIY wastes) as a minimum.
- d) Customers are allocated a collection day, and time if practicable, when the uplift will take place to avoid occasions when items are presented ahead of collection schedule leading to additional items subsequently being flytipped alongside the authorised special uplift.

Is there any background data on levels of re-use from bulky collections? It would be useful to know what the baseline is and perhaps even consider some form of target for re-use/recycling from this waste stream?

4.4 RECYCLING CONTAMINATION

4.4.1 Rationale

Policies to deal with the improper use of recycling containers have been established since the widespread introduction of kerbside recycling services over 10 years ago. However, there have been inconsistencies in the detail within these policies and the way they have been applied.

Policies to encourage the proper use of recycling containers is important in maintaining high-quality recycling and giving confidence to contractors that will manage the onward processing of collected recyclables. It is also important in re-assuring those citizens that do participate in recycling services that the material they have taken care to sort is being handled properly and thus encourages the sort of behaviour from citizens that will support the Council in its aims.

Where recycling contamination occurs, a more consistent approach to the way that incidents are monitored and managed provides all citizens with a clearer understanding of what is acceptable. It also provides officers from Councils with reassurance that the steps they take to rectify any incidents is supported by a national approach.

4.4.2 Essential elements

The following procedures **shall** be included within the Councils' ways of working:

Dry Recycling: Household with access to kerbside

a) When collecting dry recycling the collection crew shall:

- I. Check for contamination of the container with unacceptable materials (refer to 3.6.2).
- II. Provide feedback to residents if unacceptable is presented so that they understand the range of materials that can be recycled and the impact that contamination can have.

b) The recycling shall not be collected if contamination is severe as it will have a detrimental impact on the quality of the whole load collected. The following system should be adopted:

	re contamination e.g. black	collected. The following system should be adopted: Recycling not collected as it will contaminate the
bags	and/or food waste	whole load collected. The container should be stickered advising the citizen to sort their material correctly and then present the recycling for collection on the next scheduled collection day. Future collections should be monitored. Box collection: Where safe to do so the
unac visibl	everal items that are ceptable (refer to 3.6.2) are e to the operative. How	collection crew should remove the contamination and collect the recycling, leaving the contaminants in the box.
	y are several?	Bin collection: Where safe to do so the collection crew should remove the contamination and collect the recycling, leaving the contaminants in the bin. If the items cannot be safely removed, the bin should not be collected. This needs consideration – is this sending the right message to the householder where it may be that only 3 or 4 items are wrong in an entire bin? I disagree with this. Most reprocessors will deal with this level of contamination. Feedback should be provided to the resident (e.g. a calling card or bin hanger) so that they understand the range of materials that can be recycled. Future collections should be monitored.
Very unac visibl	fewels of contamination i.e. few items that are ceptable (refer to 3.6.2) are e to the operative. What is	Where safe to do so the collection crew should collect the container taking note of the incident. Feedback should be provided to the resident (e.g. a calling card or bin hanger) so that they
the d	lefinition of "very few"?	understand the range of materials that can be recycled. Future collections should be monitored. Wouldn't we still leave the undesirable items in the container if possible?

- c) Instances of contamination shall be recorded and monitored for future reoccurrence.
- d) In cases of ongoing severe contamination councils shall adopt the following protocol:
 - I. In the first instance of severe contamination the container should be labelled in some way advising the resident to sort their material correctly and then present the recycling for collection on the next scheduled collection day. But their bin won't be big enough now, can they present excess in bags next time or are they told to use RPs/HWRCs? What if they can't sort it? If it is full of rubbish it might be impossible to sort it to the desired quality or the H&S implications for the householder in tupping a bin out and sorting through it are restrictive? Wouldn't we collect it as waste in this instance? I guess this is where a box collection wins out.

- The label may be a sticker or a bin-hanger or some other means of communication.
- II. If the citizen presents a severely contaminated recycling container again, or fails to sort the contaminated recycling presented previously, the container shall again be stickered and be followed up with a written communication delivered to the property (i.e. a letter or leaflet). So now they have 2 bin fulls of mixed waste/recycling. Its going to get messy.
 - The aim of the communication is to try to understand and address the reasons for the misuse of service and where necessary to advise of any supporting policies (i.e. Additional containers) where citizens are unable to cope with the volumes of waste containers they have been supplied with.
- III. If the citizen presents a severely contaminated recycling container for a third time, or fails to sort the contaminated recycling presented previously, the container shall again be stickered and be followed up with a visit from an officer. More messy. Now 6 weeks worth of waste on a fortnightly collection if this is 3 times in a row....!
 - The purpose of this visit will be to discuss the materials that can be recycled with the citizen and, if necessary, carry out an inspection of the recycling container and non-recyclable container to demonstrate practical steps that the citizen can take.
- IV. Where the citizen continues to present recycling that is severely contaminated upon exhausting all of the steps above, the recycling service shall be withdrawn for a period of time and a follow up visit shall be arranged at a later date to discuss the options for re-introduction of the service. This is where the ability to make a charge in this kind of situation would be really useful. Withdrawing the service is time-consuming and administratively burdensome. But if we could charge them for presenting waste in the recycling bin to cover the cost of additional collection and disposal that might help although would be difficult in communal situations and if you can't apply this equally to all citizens that would be an issue.

Food Waste: Household with access to kerbside

- e) The general approach set out in 4.4.2a above shall be followed for food waste collections.
- f) Where contamination of the food waste container occurs, the crews will not take efforts to remove the contamination.
 - I. Where contamination is minimal (i.e. one plastic bag or film lid) then the container shall be collected with a notice placed on the container.
 - II. Where contamination is more serious (i.e. obvious non-food waste or packaging materials) the container shall not be uplifted and the procedures set out in 4.4.2c-d shall be followed.
 - III. But what if the contractor can deal with it? If not, wouldn't we want to collect it as waste? Leaving food waste for another week might not be good in the interests of public health???

4.4.3 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

Households without access to the kerbside or with shared containers

a) Where practicable, the Council shall adopt policies for households without access to the kerbside or with shared containers that are similar to those set out in 2.5.2.

I think that this indicates a need for more research on this. Largely, similar principles can be adopted in terms of telling residents there is a problem but this requires extra resources as the

collection crews would not have the time to leave notification through each door of the block of flats concerned. A sticker could still be applied to the bin but would possibly be less effective.

4.5 ADDITIONAL CAPACITY

4.5.1 Rationale

All policies set out in this CoP are aimed at dealing with the majority of households and the needs of most citizens. However, it is recognised that there will be some properties where the needs of the citizens' requires variations in the standard collection design or operational policy. The most common reasons for this are for larger families where there are more than 5 citizens in the house or where certain medical conditions lead to the generation of increased wastes.

This section covers the current best practice approaches for ensuring that the needs of these citizens are met whilst not compromising the overall objective of reducing waste arisings and recycling as much as we can.

4.5.2 Essential elements

The following procedures **shall** be included within the Councils' ways of working:

- a) The Council shall listen to all special requests where the citizen feels unable to manage with the standard service being delivered.
- b) Where the reason for requesting additional capacity is related to a medical need, the Council shall ask what that need is and request the citizen, or a Carer on their behalf, to complete an application.
- c) Medical conditions that will be considered for additional non-recyclable waste capacity will be ones where hygiene wastes (i.e. pads, wipes, dressings) are likely to be generated. Where the medical condition requires clinical waste provision or the management of sharps, such cases should be discussed with the local health authority. Could there be some dialogue on a national level to establish what the responsibilities are for both parties? This seems to vary from area to area at the moment so it would be helpful to get clearer guidance on this?
- d) The Council may request written confirmation from the citizen's doctor to confirm the condition. If required. It should be clear enough from what is in the bin I suspect.
- e) Where the reason for requesting additional capacity is not related to a medical condition, the Council shall carry out an assessment of the requirement for greater recycling provision or non-recyclable waste provision by:
 - I. In the first instance if the property is not lived in permanently by 6 or more people or there are fewer than 2 children in nappies the Council shall inform them that no additional capacity for non-recyclable waste shall be provided. Additional capacity for recycling may be considered where the Council feels this is reasonably practicable.
 - II. If there are 6 or more permanent residents or 2 or more children in nappies within the property, the Council shall request that the citizen complete a waste diary for an agreed period of time (e.g. 1 collection cycle for non-recyclable waste).
 - The citizen will be asked to record the wastes that they place in both recycling and non-recyclable waste containers.
 - A 'Waste Diary' pack shall be sent to the citizen with instructions for completion and, where appropriate, a visit from a Council officer shall be provided to assist with the completion of the diary.
 - III. Upon completion and submission of a waste diary, a Council officer shall visit the citizen to provide further advice on what can be recycled and ways of reducing waste.

- f) If the Council assess that the citizen requires additional capacity for non-recyclable waste following 2.6.2c they shall deliver either an additional container or a larger container.
 - I. This container should be identified with a 'marker' so that it is clear that it is an additional container that is approved by the Council to aid collection crews with collecting the proper containers.
- g) Any additional capacity provided shall be time-limited and a review shall be carried out at the end of the agreed time limit. Annually (unless a good reason for being otherwise)? Why not be specific so we are all doing the same thing and then standard template materials and letters can be developed.
 - That's a lot of visits, many LA's will not have the resource to do this and even if they do is this really best use of resources? Might it not be better to to an interview over the phone in the first instance? Monitoring can then be done once the additional container is issued to ensure it is not being filled with recyclables? This might be a better use of resources? Guidance on the additional container capacity? Can this be variable? Should we be encouraging authorities to give limited additional capacity in the first instance? E.g. if the Council provides a 180 or 140 litre bin then their additional capacity is to replace it with a 180 or 240?

4.6 NON-REYCLABLE WASTE CONTAMINATION (WHAT?)

4.6.1 Rationale

As waste and recycling services have evolved, many Councils are now considering new policies to align the use of non-recyclable waste bins with the policies for recycling provision. With the breadth of recycling services being provided currently, there is often little argument for citizens not to fully utilise these. This implies that there are few reasons why citizens should place any accepted recycling item within their non-recyclable bin. In a sustainable waste and recycling service, the placement of acceptable recycling items within the non-recyclable bin can be considered contamination. Policies in relation to this are not fully developed and best practice is far from established, however the CoP requires Councils to implement a policy that further incentivises citizens to recycle by introducing a procedure to engage with citizens that fail to use their non-recyclable bin for the intended materials. NO NO NO. Let's not complicate things, stick with sorting the recycling collection and encouraging participation in that and the residual bin by definition should be OK largely. This is not necessary at this stage.

4.6.2 Essential contents of this policy

The following procedures **shall** be included within the Councils ways of working:

- a) Citizens shall be given clear guidance on what should and shouldn't be placed in non-recyclable waste containers and the correct means of recycling target materials via the kerbside recycling service or Household Waste Recycling Centres (HWRCs).
 - I. The guidance shall specify materials that should not be presented as part of the normal residual collection e.g. hazardous wastes (such as? There is no such thing as household hazardous waste?), heavy items such as engine parts and rubble and 'unacceptable' items (refer to section 3.6.2).
 - For material such as rubble or DIY waste which may be from contracted work carried out in citizen's homes, citizens shall have be provided guidance their Duty of Care and the legal responsibility for the contractor to remove that waste and recycle/dispose of it elsewhere.
- b) Obvious commercial waste (e.g. from retail premises) shall not be collected.

I. The notes of any incidents relating to non-recyclable containers containing commercial waste, hazardous or inappropriate waste should be taken passed to a customer services function to inform the citizen should they contact the Council. This can be dealt with anyway by the Council's existing trade waste service. This is not required. What is "inappropriate waste"? This is so wrong. Let's not do this.

4.6.3 Desirable contents of this policy

The following procedures **should be considered** within the Councils' ways of working:

- a) The policy needs to provide clear guidance on how collection crews should identify and manage bins containing target recyclable materials or other incorrect material present as well as any guidance on tolerated amounts
- b) The Council shall discourage the placement of recyclable materials in non-recyclable waste containers by banning such behaviour where an adequate recycling service is provided.

 Legal? I think we'd have to serve a notice first. That's a lot of hassle, is it really worth it?
 - I. The Council shall not collect non-recyclable containers where there is a clear volume of recyclable material within the container. What's a "clear volume"? What do they do with it then? (see earlier comments on contamination policy re householders sorting it).
 - II. The policy will state that advice will be given to the citizen on what to do next. Which will be what?
 - III. The policy will state that advice will be given to the citizen on alternative places to dispose of extra waste (i.e. Recycling points or Household Waste Recycling Centres). "I don't have a car, can't walk there carrying it and anyway you have a duty to collect my waste." This is not extra waste this is the waste that was in their bin.
 - IV. A note of any incidents relating to misuse of non-recyclable containers shall be taken by the collection crew and passed to the supervisor.
 - V. A log of any incidents relating to excess/side waste or overfilled/overweight bins should be kept and maintained. This should be used to track any repeating patterns of behaviour to ascertain if further assistance is required. This shouldn't be in here isn't this the excess waste policy?

There are occasions where, for good reason, some people can't participate in a recycling collection. For example – an elderly person who produces very little waste and has an assisted collection for their waste which is generally a small bin. They may be able to have an assisted collection for recycling and residual waste, but, if glass is not collected for example, they are unable to get to a RP and don't have anyone who can assist, they only have a 2 or 3 glass items per fortnight. In this instance, it is practicable to allow those to go in the residual bin. Or, there are times where the container has got contaminated to a point where cleaning it out is very unpleasant and in some cases even hazardous (yukk to the mouldy stuff!). I don't think its so wrong to allow small amounts like this in the residual waste provided people are largely making the effort to participate in the recycling schemes offered to them. We need to get real here.

Now, whilst this type of situation may not arise that often, the fact remains that is does, and we don't want to get too specific about the residual bin for that reason. The other policies being suggested here should have enough impact to achieve the aim we need without further complicating things unnecessarily with this.

4.6.4 Elements not considered for this CoP

Councils in Scotland do not have appropriate statutory powers to issue fixed penalty notices where waste services are not being adhered to. Therefore, this CoP does not make any reference to the use

of Fixed-Penalty-Notices as a means of enforcement when citizens have chosen not to comply with the instructions on the proper use of the service. But maybe we should be considering that?

4.7 COMMUNICATING POLICIES TO CITIZENS

When policy has been developed it has to be communicated clearly to citizens. Upon completion and agreement of policy via elected members there should be effort taken to ensure that all citizens are aware of any changes and the implications of any new policy are made clear.

4.7.1.1 Essential elements

The following procedures **shall** be included within the Councils' ways of working:

- a) The Council shall include details of the policy changes in a press release.
- b) The Council shall include details of all the waste and recycling policies in written communication to households.
 - I. This can be achieved as a separate communication or as part of a planned communication activity with a supplementary section covering the relevant policies.
 - II. Details should also be on website.

4.8 POLICY IMPLEMENTATION

Policies are often only as good as the implementation that follows. This requires commitment to the implementation of the policy from Council officials and politicians and compliance from citizens. This section provides guidance on the most effective methods that are currently employed to ensure that the policies that have been agreed are effectively implemented.

4.8.1 WORKFORCE DEVELOPMENT

The first step in implementing an effective policy is making sure that those staff that are expected to ensure the policy is followed understand the rationale for the policy and the detailed procedures they are expected to follow.

4.8.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) Council implementing the policies earlier in this section shall be required to ensure that appropriate 'toolbox talks' have been held with the collection crews.
 - I. These shall occur prior to the introduction of the policy and as part of an annual update.
 - II. Records of all relevant collection crews being given these talks will be maintained.

4.8.2 OPERATIONAL DELIVERY OF POLICY

Once the policy has been adopted, the collection crews have been trained to implement the policy and the citizens have been informed of the policy, the most vital stage is in ensuring that all of the operational systems are in place to support the effective introduction of the policy.

4.8.2.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall ensure all elected members and relevant officers are thoroughly briefed on the details of the policy and the scenarios that might be expected.
- b) The Council shall carry out regular audits of its performance against the stated policies to check that the implementation of the policy is effective.
 - I. The Council shall supervise collection crews and carry out spot-checks on the implementation of policies.
 - II. Records of audits should be maintained and reported on to relevant senior officers within the Council on an annual basis.

4.9 HOW DOES THIS SECTION DELIVER THE OUTCOMES?

A summary of the impact of this section against the outcomes for the Code of Practice are summarised in the table below.

OUTCOME ONE: ACHIEVE HIGH QUANTITIES OF RECYCLING AND MINIMISES NON-RECYCLABLE WASTE	
OUTCOME TWO: SUPPORT THE CIRCULAR ECONOMY THROUGH MAXIMISING HIGH-QUALITY MATERIALS	
OUTCOME THREE: COST EFFECTIVE SERVICES FOR LOCAL GOVERNMENT	
OUTCOME FOUR: KEEP CITIZENS, STAFF AND CONTRACTORS SAFE AND HEALTHY	
OUTCOME FIVE: SERVICES THAT ENCOURAGAE PARTICIPATION FROM CITIZENS	
OUTCOME SIX: COMPLY WITH REGULATIONS	
OUTCOME SEVEN: SERVICES THAT SUPPORT SCOTTISH AND LOCAL EMPLOYMENT	

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Section 5: Operating household waste & recycling services

This section provides guidance on operating procedures that are considered current best practice. Operating procedures are needed to support the design of services and policies that deliver the outcomes of the household recycling charter.

The household recycling charter states:

We will *collect household waste when we have said we will* and ensure materials are managed appropriately upon collection.

We will manage materials so that the *highest possible quality is attained and we seek to accumulate value* by working with partners to encourage inward investment for our economy. We will *record complaints and alleged missed collections* and ensure that we respond to these in line with the Code of Practice (CoP).

We will *listen to special requests or challenges* that citizens are having in relation to household waste collections and ensure that we respond to these in line with the Code of Practice (CoP). We will deliver services so that they *take account of current policies with regards to environmental crime, litter and flytipping* in line with the Code of Practice (CoP).

We will deliver services so that our *staff and citizens are not endangered or at risk from harm* in line with the Code of Practice (CoP). (like asking them to sort out their contaminated bins??)

5.1 CUSTOMER SERVICE

Delivering high levels of customer service can help to contribute to high customer satisfaction and improved service performance. Both of which are vitally important for ensuring that the recycling service meets the expectations of the citizens, providing confidence and credibility to the service and building trust and participation.

5.1.1 COLLECTION COMMITMENT

Providing a commitment to citizens on the time, place and container for waste and recycling collections is something that has been commonplace for many years. This section will outline what the current best practice approaches are for procedures that can form a commitment to citizens about the level of service they can expect.

5.1.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

a) Local authorities shall commit to provide a 'regular' collection, i.e. one that is 'recurring at fixed times' and that provides sufficient capacity for each material stream. The time-window and collection point for the collections should be clearly communicated (e.g. "Containers shall be collected between 7am and 8pm"). Research commissioned by WRAP suggests that residents strongly value having certainty on when they will receive their collections¹⁴.

¹⁴ WRAP (2012). The Waste Collection Commitment. [Online] http://www.wrap.org.uk/sites/files/wrap/Waste%20Collection%20Commitment%20Report%20-%20Revised%2020.3.12 0.pdf [Accessed October 2015].

- b) Once waste or recycling is collected, operatives shall return the collection container to the collection point, taking care to be neat and avoiding blocking access (i.e. they shall avoid leaving containers in a position which blocks driveways or pedestrian access along the kerbside). In instances of bad weather (e.g. strong winds or flooding) operatives shall return smaller containers (e.g. boxes or food waste caddies) to within the property boundary where possible.
- c) Where there are complaints related to irregular collections or return of containers, liaison shall take place with specific crews and monitoring undertaken to ensure the issue is addressed.
- d) Local authorities shall ensure that call centre staff have access to up to date service schedule information and service policies.

5.1.1.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) Where possible local authorities shall provide same day collections so that each material stream is collected from a given household on the same day (albeit with materials collected at different frequencies).
- b) During bad weather containers on or close to trunk roads shall be secured where appropriate to prevent any hazards. Where necessary, the Council shall determine the safest point of collection and communicate this to the resident. Secured by who? Not only trunk roads, what about high speed rural roads?

5.1.2 MISSED COLLECTIONS

On occasion collections will not take place as planned. This is usually a result of parked vehicles blocking access to streets, human error or incomplete emptying of containers. When a collection is genuinely missed, it is important to maintain the trust and credibility of the waste and recycling service that procedures are put in place that deal with 'missed collections' effectively.

5.1.2.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall adopt a consistent definition which explains what determines a 'missed collection' and when it should be acted upon and reported. Shouldn't we be defining that here so that the definition is consistent?
- b) The Council shall clearly communicate when residents should present their containers for collection (e.g. before 7am on collection day). They shall explain that the Council cannot commit to specific collection times and that routing schedules may change. They should ask citizens to leave any unemptied containers at the collection point until the end of the collection day (e.g. until 8pm).
- c) Collection operatives shall also have the ability to capture and report information on service issues specific to a property or group of properties which may have prevented collection from taking place as planned. For example:
 - I. Severe contamination of recyclables
 - II. Container not presented by the resident in time for the collection
 - III. Local access issues (e.g. not being able to undertake an assisted collection due to a locked gate)
 - IV. Excess waste presented/local flytipping.
- d) When the citizen calls to report a missed collection prior to completion of the working day, initial notes shall be taken and contact shall be made with the crew carrying out that collection. However, the call shall not be logged as a 'missed collection' until the day's work

- has been completed (i.e. after 8pm). Reports of missed containers shall only be accepted and reported after the end of the collection day.
- e) The procedure adopted at the customer contact centre (or on-line if self-reporting of issues is made available by the Council) shall ensure that citizens are queried to try to ensure that the issues described in 5.1.2.1c are not applicable.
- f) If deemed necessary in agreement with the citizen, collection crews shall return to collect missed containers. The response time should be no longer than 48 hours from when the missed bin was reported and logged as a missed collection for records. May need some flexibility here for more rural authorities! Sometimes the ability to take excess bags the next cycle is a better option provided the householder is happy with that.

5.1.2.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) Collection operatives shall have the ability to capture and report real-time information to the customer contact centre on service issues that prevent collection e.g. vehicle breakdowns, blocked access to collection points (e.g. parked cars). More regional issues (e.g. heavy snow) shall be reported by a supervisor/manager to the customer contact centre.
- b) Integrated systems can be used to monitor operations, capture service data and address service issues. For example, containers fitted with RFID tags (i.e. chipped bins): Fitting containers with RFID tags that are then electronically coded to an individual property can enable the council to monitor operations (e.g. delays to collections) as back office staff can check the progress of the collection vehicle and/or if individual bins have been emptied.

5.1.3 HANDLING SPECIAL REQUESTS

Collection services need to be sensitive to the particular circumstances of individual residents and households by ensuring that there are policies and procedures in place which offer a level of flexibility in order to enable residents to use the services to the best of their ability.

Examples include policies which address the following circumstances:

 Assisted collections for residents that are infirm, have a medical condition or a disability and are unable to present their waste and recycling containers at the designated collection point.

Special requests are often referred to as 'Pull outs' or 'Assisted lifts'. Let's standardise this then!? What are we calling it?

5.1.3.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) Citizens shall be required to complete an application for an assisted collection.
 - I. Assisted collections are for residents that are infirm, have a medical condition or a disability and are unable to present their waste and recycling containers to the designated collection point. Applications would be considered where there is no one in the property to assist with the collection. So are they not considered where there is someone there? What if someone is only there some of the time? I would reword the last sentence along the lines of "where there is no regular assistance available to help. The helper need not live there for example, it could be a friendly neighbour or a carer. Or they may have a son who works away a lot.

- b) Once approved, the Council shall maintain an accurate and up-to-date list of properties where the citizen requires assisted collections.
- c) Collection crews shall collect and return the container from the same point of collection within the property boundary.
- d) The Council shall inform the citizen of their responsibility for maintaining access to the collection point for the collection crew.
- e) The Council shall review properties receiving a collection at least annually (from the date of application) to monitor whether assisted collections are still required.
 - I. All communication in relation to assisted collections shall be addressed 'To the Occupier' to be sensitive to any changes in circumstances.
 - II. The citizen should still be encouraged to participate in all recycling services provided and an assisted collection would be provided for all services if needed.

5.1.3.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

a) The Council shall monitor the 'Tell us once' protocol¹⁵, where it exists, to monitor potential changes in assisted collection lists.

5.1.4 REPLACING LOST/STOLEN CONTAINERS

Containers for waste and recycling are occasionally lost, broken or stolen. When this occurs, it is important to replace these timeously to provide continuity of service and maintain participation in services.

5.1.4.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) Standard containers shall be dealt with separately from specialist containers. Replacement containers shall be delivered before the next collection or within 10 working days of notification, whichever is the greater (i.e. if the next collection is in 15 working days' time, the container shall be delivered by then).
 - I. Standard containers are ones that are used for individual properties. For example 240I, 140I wheeled bins, boxes, bags, caddies etc.
 - II. Specialist containers are ones that are used for communal properties or properties that are not on the typical collection service. (examples?)
 - III. Higher priority for communal containers?
- b) Where the council provides free food waste liners, the resident can request additional liners to be provided by tying the last liner to the caddy handle. The collection crew shall provide a new roll which shall be posted through the letter box or secured in the food waste caddy. What about situations where food waste is co-collected with garden waste? If the roll of liners is left in the bin it is likely that this is where it will stay. Other arrangements need to be made in this situation. Also – what about communal food waste collections?
- c) Collection crews should be required to report and bins falling into the collection vehicles and/or damaged during collection.

5.1.4.2 **Desirable elements**

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¹⁵ https://www.gov.uk/after-a-death/organisations-you-need-to-contact-and-tell-us-once

The following procedures **should be considered** within the Councils ways of working:

a) Replacement food waste containers and liners should be made available for collection by residents from local offices (e.g. depots, recycling centres, etc).

5.1.4.3 Elements not considered for this CoP

There are varying policies on charging for replacement containers across Scottish Councils. The charging for containers is not within the scope of this CoP and Councils are free to decide on the best means of determining the costs and charges for replacing containers for waste and recycling.

5.2 STEWARDSHIP OF COLLECTED MATERIALS

The Scottish Government's Recycling Quality Action Plan¹⁶ explains that there are greater environmental and economic benefits to closed loop recycling where a product is used, discarded, captured, and then the component materials recycled into a new product of similar functionality which can itself be used, discarded and captured, to be recycled again, continuously cycling the material resource though the supply chain. Examples include;

- the use of recovered glass cullet in re-melt applications to create new glass products rather than for aggregate in construction;
- the use of recovered plastic to produce, for example, new food and drinks containers rather than construction products;
- the use of recovered paper for the production of new paper products rather than other uses such as animal bedding and insulation.

The Waste Hierarchy Guidance¹⁷ provides further details for a range of common recyclable materials. Generally speaking, these 'high quality' applications require high quality materials in order to be viable.

5.2.1 COLLECTING HIGH-QUALITY RECYCLING MATERIALS

Every stage of the collection, bulking and processing chain is equally important in the stewardship of materials. It all starts with collection from the containers provided to citizens however and there are procedures that should be followed to ensure this process provides a quality feedstock to the next stage in the process.

5.2.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

a) The policies for recycling contamination (Refer to 4.4) shall be adhered to.

¹⁶ Recyclate Quality Action Plan – Consultation Paper (2012). The Scottish Government. [Online] http://www.gov.scot/Publications/2012/10/6584/6 [Accessed October 2015].

¹⁷ Waste Hierarchy Guidance (2013). The Scottish Government. [Online] http://www.gov.scot/Resource/0042/00420711.pdf [Accessed October 2015].

5.2.1.2 Elements not considered for this CoP

Councils in Scotland do not have appropriate statutory powers to issue fixed penalty notices where waste services are not being adhered to. Therefore, this CoP does not make any reference to the use of Fixed-Penalty-Notices as a means of enforcement when citizens have chosen not to comply with the instructions on the proper use of the service.

5.2.2 BULK TRANSFER OF RECYCLING MATERIALS

The second stage of material stewardship occurs at the bulking/transfer station. The priority at this stage should be to ensure that separately collected wastes are not mixed with other wastes or materials where doing so would hamper further recycling.

5.2.2.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) A physical barrier between each waste stream (e.g. separate bays) shall be maintained.
- b) The Council shall ensure that materials are stored safely (e.g. ensuring that fire hazards are understood and that risks are minimised).
- c) The Council shall Implement procedures to ensure that infrastructure used to transfer recycling (e.g. vehicles, shovels and balers) are clean, especially when used to handle multiple waste streams.
- d) The Council or its contractors shall, where practicable, store paper/card recycling in a clean and dry environment (i.e. indoors).

5.2.2.2 **Desirable elements**

The following procedures **should be considered** within the Councils ways of working:

a) The Council shall, where practicable, undertake preliminary pre-sorting of materials e.g. operating a picking line to remove obvious contaminants. H&S worth mentioning here.

5.2.3 ONWARD PROCESSING OF RECYCLING MATERIALS

The Council should ensure that its duty to maintain the high quality of collected recycling is reflected in any contracts that it has with operators undertaking further processing or sorting of materials is required. Any guidance? Draft clauses? Something about contamination here would be good – how is a load defined as contaminated? Who gets to decide that a load of material collected for recycling is tipped in the transfer station as waste – and how should this be reported?

5.2.3.1 Scottish Materials Brokerage Service

The Scottish Materials Brokerage Service was launched in October 2014¹⁸. The aim of the service is to see supply and demand for high-value recycling matched up, providing certainty of supply for investors and certainty of demand for Councils.

5.2.3.1.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

¹⁸ http://news.scotland.gov.uk/News/Striking-gold-from-waste-11ba.aspx

a) The Council shall consider the means of supplying the Scottish Materials Brokerage Service with the material it collects.

5.2.3.2 Supporting the prevention of environmental crime

Local Authorities will have operational procedures in place to deal with litter and flytipping in order to fulfil their duty under the Environmental Protection Act 1990 section 89 (1&2)¹⁹ to ensure that the land is, so far as is practicable, kept clear of litter and refuse, guidance on fulfilling this duty is provided in the Code of Practice on Litter and Refuse²⁰. Is this necessary for this CoP? How does this fit under onward processing? Litter at transfer stations will be taken care of by site licensing requirements?

The Scottish Government's published its first National Litter Strategy in 2014, Towards a Litter-Free Scotland. The strategy seeks to significantly reduce litter through multiple interventions which encourage personal responsibility. The current operational practice on tackling litter and flytipping based on cleansing regimes alone currently costs Local Authorities in excess of £45 million pounds per year. There are range of measures being considered as part of the strategy to move from a focus on cleansing to preventing litter and flytipping occurring in the first place.

A collection of current practice on litter and flytipping prevention is being collated and will be made available in the 'knowledge hub/portal' and is designed for stakeholders to access case studies and toolkits to aid the implementation of prevention activity.

The procedures and policies adopted by Local Authorities to deliver household waste and recycling services should seek to minimise the potential for waste from collection services becoming litter or flytipping.

5.2.3.2.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) The Council shall ensure there is a synergy between all the operational functions responsible for waste, cleansing and flytipping. To promote more effective and efficient services by ensuring procedures within the different functions complement each other and work in parallel to avoid cross over or double handling of issues. For example:
 - I. cleaning any spillages during collection or putting excess waste in the emptied bin to avoid cleansing crews being required to visit the same area;
 - II. Ensuring cleansing crews have a copy of the bulky uplift schedule so flytipping is easier to identify.
- b) A partnership approach with external agencies, such as Housing Associations, private landlords and factors, Scottish Fire and Rescue Service (SFRS) and Community Planning Partnerships. To promote a joined up approach to communicating with householders to help prevent the build-up of extra waste as research show that areas with accumulations of waste tend to attract more waste causing bigger litter and flytipping issues and wider issues such as: Deliberate fire setting of waste; additional costs for removal for the landlord/owner; and windblown litter.
 - I. The SFRS have issues with deliberate fire setting of rubbish and refuse. Ensuring citizens are aware of policies, procedures, collection times etc. for returning bins to their property and time slots for bulky waste will help with this issue.

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¹⁹ section 89 (1&2)

²⁰ Code of Practice on Litter and Refuse

- c) The use of the FlyMapper²¹, Scotland's National Flytipping Management Tool is encouraged to record and manage flytipping incidents. Allowing flytipping to be monitored and managed in an effective manner and for targeted interventions to be put in place. The largest waste type reported by Local Authorities as flytipping is household waste. FlyMapper data should be used to identify where the problem areas exist to allow: Targeted communications to householders; enforcement action to be taken; identify and review issues with collection services
- d) Ensure waste collection services are designed in a way so as to avoid accidental spillage or 'wind-blown' waste from collection containers or vehicles.
 - I. This should include containers that are fit for purpose and mechanisms in place for replacing damaged containers;
 - II. Up to date collection calendars and advice on changes to collection schedules to avoid containers being presented ahead of collection window;
 - III. Advice to the public on presenting containers in adverse weather conditions;
 - IV. Collection vehicles are fit for purpose and are not open to materials escaping during collection rounds;
 - V. Any spillages during collection rounds are cleared by the crew and equipment made available on the collection vehicle to aid this; or if not possible should be reported to the appropriate department as soon as practicable for clearance.
- e) Where bagged collections are provided thought should be given to the type of material collected to avoid wildlife being attracted to them, potentially causing litter to escape.
- f) Provision of improved communications at recycling points/bring sites to increase awareness of the materials accepted and to make it clear that materials/items left out with the containers are classed as flytipping. Other deterrents such as CCTV could also be considered.

5.3 OPERATIONAL SERVICE DELIVERY: FRONTLINE DELIVERY

The design of services, the policies used to support these and the operational delivery framework for services are all very important in the achievement of effective service delivery. However, these elements are all underpinned by the investment in frontline staff and the vital role they play in delivering services.

5.3.1 SUPERVISION

The first tier of management that interacts with the drivers and collection operatives has many job descriptions used (e.g. Supervisor, team leader) across Scotland. For the purposes of this CoP the term 'Supervisors' has been used to describe this first tier of management, which has a key role within the operational delivery of waste and recycling services. Supervisors are typically responsible for ensuring that all collection operations are carried out in compliance with relevant regulation and licences (i.e. operating licence and waste carrier's licence), they provide leadership and make sure that correct health and safety practices are adhered to.

5.3.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

a) The Council shall empower Supervisors to ensure all new staff are adequately inducted to carry out the tasks required of them safely.

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²¹ http://www.zerowastescotland.org.uk/content/flymapper

- b) The Council shall empower Supervisors to ensure that they speak with all of their drivers and operatives on a minimum basis of once per day, preferably at the start and finish of their collection day. This may not be possible and should probably be desirable to be once per day but no less than say twice per week?
- c) The Council shall empower Supervisors to ensure that they observe the collection practices of each collection crew on at least a weekly basis to assess the operating practices of the crews. Also may not be possible maybe each crew once a month?
- d) The Council shall ensure that Supervisors meet the requirements of the relevant competency requirements for the role²². Where the minimum competency requirements are not being attained, the Council will provide relevant training to build competency in necessary areas.

It would be great to meet the above, but as part of this it would be useful to get some guidance on the level of supervision that is required to meet this requirement – in an ideal world how many supervisors are needed to carry out the basic supervisory functions for a typical collection service?

5.3.1.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) Supervisors shall have the competency requirements to operate and understand relevant data and computer software that supports the customer service functions of the Council.
- b) Supervisors shall have the ability to speak to customers and act as ambassadors for the waste and recycling service.

5.3.2 WORKFORCE DEVELOPMENT

A competency framework has been established by the Scottish Waste Industry Training Competence and Health & Safety Forum (SWITCH) Competency Framework. By developing the competency framework SWITCH aims to create a Resource Management industry that:

- Is safe and healthy to work in
- Actively supports education, training, learning and development
- Increases workforce capacity and competence
- Develops and shares good practice
- Creates an industry that is attractive as a career choice
- Creates clear career and learner pathways

The roles within the framework are called Levels 1, 2 and 3^{23} - this is to avoid assumptions being made if labelled, for example, 'Operator', 'Supervisor' and 'Manager' given the variety of job titles that exist in the sector and the variety of responsibilities that fall within these areas.

²² http://www.ciwm.co.uk/web/FILES/ScotlandRDO/Framework.pdf

Level 1 - basic operative level, responsible for own area of work, carries out duties as prescribed by the supervisor. Level 2 - has the knowledge and skills to carry out the work unsupervised and could be leading a small team of others, maintaining productivity and resolving problems as they arise. Level 3 - responsible for controlling/administering teams/a group of staff. Plans and directs the work of a group of individuals, monitoring their work and taking corrective action where necessary.

5.3.2.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) The Council shall ensure that all staff are measured against the requirements for each role within the SWITCH Competency Framework to understand the development opportunities for each staff member.
- b) The Council shall ensure that adequate provision is made to address the competency development opportunities for each staff member over a period of time.

5.3.3 RISK ASSESSMENTS

Guidance on Health and Safety, including risk assessments is provided by the Health and Safety Executive (HSE)²⁴.

The Management of Health and Safety at Work Regulations 1999 require employers to suitably and sufficiently assess and control the risks their activities present to their employees and others. The assessment should identify:

- the hazards that can cause harm, what kind of harm and how likely it is to happen;
- who is at risk (such as workers, contractors, subcontractors, agency or temporary workers, members of the public or visitors);
- the appropriate control measures needed to eliminate or reduce the risks so far as is reasonably practicable.

Risk assessment is about identifying and taking sensible and proportionate measures to control the risks in your workplace, not creating huge amounts of paperwork.

Risk assessments aim to help you:

- identify the hazards;
- Identify those potentially at risk (e.g. workers, the public (other road users and pedestrians), contractors, subcontractors, agency workers, temporary workers, etc;
- assess the risks from those hazards, remembering that special consideration may be needed for people with disabilities, young people, etc;
- eliminate or at least reduce the risks from those hazards so far as is reasonably practicable.

5.3.3.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

a) The Council shall meet the British Standard OHSAS 18001 (due to be replaced in October 2016 by ISO 45001). Adopting an effective occupational health and safety management system promotes a safe and healthy working environment by providing a framework that allows your organisation to identify and control its health and safety risks, reduce the potential for accidents, aid legislative compliance and improve overall performance.

5.3.4 DESIGINING COLLECTION ROUTES

²⁴ Health and Safety Executive. 2015. Waste management and recycling. [Online] http://www.hse.gov.uk/waste/index.htm [Accessed October 2015].

5.3.4.1 Route risk assessments

When local authorities are developing and assessing collection route risks they should refer to HSE guidance²⁵.

5.3.4.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall undertake route risk assessments that assess route and location-specific hazards.
 - I. Although not an exhaustive list, this would include reversing, single side or double side collection, high-risk pedestrianised areas (e.g. schools, city centres), low overhead cables, staircases/steps, areas with poor lighting, etc.
 - II. Although not an exhaustive list, this would include the ability and authority of drivers and collection crews to react to changing (dynamic) conditions, taking action to ensure the health and safety of themselves and others.
 - Examples may include changing weather conditions, temporary road works and mechanical breakdowns.
 - Crews shall be adequately trained to respond to such circumstances, or identify the need to seek advice before proceeding.
 - III. Where high risks are identified the Council shall utilise technology or increased supervision used to manage the residual risk.
- b) The Council shall include within route risk assessments more generic factors (i.e. ones affecting the whole service) including:
 - I. The effect of strategic decisions, such as choice of vehicle design, receptacle type and material-specific issues (e.g. noise and glass collections)
 - II. Common issues such as manual handling, slips and trips, violence to staff, dealing with hung-up bins and sharps across your collection activities.

5.3.4.2 Routing software

The majority of Councils in Scotland now utilise computer software packages to plan collection routes. Such software has been proven to help improve the efficiency and effectiveness of collection routes and there is more to be achieved through technology.

5.3.4.2.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall utilise computer software, based on clean GIS information drawn from the Council's Corporate Address Gazetteer or equivalent tools, to plan and maintain collection routes.
- b) The Council shall utilise in-cab technology to support route risk assessment, monitoring of performance data (i.e. contamination) and customer service functions (i.e. linking to Customer Relationship Management (CRM) system) of the waste and recycling service.

5.3.4.2.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

-

²⁵ http://www.hse.gov.uk/pubns/waste23.pdf

a) The Council shall utilise property identification systems (e.g. RFID, NIR) to capture performance information (e.g. contamination, set-out).

5.3.5 COLLECTING FROM RURAL AREAS, PRIVATE ROADS AND LANE-ENDS

Often in rural areas or where there are private roads or inaccessible lanes, both formal and informal operating practices have been developed to tackle issues that arise from:

- Operational efficiency (i.e. to prevent excess travel and manoeuvring to service single or small numbers of properties)
- Liability (i.e. in terms of the risk of damage to non-council maintained property / roads)
- Health & Safety (i.e. accessing roads / locations which may present an operational risk due to road condition or other reason)
- Access (i.e. restricted access for vehicles or crews which may include width, turning areas, weight limits.)

Many Councils have implemented operational practices where the collection takes place away from the kerbside or vicinity of the property to overcome these issues and this section lays out the current best practice approaches for adopting such practices where the Council feels it is appropriate to do so.

5.3.5.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- The Council shall clearly identify where properties cannot be collected within the typical collection approach (e.g. Kerbside from the front or rear of individual properties or communal areas).
 - I. This will state the reason for a non-typical collection, such as:
 - journey time from the nearest adopted road being excessive;
 - turning area within property for collection vehicle being inadequate;
 - permission required to access a private road (and liability for gaining access being waived).
 - II. The method of assessment shall be made available to the citizen upon request.
- b) The Council shall write to all properties impacted by the non-typical collection to inform them of the reasons for their collection and stating the location that containers should be placed for collection.
 - I. Collections may take place from the nearest accessible road that is adopted by the Council or accessible, with appropriate permissions, for collection vehicles.
 - II. It would be helpful to develop some standard criteria to be used for assessing when a collection would or would not take place from a road end? Otherwise we will not have consistency?
- c) The Council shall provide planning advice to developers to prevent, where possible, the building of new developments or re-developments that will lead to non-typical collection.

5.3.6 MONITORING PERFORMANCE

Monitoring, interpreting and analysing data and information is vital to ensuring that the strengths and weaknesses of any service are understood and areas for improvement are recognised. There are many types of data that Councils have typically collected since the introduction of kerbside recycling

services and further guidance on general best practice for managing performance is available from WRAP²⁶ but this CoP will consider the following:

- Waste composition analysis: Where samples of wastes from a representative sample of
 properties is split into the constituent parts. This helps understand what citizens are wasting,
 the proportions of each material and the most common container for each material (i.e.
 non-recyclable waste, dry recycling etc.).
- **Set-out and participation rate:** Where collection routes, or representative samples from routes, are monitored at each collection cycle to observe properties that are setting containers out for collection. Participation rate is calculated over 3 cycles and where a property sets out a container at least once within that cycle, they are deemed to be participating in that service.
- Waste Data: Every piece of waste that is collected is weighed at some point in the collection, bulking and reprocessing chain. This data is collected and collated by all councils to report to SEPA via the Wastedataflow system.
- Key Performance Information: For the purposes of this CoP, key performance information (KPIs) shall be collected on: Missed collections; Replacement container deliveries; Contaminated containers reported by crews; Uncollected bins resulting from failure to comply with policies; Additional capacity supplied for non-recyclable waste; and Contamination reports from contractors.

5.3.6.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall carry out waste compositional analysis of all mixed waste streams (i.e. non-recyclable waste and mixed recyclates) on minimum basis of every 3 years or prior to any major service change.
 - Analysis will be taken from a representative sample and carried out over two seasons (i.e. Autumn/Summer) and follow the Zero Waste Scotland methodology²⁷.
 - II. Separately collected streams (i.e. garden waste, glass, food waste) shall be analysed separately and included in the results to show total waste composition.
 - III. Analysis prior to a major service should occur at least 3 months prior to the first new collection date.
 - IV. It might be useful if a nationwide contract were let to do this work right across Scotland so that consistency is achieved and reporting is simplified?
- b) The Council shall record waste data from all sources and prepare spreadsheets for the completion of Wastedataflow on at least an annual basis.
- c) The Council shall set up a system for recording and reporting the following KPIs:
 - I. Missed collections
 - Reports should show the number of confirmed missed collections per 1,000 properties per calendar month. (per quarter?)
 - II. Replacement container deliveries
 - Reports should show the percentage of replacement or new container deliveries that are completed within the time allocated in Section 5.1.4.1a of this CoP.
 - III. Contaminated containers reported by crews

²⁶ Monitoring and evaluation guidance. WRAP [Online] http://www.wrap.org.uk/content/monitoring-and-evaluation-guidance [Accessed October 2015]

²⁷ WCA Methodology Guidance - LINK NEEDED

- Reports should show the number of contaminated containers that are reported by crews and the collection routes where these were reported.
- (Frequency of reporting?)
- IV. Uncollected bins resulting from failure to comply with policies
 - Reports should show the number of properties where crews have not collected bins/containers as a result of failure to comply with excess waste/side waste/over-weight bins policy.
- V. Additional capacity supplied for non-recyclable waste
 - Reports should show the number of properties that are currently in receipt of additional capacity (i.e extra bins or larger bins) for non-recyclable waste.
- VI. Contamination reports from contractors
 - Reports should show the number of occasions and the details of the reports where contractors receiving recyclable materials have reported contamination and this has not been disputed by the Council.

5.3.6.1.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) The Council shall carry out analysis of the set out and participation rate for dry recycling and food waste collections on a minimum of 20% of collection routes per annum.
 - I. This can be achieved by following crews to record set out or by the crews recording the set out via a handheld or digital device.
 - II. Over a 5-year period all routes should be assessed for set-out and participation rates.

National contract to do this!?

5.4 HOW DOES THIS SECTION DELIVER THE OUTCOMES?

A summary of the impact of this section against the outcomes for the Code of Practice are summarised in the table below.

OUTCOME ONE: ACHIEVE HIGH QUANTITIES OF RECYCLING AND MINIMISES NON-RECYCLABLE WASTE	
OUTCOME TWO: SUPPORT THE CIRCULAR ECONOMY THROUGH MAXIMISING HIGH-QUALITY MATERIALS	
OUTCOME THREE: COST EFFECTIVE SERVICES FOR LOCAL GOVERNMENT	
OUTCOME FOUR: KEEP CITIZENS, STAFF AND CONTRACTORS SAFE AND HEALTHY	
OUTCOME FIVE: SERVICES THAT ENCOURAGAE PARTICIPATION FROM CITIZENS	
OUTCOME SIX: COMPLY WITH REGULATIONS	
OUTCOME SEVEN: SERVICES THAT SUPPORT SCOTTISH AND LOCAL EMPLOYMENT	

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Section 6: Communicating with citizens

This section provides guidance on approaches to communicating with citizens that are considered best practice. Without regular and effective communication to citizens, the design and operation of services, supported by suitable policies, will not achieve the services full potential to deliver the outcomes of the household recycling charter.

This section provides guidance on approaches to communicating with citizens that are considered best practice. Without regular and effective communication to citizens, the design and operation of services, supported by suitable policies, will not achieve full potential of the service to deliver the outcomes of the household recycling charter.

The household recycling charter states:

We will *clearly explain to all citizens* what services we provide by providing information on a regular basis. This will take recognition of different housing types, collection routes and service availability and be as specific to each property as necessary, in line with the Code of Practice (CoP);

We will *deliver service information directly* to citizens periodically in line with established Code of Practice (CoP); and

We will *provide clear instructions to citizens on what can and cannot be recycled*, giving clear explanations where materials cannot be competently recycled.

6.1 PROACTIVE COMMUNICATION

Fewer than half (47%) of all Scottish households recall receiving information on their recycling services from their council in the past year, compared with a UK average of 55%. While it is not possible to prove causality, those who say they are confident about what can and cannot be recycled are more likely to have received information in the past year.

There would appear to be a link between the relative recycling performance of Councils in Scotland and the level of communication activity that they undertake, with those investing more resources, more often, on proactive communication performing better. However, there is little empirical evidence to back up this hypothesis.

Proactive communication can cover many topics but for the purposes of this CoP, the following sections cover routine communication, major service changes and targeting poor performance.

6.1.1 ROUTINE COMMUNICATION

Routine communication is planned and provides updates, reminders and important service information whilst there are no changes in the service being delivered or the policies being implemented.

The impact of communications is maximised when multiple channels are used to ensure the widest possible reach and coverage and to reinforce key messages. This can include: printed collateral (leaflets and calendars), online information, social media, PR, local media advertising, locally available outdoor advertising (including bin stickers and vehicle liveries).

6.1.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall complete a communications strategy each year to plan its proactive communications with citizens.
 - Information on preparing a communications strategy is available from Zero Waste Scotland's guide 'Improving recycling through effective communications' 28.
 - II. This shall be reported and agreed with senior managers.
- b) The Council shall carry out routine communication activities annually in line with the communication strategy with a minimum budget spend of £1 per household per year committed to this. Perhaps this should be a guide rather than a requirement? Be difficult to sign up to this. As a minimum the following list, although not exhaustive, indicates the information that should be provided:
 - I. Information on collection days/patterns;
 - Information on what items can be recycled at kerbside or recycling points (yes/no lists for each container) using consistent, tested terminology (referred to in section 3.6);
 - III. Information on how to dispose of items that are not collected at the kerbside via HWRCs or reuse organisations;
 - IV. Information on what happens to materials that are collected for recycling;
 - V. Where possible, information on any specific, local benefits of recycling; Feedback on recycling rates, etc?
- c) The Council shall make routine service information available on its website, covering as much of the information set out in 4.1.1.1b.
 - One-in-five people actively sought information on recycling in the past year. Of these, 82% visited their local authority's website and 19% telephoned their council.
 It is therefore essential that these communications channels are maintained with regular accurate information.
- d) The Council shall provide information directly to citizens to inform them of known variations to the normal service.
 - I. This will be for changes in collection days or schedules resulting from seasonal holidays, bank holidays or other changes (e.g. planned road closures)
 - II. The format of direct information shall be via printed materials posted or delivered to the property or via stickers (or similar) appended to the waste containers.
 - III. The information shall also be available via the Council's website and, where available, social media channels.
- e) Standardisation of terminology? Format of website info for waste? Ideally accessed directly from home page

6.1.1.2 **Desirable elements**

-

The following procedures **should be considered** within the Councils ways of working:

²⁸ http://www.wrap.org.uk/sites/files/wrap/IRTEC Revision 12 6 13 0.pdf

- a) The Council shall provide an annual collection calendar in a durable format (e.g. fridge magnet) for the citizen to refer to. Is a leaflet durable? Can it be online only?
- b) The Council shall label non-recyclable bins or recycling containers annually with information relating to the effective use of the service. Annually??
 - 'Stop stickers' placed on non-recyclable bins are effective at encouraging the prevention of food waste and dry recyclates from entering the non-recyclable waste stream.
- c) The Council shall have a scheduled programme of social media messaging within the Communication Strategy.
 - I. Social media is an effective means of sharing positive messages and to normalise positive behaviours.
- d) Where available, the Council shall promote the waste and recycling services annually via a corporate magazine delivered directly to properties and/or made available online.

....all materials printed on recycled paper.....?

6.1.2 MAJOR CHANGES TO SERVICES

Many Scottish councils have implemented major changes to services recently with the introduction of food waste services and moves to 2-weekly and 3-weekly collections of non-recyclable waste taking place. Planned service changes create their own communications challenges but they are also a key opportunity to reinforce overall recycling information and motivational messaging.

6.1.2.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall complete a communication strategy 12 weeks prior to the scheduled date of the first collection of the new service. Too detailed. We know this.
 - I. This shall be agreed with senior managers and any supporting partners (e.g. Zero Waste Scotland).
- b) The Council shall provide a 'teaser' message to the property between 4-6 weeks from the date of first collection.
 - I. This will be on printed media posted or delivered to the property providing information covering:
 - What is the change and when is it happening
 - Define the reason for the change
 - Reinforce the economic and environmental benefits supporting the change
 - Contact details for more information
- c) The Council shall provide a 'Key information' message to the property at the time where new containers are delivered for the new service or after the last unaffected collection where no new containers are being supplied.
 - I. This will be on printed media posted or delivered to the property providing information covering:
 - What the service looks like what infrastructure is available
 - What materials the service collect and importantly does not collect using standard terminology and iconography
 - The recycling journey what happens to the materials collected, with localised examples where appropriate
 - Collection day details
 - Contact details for more information

- d) The Council shall provide a minimum of 2 press releases to all relevant media outlets informing them of the changes in service and the areas effected.
 - I. The press releases will be timed to align with the 'teaser' and 'key information' messages being sent to properties.
 - II. This is all way too detailed. No need for this to be so specific.

6.1.2.2 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

- a) The Council shall provide an annual collection calendar in a durable format (e.g. fridge magnet) for the citizen to refer to at the point of the new service being communicated.
- b) The Council shall recruit recycling advisors for a minimum of 8 weeks prior to and 8 weeks after the date of first collection.
 - I. Recycling advisors shall be deployed to:
 - support the delivery of communications materials to properties;
 - provide support to operational teams as the service commences;
 - provide advice to citizens in person or by phone;
 - provide support to crews delivering new containers; and
 - carry out visits to properties to discuss any issues with citizens (e.g. contamination/additional capacity requests).

Too much detail.

6.2 REACTIVE COMMUNICATION

Whilst much of the positive impact of communications occurs through the planned activities each year, it is equally as important to ensure that the communication in response to some of the operational challenges faced by Councils is managed just as effectively. Not reacting well to these challenges can affect the public perception of the waste and recycling service, ultimately undermining their confidence in participating in recycling and reuse.

This section covers the current best practice approaches for managing communication when there are disruptions to services or where operational issues, such as contamination problems, need to be addressed.

6.2.1 DISRUPTIONS TO SERVICES

Disruptions to services can happen at any time, often the reasons for this are:

- Inclement weather causing hazardous conditions for vehicles and collection crews or blocking access to certain roads or areas (i.e. snow, ice or flooding).
- Road accident or road closure blocking access to areas;
- Vehicle breakdowns;
- Industrial action;

Councils should have plans in place to ensure that where disruptions do occur, citizens are given the best opportunity to access crucial information that maintains their confidence in the service.

6.2.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

a) The Council shall have an agreed protocol for communicating service disruptions.

- I. This shall include social media channels and the Council website.
- II. This may include local media.
- III. This may include direct communication (e.g. stickers on bins or printed media delivered to properties) and text messages alerts, where available and appropriate.
- IV. This shall include timescales for when communication will take place to maximise awareness and minimise confusion.
- b) The Council shall include with the communication the following:
 - Define the disruption and what changes can be expected;
 - Inform when services are expected to return to normal; and
 - Advise where the most up-to-date information can be found
 - Encourage citizens to speak to neighbours and friends to spread the message.

I think we all do this anyway.

6.2.2 DEALING WITH POOR PERFORMANCE

Where citizens or specific areas or groups (e.g. Students) are identified as not participating in recycling services as effectively as possible (e.g. by regularly contaminating recycling containers or by not participating in recycling services), specific communications actions may be undertaken. Often this occurs following observations from collection crews or from monitoring the reports from collection rounds but reports may also occur via feedback from the sorting facility.

When poor performance is identified it is important that steps are taken to change the behaviour of those citizens by communicating with them. Details of the operational procedures are set out in section 3 of this CoP but further details on the communication approaches that are currently considered best practice are laid out in the following section and more information is available in guidance available from Zero Waste Scotland "Reducing contamination in dry mixed recycling collections"²⁹.

Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall act upon information that suggests that citizens, areas or groups are not participating effectively by establishing a protocol for communicating with such properties. Maybe of more help would be simple guidance on how to define poor participation? Compare against national expected rates in terms of both participation and kg/hh/annum? How to present and gather the data? Participation of HWRCs/RPs/communals, as well as kerbside services.
 - The communication shall be written and posted or delivered to the property.
- b) The Council shall communicate with the property outlining the following:
 - I. Advising citizens of the specific issues (i.e. contamination or non-participation)
 - II. Advising what the correct action should be
 - III. Reinforcing standard collection information (yes/no lists)
 - IV. Signposting to sources of further information or advice
- c) The tone of communications shall be helpful, not accusatory, throughout.

²⁹ Dry recyclables: improving quality, cutting contamination. WRAP. [Online] http://www.wrap.org.uk/sites/files/wrap/Dry%20Recyclables%20Improving%20Quality%20Cutting%20Contamination.pdf [Accessed October 2015]

6.2.2.1 Desirable elements

The following procedures **should be considered** within the Councils ways of working:

a) Officers from the Council (e.g. Recycling advisors) shall carry out doorstep visits to each property to provide advice and support to the citizens. Each property????

6.3 BRANDING AND TONE OF VOICE

Scotland has long benefited from the use of a consistent brand, messaging and tone of voice in most communications that have been delivered directly to citizens. The Reduce Reuse Recycle brand was replaced with the Recycle for Scotland brand in 2011 as the national brand. Recycle for Scotland brand and associated toolkit materials have high-levels of recognition (52% recall of the 'recycle' logo), have been thoroughly tested with citizens, and meet accessibility requirements.

To build upon consistency in the way communications are delivered to citizens, the Recycle for Scotland brand will continue to evolve for the needs of Councils so that it is fit for purpose. On this basis, current best practice assumed that all Councils shall contribute to the development of and use the Recycle for Scotland brand in all communications relating to waste and recycling services.

6.3.1.1 Essential elements

The following procedures **shall** be included within the Councils ways of working:

- a) The Council shall use Recycle for Scotland branding, messaging and tone of voice in all communication related to waste and recycling services.
- b) Provided that is not too prohibitive!

6.4 HOW DOES THIS SECTION DELIVER THE OUTCOMES?

A summary of the impact of this section against the outcomes for the Code of Practice are summarised in the table below.

OUTCOME ONE: ACHIEVE HIGH QUANTITIES OF RECYCLING AND MINIMISES NON-RECYCLABLE WASTE	
OUTCOME TWO: SUPPORT THE CIRCULAR ECONOMY THROUGH MAXIMISING HIGH-QUALITY MATERIALS	
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OUTCOME SIX: COMPLY WITH REGULATIONS	
OUTCOME SEVEN: SERVICES THAT SUPPORT SCOTTISH AND LOCAL EMPLOYMENT	

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Appendices

General.

Overall this document goes into far too much detail and this will make it difficult for authorities to sign up to. There is an underlying fundamental issue here that is being skirted around a little – kerbside sort or co-mingled? It would be usefult o have a vote of all 32 LA's to ascertain what the majority view is (and why) and then start from there.

The timescale given for the development of a document like this is way too short. This needs a lot more time to be developed if indeed it is to retain this level of detail and information.

It would be better to take this a step at a time and the code of practice should be just that – a set of standards, not a detailed methodology of how we do it and what resources we should use and when and where and why. Most of this is carried out anyway and simply needs some harmonisation, not have it spelled out in this way.

"a set of standards agreed on by a group of people who do a particular job".

(Cambridge Dictionary)

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Agenda Item 4

ABERDEEN CITY COUNCIL

COMMITTEE Zero Waste Sub-Committee

DATE 1 December 2015

DIRECTOR Pete Leonard

TITLE OF REPORT Review of Energy from Waste Business

Case

REPORT NUMBER ZWSC/7602

CHECKLIST COMPLETED Yes

1. PURPOSE OF REPORT

The purpose to this report is to update members on the progress of the Zero Waste Project.

2. RECOMMENDATIONS

 Agree the outcome of the review of the EfW business case (that joint EfW plant is best way forward)

3. FINANCIAL IMPLICATIONS

The Zero Waste Project will contribute to a reduction in cost pressures associated with the increasing costs of landfilling the city's waste whilst at the same time substantially improving recycling services and meeting national regulations and targets.

4. OTHER IMPLICATIONS

Legal. Specialist legal support is being provided to ensure the implementation of the Zero Waste Project is undertaken in accordance with best practice and minimizes risk to the Council.

Resource. Management of the development of a Joint EfW solution will be undertaken by internal staff as part of their substantive duties, specialist support will be provided (from within allocated budgets) for legal, financial and technical matters.

Personnel. As above.

Sustainability and environmental. The Zero Waste Project will deliver substantial advances in sustainability and environmental performance.

5. BACKGROUND/MAIN ISSUES

5.1 Review of Energy from Waste Business Case

A report entitled Energy from Waste Business Case (ZWM/13/006) was considered by the Zero Waste Management Sub-committee on 4 December 2013. The Business Case concluded that the Best Value Option for the management of residual waste collected in the city was to seek to find partners to develop an Energy from Waste (EfW) facility in Aberdeen.

Recommendation 3, adopted by the Sub-committee stated:

'That the sub-committee instructs officers to seek partners for the future development of an Energy from Waste facility in order to obtain better value for money for the Council.'

Recommendation 5, adopted by the Sub-committee stated:

'That the Sub-committee instructs officers to report back in March 2015 with a review of the Business Case.'

This report addresses those recommendations.

5.2 Progress on Joint Working and Definition of Facility Capacity

Since December 2013, extensive discussions have been held with potential partners and Zero Waste Project Updates have informed members of progress. In early 2015, it was agreed that the Council should seek to develop a joint solution with Aberdeenshire Council and the Moray Council. The three authorities also concluded that the best value funding model for the project would be that the three authorities would directly finance the project.

5.3 Review of Energy from Waste Business Case

Upon confirmation of the partners for the joint project, an outline capacity for the EfW facility has been set at 150,000 tonnes per annum.

The Original Business Case Considered the following options:

Option One (Small EfW, Council financed):

To develop a facility on a site identified within the Council's boundary with the purpose of treating Aberdeen's residual waste arisings. The capital investment to provide this facility would be funded directly by the Council, and a partner waste contractor engaged to manage the facility's operational activities on the Council's behalf. It offers the potential benefit of renewable energy generation within the City.

Option Two (Small EfW, PPP financed):

As above but with finance provided by the contractor. The decision to self-finance the project means that is option has not been remodelled.

Option Three (Large EfW, Council financed):

As option 1, with a larger EfW facility that is sized to take other residual waste. This other waste is assumed to be Aberdeenshire Council (70 ktpa) and Moray Council (20 ktpa), but could also include some commercial and industrial wastes. The capital investment to provide this facility would be funded directly by the Council and a partner waste contractor engaged to manage operations;

Option Four (Large EfW, PPP financed):

As above but with finance provided by the contractor. The decision to self-finance the project means that is option has not been remodelled.

Option Five (Refuse Derived Fuel offtake):

The Council has been progressing an interim treatment solution comprising the preparation of waste as Refuse Derived Fuel (RDF) prior to export to European EfW facilities. The business case considers this waste treatment option also as a long term solution, assessing whether the cost of this waste management practice would provide better value for money.

The Council appointed AMEC Foster Wheeler and Enrst and Young to undertake the review of the Business Case (included as Appendix 1).

5.4 Outcome of the Review

The following table summarises the outcome of the review of the Business Case:

Table 1 Results of Business Case Review

Item	Option 1 - 60 kpta EfW	Option 3 - 150 kpta EfW	Option 5 - MT & RDF
	£000	£000	£000
Total Nominal Price	290,710	247,967	283,880
Total Net Present Value	98,818	84,793	84,411
	£	£	£
Gate fee per tonne (year 1 operations)	187	161	143

The financial measures outlined above provide different perspectives on the cost of the project with Net Present Value (NPV) considered the best measures to assess the overall cost or benefit from a project over its full lifetime.

The key conclusion from the report is that the financial assessment of options reconfirms the previous conclusion that a larger EfW delivers the best value for money solution in the long term.

The review of the Business Case has focused primarily on financial aspects, the original review also considered other factors such as risk. There have been no significant changes in the risk profile of the options considered. In summary, main risks associated with each option are shown on the following table:

Table 2. Risk Management

			Risk	Significance	Mitigation	
Option EfW)	1	(Small				
			Planning Permission	High, prior to development	Site in LDP, determine application before procurement, widespread stakeholder engagement, ensure delivery of district heating	
			Operational Performance	High but manageable	Selection of reliable technology and high quality operator	
Option EfW)	3	(Larger				
			Planning Permission	High, prior to development	Site in LDP, determine application before procurement, widespread stakeholder engagement, ensure delivery of district heating, emphasise lower cost and additional heat benefits	
			Operational Performance	High but manageable	Selection of reliable technology and high quality operator	
Option Export)	5	(RDF				
			Long term cost	High and continuing	Seek to secure long term price guarantees, however, not available at present for full duration of project	
			Long term outlets	High, continuing and critical	Seek to secure long term capacity guarantees, however, not available at present for full duration of project	

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Considering financial and risk issues together, it is evident that the EfW options face risks that can either be mitigated and come to fruition very early in the project, ensuring that the long-term security of residual waste management can be achieved. By contrast, RDF presents high risk throughout the project, increasingly so beyond 2020 when capacity for outlets is unknown and the viability of this solution being outwith the Council's power to manage.

A further consideration is the opportunity that EfW in Aberdeen presents; heat from the facility can be used for the benefits of Aberdonians and in particular for those in fuel poverty. RDF exports those benefits to communities elsewhere and delivers no positive outcomes for the city.

5.5 Conclusion

Little has fundamentally changed in the relative merits of the options considered in the Business Case. Larger EfW, developed in partnership with other public authorities offers the best financial, lower risk and highest benefit option for the city.

6. MANAGEMENT OF RISK

Risk 1	Category (hazard, control or opportunity)	Cause (What could trigger a risk event?)	Impact (What would be the consequences if a risk event occurred?)	
TBC				
Controls (What do we already have in place which could reduce the likelihood and or consequences of a risk event?)	Risk Class (see guidance)	Further planned mitigating actions (What else could we implement in order to reduce the likelihood or consequences of a risk event?)		

7. BACKGROUND PAPERS

Appendix 1. 2015 Addendum to Energy from Waste Business Case

8. REPORT AUTHOR DETAILS

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Aberdeen City Council

Addendum to Energy from Waste Business Case



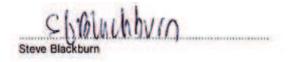
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Document revisions

No.	Details	Date
1	Draft Report	October 2015
2	Final Report	November 2015

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Appendix A Waste Flow Model Assumptions 2015 Appendix B EY Value for Money Report

1. Introduction

This section outlines the purpose and context for this report, the scope of work and the various options that are appraised.

1.1 Purpose of Report

Amec Foster Wheeler Environment & Infrastructure UK Limited (hereafter 'Amec Foster Wheeler') was appointed by Aberdeen City Council (ACC) in November 2013 to provide a Business Case (referred to as 2013 Business Case in this report) for the development of an Energy from Waste (EfW) facility as a waste treatment solution for the City's residual municipal solid waste (rMSW). The Council had previously produced an Outline Business Case for Waste Facilities in October 2012.

This Addendum addresses the changes to the modelling inputs since the 2013 Business Case, and sets out the overall results. It is not a stand-alone business case and should be read in conjunction with both the 2012 Outline Business Case and 2013 Business Case.

1.2 Context

The 2013 Business Case considered a series of options for the development including the development of a stand-alone plant sized for ACC alone, a larger EfW which could also accept rMSW from a neighbouring authority, or with a pre-treatment facility with all rMSW exported to an existing facility in Northern Europe. The recommendations arising from this study were primarily;

- Secure support for a Large EfW
- Secure site for new EfW
- Develop procurement strategy
- Research and develop RDF contingency arrangements
- Keep a watching brief on potential changes in law and policy

Since the Energy from Waste Business Case was issued, discussions have been ongoing between ACC and Aberdeenshire and Moray Councils and in principle the Authorities have decided to work together to progress a joint solution. A site within East Tullos Industrial Estate has been identified for the development and is now in the process of being purchased from SGN by ACC prior to an application for planning permission.

The 2013 Business Case now requires to be updated to reflect the recent activities and test the joint working option against the other original options to ensure it remains the preferred solution and offers all three Authorities value for money.

1.3 Scope of Work

As defined in Amec Foster Wheeler's proposal (e-mailed to the Council on 1st July 2015), the scope of works comprises modelling of waste flows and cost base for three options:

- EfW sized for Aberdeen City Council only
- ► The continued use of RDF export for Aberdeen City Council through use of the Altens RDF Facility post SITA contract.
- A joint Authority EfW for Aberdeen City Council, Aberdeenshire Council and Moray Council

The Private-Public Partnership (PPP) variants on these options have not been refreshed as the current preference is for a Council funded option (albeit the previous general findings in terms of differential factors between the various funding options would still apply).

Ernst and Young was appointed by the Council to undertake financial modelling, based on the mass flow and cost assumptions provided by Amec Foster Wheeler. Their report is provided in **Appendix 2.**

1.4 Outline of Options

The modelling of waste flows and costs undertaken for the 2012 Outline Business Case and 2013 Business Case, provided detail on five options. Three of these have been updated within this Addendum as set out below.

Option One (Small EfW, Council financed):

To develop a facility on a site identified within the Council's boundary with the purpose of treating Aberdeen's residual waste arisings. The capital investment to provide this facility would be funded directly by the Council, and a partner waste contractor engaged to manage the facility's operational activities on the Council's behalf. It offers the potential benefit of renewable energy generation within the City. It would not include front end mechanical treatment (MT) due to the potential for exemption under the Thermal Treatment Guidelines.

Option Two (Small EfW, PPP financed):

NOT REMODELLED

Option Three (Large EfW, Council financed):

As option 1, with a larger EfW facility that is sized to take other residual waste. This other waste is assumed to be Aberdeenshire Council (70 ktpa) and Moray Council (20 ktpa), but could also include some commercial and industrial wastes. With this option the MT facility need not be co-located with the EfW, as this could take place at the waste source, with the EfW being constructed at a suitable central site. As above, exemption from further pre-treatment of residual waste could be obtained by all three Councils. The capital investment to provide this facility would be funded directly by the Council and a partner waste contractor engaged to manage operations;

Option Four (Large EfW, PPP financed):

NOT REMODELLED

Option Five (RDF offtake):

The Council has been progressing an interim treatment solution comprising the preparation of waste as Refuse Derived Fuel (RDF) prior to export to European EfW facilities. The business case considers this waste treatment option also as a long term solution, assessing whether the cost of this waste management practice would provide better value for money.

2. Technical Modelling

This section considers updated costings for each of the Options using the outputs from mass flow modelling to inform an outline financial appraisal.

2.1 Mass Flow Modelling

The previous technical note on the underlying modelling undertaken by Amec Foster Wheeler has been updated (see **Appendix 1**) and includes a summary of key inputs.

The required EfW facility size for Option 1 is 60,000 tonnes per year, and a similar tonnage from ACC requires pre-treatment and RDF offtake in Option 5.

For Options 3 the rMSW inputs are;

- ▶ **Aberdeen City Council** annual tonnages with waste growth and changes in recycling rates etc as previously modelled (e.g. no major updates to the detailed mass flow model ACC Profile Model V11 20130918)
- Moray Council a fixed 20ktpa. Note that their underlying consultant's report has slightly more total residual waste arisings, but it will not all be suitable for thermal treatment hence the difference.
- Aberdeenshire Council a fixed 70ktpa

The previous modelling assumed a generic additional input of 62,000 tonnes per year in addition to ACCs rMSW, resulting in a total EfW facility size of 109,000 tonnes per year. Amec Foster Wheeler not developed detailed mass flow models for the other two partner Councils and have utilised fixed annual tonnage based on their stated requirements. The updated tonnages result in a larger EfW solution would accept up to **150,000 tpa**, and this is what the planning application is being based upon. Any surplus capacity within a 150ktpa plant would be taken up by third party waste, but no revenue from this is assumed in order to test the option is still viable without reliance on income from third parties.

2.2 Project Timetable

The timing assumptions for the options appraisal were updated from the 2013 Business Case to reflect the intervening period, and are as follows:

- Whilst SITA are contracted to provide services until 2025 the Council has the option to take out residual waste at any time. Purely for the purposes of this assessment, all options have been assumed to commence full operations in the year 2022, and have been assessed over a 25 year period to 2047;
- ▶ Options 1 and 3 –. New EfW procured and constructed by 2022;
- Option 5 –Long term export of RDF from 2022. It is assumed that a new offtake contract would be entered into on equivalent terms.

The project timescales will be driven by 4 principal drivers:

- ► The Waste (Scotland) Regulations 2012 requirement banning biodegradable waste going directly to landfill from 2020;
- ► The level and capability of resourcing within the Council's project team and governance structure;
- ▶ The programme and timescales set out for the procurement process; and

▶ The time taken to physically deliver each option. The highest uncertainty and risk is associated with construction of a new EfW.

3. Financial Appraisal

This section considers updated costings for each of the Options using the outputs from mass flow modelling to inform an outline financial appraisal.

3.1 Approach

Ernst and Young was appointed by the Council to undertake financial modelling, based on the mass flow and cost assumptions provided by Amec Foster Wheeler.

A recent report for Aberdeenshire on waste management options (SLR, May 2015) utilised WRAP gate fees which helped inform the case for joint working. This addendum applies the previous approach of bespoke financial modelling for a new facility, allowing the generation of a project specific gatefee by the financial advisors.

Each of the three options has been refreshed using updated reference data held by Amec Foster Wheeler on Capex, Opex, Income and Lifecycle costs, plus any site specific data available on site purchase/ development costs. A summary of the cost assumptions is provided in the section below. The costs exclude fees for investigations into site specific costs with utility providers, and site specific bills of quantities for a new facility. It is recommended that parallel research is undertaken into these elements in order to utilise better base data in the financial modelling, or that a further refresh of the business case is undertaken in 2016 once these items have been fully costed.

The financial modelling assumes a revenue from an electricity only output i.e. the Council would not elect to make use of heat produced from any EfW plant by feeding it to a CHP. The benefits of CHP are discussed in the 2013 Business Case. No costs for a CHP pipeline have been included in the modelling as any additional capital expenditure would typically be expected to be covered by the heat income.

There are also a number of "one off" costs that could also apply to Options 1 relating to the particular site. Pending further site studies, it has been assumed that the grid connection and site preparation costs are similar to other UK plants within Amec Foster Wheeler's cost database, and are therefore included in the modelling.

3.2 Revised Design and Cost Assumptions

The design and cost assumptions regarding the subsequent EfW or RDF export outlet are set out in Table 3.2.

Table 3.1 Key EfW Input Assumptions

Item	Assumption
Option 1 & 2 - Small EfW	
Long term residual Waste throughput (Tonnes)	55,733
Design Throughput of Facility (Tonnes)	60,000
Capital Expenditure	£55,729,143 (excludes inflation and financing costs)
Maintenance per annum	£3.62 per tonne
LifeCycle per annum	£2.79 per tonne
Operating Cost Variable per annum	£19 per tonne
Operating Cost Fixed per annum	£21 per tonne

Item	Assumption
Calorific value of rMSW	7.7 MJ/kg
Option 3 & 4 - Large EfW	
Maximum residual Waste (Tonnes)	145,733
Design Throughput of Facility (Tonnes)	150,000
Capital Expenditure	£138,861,985 (excludes inflation and financing costs)
Maintenance per annum	£6.46 per tonne
LifeCycle per annum	£4.97 per tonne
Operating Cost Variable per annum	£19.08 per tonne
Operating Cost Fixed per annum	£9.91 per tonne
Calorific value of rMSW	7.7 MJ/kg
Option 5 – RDF offtake	
Capital Expenditure (RDF Mechanical Treatment plant)	£? (excludes inflation and financing costs)
Baling and Wrapping	£10 per tonne
Gate Fee at Swedish plant	£82 per tonne (Free on board)
Sea transport & handling	£0 per tonne (assumes no backload available for free)
Licensing (TFS)	£4,000 per year

3.3 Sensitivity Modelling

A number of financial sensitivities have been generated for E&Y the financial advisor;

- Capex -10% and +30%
- Opex -10% and +10%
- RDF offtake +50%

Within the last Business Case another 2 sensitivities were undertaken on Waste Growth (-10%, +10%) and Recycling (65%). These only affect the annual facility throughputs. It is not considered that they would affect the relative ranking of the options, and for the purpose of this high level refresh have not been remodelled.

The key technical sensitivity model for the original Business Case was the inclusion or exclusion of a Mechanical Treatment (MT) facility before the residual waste was thermally treated in a new EfW. The general findings of this still stand, and due to the evolving policy context the use of MT has not been utilised for this refresh of the EfW cases (Option 1 & 3), but is included in the RDF case (Option 5)

The 2013 Business Case discussed the options available and the related risks to make a recommendation on a way forward for the next 25 years. Background information, Procurement routes, Management Structures and a projected Timetable were also provided so that the document could form the basis of a Descriptive Document. This wider analysis has not been updated as part of this Addendum.

3.4 Revised Financial Modelling

The financial assumptions and results are set out in **Appendix B** together with supporting comments.

Key assumptions on third party income are:

▶ Third party Waste has been priced at £65/t for spare capacity.

▶ Electricity has been priced at £47/MWh and indexed at 2.5%. This is slightly more aggressive than typical bank funding but comfortable for the current market placement on power price.

Key assumptions on indexation and funding terms are:

- Treasury Green Book advice has been applied where appropriate
- ➤ The project has been costed on a operating life of 25 years, in line with other waste project financial models currently in the market
- ▶ Inflation at 2.5% in line with Treasury Green Book, unless specific aspects of the project suggest using a higher rate e.g. capital costs at 4.5%, RDF export at 3%.
 - ▶ Risk / Optimism Bias has been based on the financial consultants experience with similar waste related projects as per the 2013 Business Case.

The total net present value (NPV) of each option uses a standard 3.5% discount rate.

The summary results are set out below. The sensitivity results are shown in **Appendix B**.

Table 3.2 Results – Base Case

Item	Option 1 - 60 kpta EfW	Option 3 - 150 kpta EfW	Option 5 - MT & RDF
	£000	£000	£000
Total Nominal Price	290,710	247,967	283,880
Total NPV	98,818	84,793	84,411
	£	£	£
Gate fee per tonne			
(year 1 operations)	187	161	143

4. Conclusions

The financial assessment of options re-confirms the previous conclusion that a larger EfW delivers the best value for money solution in the long term.

The analysis broadly follows the expected convention that a larger EfW facility gives a lower nominal price than a small one, with Option 3 having a 15% lower NPV over 25 years than Option 1, based on the stated assumptions.

In the event that a larger EfW was not deemed deliverable, the next ranked option in terms of total NPV is Option 5 (MT & RDF), with total NPV comparable to Option 3 (3% higher). RDF export is a competitive option for the Council in the short to medium term. However following the end of the current RDF contract there will be an unquantifiable risk of increases in gate fee (as more waste producers seek to access a fixed number of energy from waste outlets). In contrast Option 1 and 2 will allow a stable gate fee price over the length of the contract following the construction phase.

A smaller scale EfW facility (Option 1) would be the most expensive option in NPV terms. However with both Options 1 and 3, once the borrowing has been re-paid the EfW facility would benefit from a step-down in the price per tonne for ongoing operations. The Council would be in ownership of a strategic asset which could offer a continued service at much reduced rates, in a similar way that other UK authorities are currently benefiting from operating older EfW facilities.

The 25 year NPV of the options tends to hide the relative changes in future costs over time, due to discounting effects on payments in later years. In those later years the budgetary impacts of high prices could place added financial burdens on the Council, albeit the overall 25 year project cost is still value for money. In terms of annual gate fees, Option 5 RDF offtake could be lower than Option 3 until about the year 2028, and lower than Option 1 until around the year 2036. After these points the respective EfW options have lower gate fees than RDF offtake. The RDF offtake price and the future inflation assumptions have a key influence on the cross over point between the options.

A number of critical documents will emerge during any procurement this could impact upon final designs and costs of the new EfW, including EU Best Available Techniques reference documents due in 2016. The legislation and guidance controlling the pre-treatment and export of RDF is also likely to evolve over coming years. Finally any future introduction of EU incineration taxes or other changes in law could impact upon the deliverability and costs of each option.

Appendix A Waste Flow Model Assumptions 2015

1. Aberdeen Waste Flow Model

This paper sets out the modelling assumptions made by Amec Foster Wheeler in support of the options assessment.

The basis of the Waste Flow Model (WFM) is the data by Aberdeen City Council provided in "ACC Profile Model V11 - 20130918.xlsx".

The waste flow model was developed to replicate the tonnages projected by ACC, and we have not attempted to check the appropriateness of the underlying capture assumptions. No time was allowed to look at the sensitivity of waste composition versus participation and recognition. The ACC projected capture rates appear challenging. Given the absence of a waste sort composition for Aberdeen further work is recommended as the project proceeds.

2014 data was the starting point for the WFM. We have replicated the entire model and provide comments below. Modelled waste arisings match those provided by Aberdeen City.

The data provided by ACC indicates 54% in 2025 for ACC recycling and 7.4% from further "picking" operations totalling 61.4%. ACC have modelled 65.7% diversion rate for the HWRC as a new HWRC is commissioned and/or improvements to other HWRCs are achieved. There is no HWRC picking line modelled in the WFM from 2016 onwards when the new HWRC is commissioned.

Post issuance of the ACC data it was decided to route the HWRC residual waste to the MT plant in Option 5. Further instructions were to minimise the cost of the MT plant and capture metals and dense plastics (as per SITA proposal for the interim SRF market solution).

The projected recycling & composting rate including the MT plant in the WFM is 56.4% (2025), which is below the ACC modelled rates. This rate does not include IBA metals (which are expected to be minimal as metals are captured at the MT plant). Excluding the MT plant contribution, the recycling & composting performance in the WFM is 53.6% (2025).

2. Housing Types

For modelling purposes we have extracted data from http://www.gro-scotland.gov.uk/files2/stats/household-estimates/he-12/2012-estimates-households-dllings-Scotland.pdf.

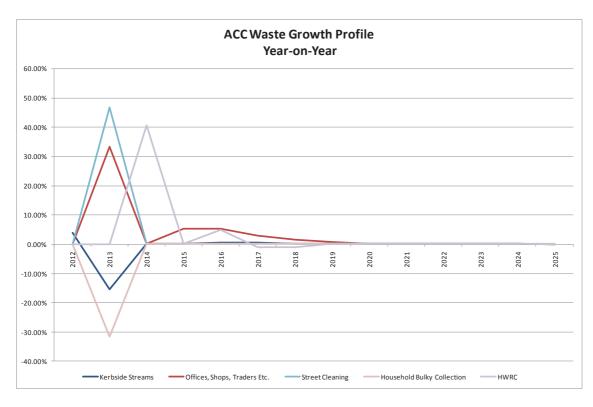
	Aberdeen City		AMEC model
Flats	55%	HG1(gardened	27%
		properties)	
Terraced	18%	HG2 (garden flats)	5.4%
Semi-detached	17%	HG3 (flats without	49%
		gardens)	
Detached	11%	HG4 (Terraced	17.8%
		properties without	
		gardens)	

We have assumed that 10% of the flats have gardens.

3. Growth

For kerbside household waste this is 3.9% growth in 2013, (minus) -15.38% growth in 2014, 0.15% (2015), 0.2% (2016), 0.6% (2017), 0.61% (2018) and 0.25% from 2019 to 2025 and 0% from 2026 onwards as provided by Aberdeen City "ACC Profile Model V11 - 20130918.xlsx".

The non-kerbside streams have different growth profiles.



4. Composition

We have used Edinburgh kerbside waste composition, with adjustments to cater for the current garden waste capture and the projected dry recyclables capture, i.e. we increased the relative concentrations of the targeted dry recyclables over that in Edinburgh (45.6% versus 38.3%). This suggests that either the composition data is incorrect or the capture rates in the ACC model are overly ambitious.

We have assumed that all housing types generate the same quantities of waste (except garden waste) tpa/household.

Assumed waste composition

Waste component	Sub-component	HOUSING	HOUSING
		GROUP 1 & 2	GROUP 3 & 4
Paper	Newspapers	8.07%	11.25%
Paper	Magazines	5.19%	7.84%
Paper	Other Recyclable Paper	1.73%	2.61%
Paper	Paper Packaging	0.00%	0.00%
Paper	Non-recyclable Paper	2.89%	4.36%
Card	Liquid Cartons	0.24%	0.36%
Card	Board Packaging	1.87%	2.82%
Card	Card Packaging	1.74%	2.63%
Card	Other Card	0.21%	0.32%
Dense Plastic	Plastic Bottles	2.85%	4.31%
Dense Plastic	Other Dense Plastic Packaging	1.47%	2.22%
Dense Plastic	Other Dense Plastic	0.71%	1.07%
Plastic Film	Other plastic film	0.36%	0.54%
Plastic Film	Packaging film	1.41%	2.12%

Waste component	Sub-component	HOUSING GROUP 1 & 2	HOUSING GROUP 3 & 4
Textiles	Textiles	1.34%	2.03%
Textiles	Shoes	0.23%	0.35%
Glass	Glass Bottles	9.14%	13.79%
Glass	Glass Jars	0.00%	0.00%
Glass	Other Glass	0.14%	0.22%
Miscellaneous Combustibles	Treated Wood	0.14%	0.21%
Miscellaneous Combustibles	Untreated Wood	0.02%	0.03%
Miscellaneous Combustibles	Furniture	0.90%	1.36%
Miscellaneous Combustibles	Disposable Nappies	1.44%	2.17%
Miscellaneous Combustibles	Other Miscellaneous Combustibles	2.35%	3.54%
Miscellaneous Combustibles	Carpet and Underlay	1.44%	2.18%
Miscellaneous Non- combustibles	Construction and Demolition	1.33%	2.01%
Miscellaneous Non- combustibles	Other Miscellaneous Non- combustibles	0.46%	0.70%
Ferrous Metal	Ferrous food	0.79%	1.19%
Ferrous Metal	Ferrous beverage cans	0.00%	0.00%
Ferrous Metal	other ferrous metal	0.40%	0.61%
Non-ferrous metal	Non-ferrous food	0.20%	0.30%
Non-ferrous metal	Non-ferrous beverage cans	0.00%	0.00%
Non-ferrous metal	Other non ferrous metal	0.40%	0.61%
WEEE	white goods	0.00%	0.00%
WEEE	Large electronic goods	0.00%	0.00%
WEEE	TV's and monitors	0.00%	0.00%
WEEE	Other WEEE	0.00%	0.00%
Hazardous	Household Batteries	0.00%	0.00%
Hazardous	Car Batteries	0.00%	0.00%
Hazardous	Engine Oil	0.00%	0.00%
Hazardous	Other potentially hazardous	0.00%	0.00%
Hazardous	Identifiable clinical waste	0.00%	0.00%
Organic non-catering	Garden Waste	32.95%	0.00%
Organic non-catering	Soil	0.00%	0.00%
Organic non-catering	Other Organic	0.18%	0.00%
Organic catering	Home compostable Kitchen Waste	8.47%	12.78%
Organic catering	Non-home compostable Kitchen Waste	7.75%	11.69%
Fines	Fines	1.18%	1.78%
		100.0%	100.0%

5. Kerbside Recycling

5.1 Dry Recycling

Current System coverage & participation- kerbside sort

HG1 2012 to 2015

- ► Coverage 100%
- Participation 32% to 32.6%

HG2 2012 to 2015

- Coverage 100%
- Participation 32% to 32.6%

HG3 2012 to 2014

- Coverage 100%
- Participation 56.5% to 30.9%

HG4 2012 to 2014

- ► Coverage 100%
- Participation 56.5% to 30.9%

Future System coverage & participation- kerbside comingled

HG1 2016 onwards

- Coverage 100%
- Participation rising to 56.9%

HG2 2016 onwards

- Coverage 100%
- Participation 56.9%

HG3 2015 onwards

- Coverage 100%
- Participation rising to 33.3%

HG4 2015 onwards

- Coverage 100%
- Participation rising to 33.3%

Targeting & Recognition of kerbside Dry Recyclables

Targeted Dry Recyclables	2012 - 2014	2015	2017 onwards
Newspapers	100%	100%	100%
Magazines	100%	100%	100%
Other Recyclable Paper	100%	0%	100%
Paper Packaging	100%	0%	0%
Liquid Cartons	100%	100%	100%
Board Packaging	100%	100%	100%
Card Packaging	100%	100%	100%
Other Card	100%	0%	100%
Plastic Bottles	100%	100%	100%
Other Dense Plastic Packaging	0%	100%	100%
Other Dense Plastic	0%	100%	100%
Textiles	0%	100%	100%
Shoes	0%	100%	100%
Glass Bottles	100%	100%	100%
Glass Jars	100%	100%	100%
Ferrous food	100%	100%	100%
Ferrous beverage cans	100%	100%	100%
Non-ferrous food	100%	100%	100%
Non-ferrous beverage cans	100%	100%	100%

Dry Recyclables Recognition	2025
Newspapers	94%
Magazines	95%
Other Recyclable Paper	50%
Liquid Cartons	80%
Board Packaging	53%
Card Packaging	53%
Other Card	44%
Plastic Bottles	90%
Other Dense Plastic Packaging	52%
Other Dense Plastic	25%
Textiles	59%
Shoes	59%
Glass Bottles	90%
Glass Jars	90%
Ferrous food	85%
Ferrous beverage cans	90%
Non-ferrous food	85%
Non-ferrous beverage cans	90%

5.2 Garden & Food waste

HG1 2012 to 2015:

- ▶ 100% coverage
- ▶ 90.1% to 94.3% Participation
- Recognition garden waste 95%
- Recognition food waste 63%

5.3 Garden

HG1 2016 onwards

- ▶ 100% coverage
- Participation 78.9% rising to 79.1%
- ▶ Recognition garden waste 95%

HG2 2016 onwards

- ▶ 100% coverage
- Participation 72% rising to 75%
- ▶ Recognition garden waste 95%

5.4 Food waste

HG1 2016 onwards:

- ▶ 100% coverage
- Participation 78.9% to 79.1%%
- Recognition food waste 63%

HG2 2014 onwards:

- ▶ 100% coverage
- Participation 78.9% to 79.1%%
- Recognition food waste 63%

HG3 2014 onwards:

- ▶ 100% coverage
- Participation 30%
- Recognition food waste 63%

HG1 2014 onwards:

- ▶ 100% coverage
- Participation 30%
- Recognition food waste 63%

5.5 Overall performance

Recycling & composting rate including MT plant is 56.4% (2025). This does not include IBA metals (which are expected to be minimal as metals are captured at the MT plant).

Without the MT plant, the recycling & composting performance is 53.6% (2025).

Note: These rates are below the performance data provided by Aberdeen City "ACC Profile Model V11-20130918.xlsx" which indicates 54% in 2025 for ACC recycling and 7.4% from further "picking" operations totalling 61.4%. This is because post issuance of the ACC data it was decided to route the HWRC residual waste to the MT plant. Further instructions were to minimise the cost of the MT plant and capture metals and dense plastics (as per SITA proposal for the interim SRF market solution). This means that the MT plant performance is NOT as good as the ACC modelled "picking line".

6. Residual Waste Management

Three residual waste management options have been modelled:

Option 1: EfW sized for Aberdeen City Council only.

To develop a facility on a site identified within the Council's boundary with the purpose of treating Aberdeen's residual waste arisings. This would include front end mechanical treatment (MT) to recycle plastics and metals, and remove inert fraction, as preparation for an Energy from Waste (EfW) facility in line with Scottish Government requirements. The capital investment to provide this facility would be funded directly by the Council, and a partner waste contractor engaged to manage the facility's operational activities on the Council's behalf. It offers the potential benefit of renewable energy generation within the City.

▶ Option 3: A joint Authority EfW for Aberdeen City Council, Aberdeenshire Council and Moray Council Option 1 EfW (Aberdeen County Council).

As Option 1, with a larger EfW facility that is sized to take other residual waste. This other waste could be sourced from other public sector bodies or commercial and industrial wastes. With this option the MT facility need not be co-located with the EfW, as this could take place at the waste source, with the EfW being constructed at a suitable central site. The capital investment to provide this facility would be funded directly by the Council and a partner waste contractor engaged to manage operations.

▶ **Option 5:** The continued use of RDF export for Aberdeen City Council through use of the Altens RDF Facility post SITA contract.

The Council is currently progressing an interim treatment solution comprising the preparation of waste as Refuse Derived Fuel (RDF) prior to export to European EfW facilities. The business case considers this waste treatment option also as a long term solution, assessing whether the cost of this waste management practice would provide better value for money.

Projected arisings of residual waste are 73,292 tpa (2015) falling to 55,733tpa as kerbside performance improves.

For Option 3 we have assumed the additional residual waste tonnages:

- Moray Council 20,000 tpa; and
- Aberdeenshire Council 70,000 tpa.

6.1 Option 5 MT (Mechanical Treatment) + RDF

A 75,000 tpa capacity MT plant is assumed to have been already provided under the current contract with SITA from 2022. The overall performance of the MT plant as modelled is:

- 6.2% recycling (2025)
- ▶ 83.3% RDF (2025)

▶ 10.5 % landfill (2025) (overall 5.4% of MSW to landfill)

This is based on the following material captures (metals):

- Plastic Bottles 70%
- Other Dense Plastic Packaging 10%
- Other Dense Plastic 10%
- Ferrous 83%
- Non-ferrous 80%

RDF output is 46,452 tpa.

Modelling Notes: In the tab "Model Data MT RDF" of the workbook ACC WFM AMEC V8 RDF rev 0 the MBT model facility is used as a surrogate for the Residual Waste MT in this model because the MT model facility was previously allocated to a HWRC Residual Waste MT plant. In the EfW options there is NO Residual Waste MT facility modelled.

6.2 Option 1 and 3 EfW (Energy from Waste)

For modelling purposes as the bottom ash and APC residues are treated off-site by a 3rd Party. The EfW performance is assumed to be:

- % Combusted 71%
- % Fly Ash 4%, of which;
 - ► Fly Ash recycled 100% (to remove landfill costs associated with ash from the model as a "gate-fee" for ash handling is assumed in the EfW cost model.
 - ► Fly Ash landfilled 0% (to remove landfill costs associated with ash from the model as a "gate-fee" for ash handling is assumed in the EfW cost model.
- Bottom Ash 25%, of which
 - ▶ Bottom Ash recycled 100% (to remove landfill costs associated with ash from the model as a "gate-fee" for ash handling is assumed in the EfW cost model.
 - ▶ Bottom Ash landfilled 0% (to remove landfill costs associated with ash from the model as a "gate-fee" for ash handling is assumed in the EfW cost model.
- ► Electricity Production (output):
 - ▶ 323 kWh(e) / te (for 60ktpa EfW based on NCV of 7.74MJ/kg and net electrical efficiency of 15%)
 - ▶ 430 kWh(e) / te (for 60ktpa EfW based on NCV of 7.74MJ/kg, and net electrical efficiency of 20%)

7. Other Facilities

- 7.1 Windrow
 - ▶ 12,000 tpa (All costing data removed from the model)
- 7.2 IVC (food)
 - ▶ 13,000 tpa (All costing data removed from the model)
- 7.3 MRF
 - ▶ 25,000 tpa (All costing data removed from the model)

8. Basis of Costs

8.1 Treatment Facilities

60,000 tpa EfW

EFW COSTS ESTIMATION				
Energy Services				
Valid for EfW projects 50 - 120ktpa				
Project	Aberdeen CC			
Reference	34149-02			
For	Steve Blackburn			
By	Brendan Sharpe			
Date	09 July 2015			
	,			
CAPEX ESTIMATE				
Waste Stream	MSW			
Waste CV	7.74	MJ/kg		
Capacity	60,000	tonnes/year		
Location	North East Scotland			
Location Costing Factor	95%	Costing Factor (relative to Base Case data)		
Tonnage Rating		tonnes per hour		Operating hours per year
Thermal Capacity	16	MW(th) @		Load Factor
Electrical Output	2.4	MW(e) @	15%	Net Electrical Efficiency
Electrical Output	19,362	MWh per year =	323	kWh(e) per tonne of waste
Estimated EFW EPC Capex				
Thermal Element				
Tonnage Element				
Total EFW EPC Cost Estimate	£ 52	M	£ 870	per tonne/year capacity
Capex extimates are accurate to +/- 50%				
Capex estimates do not include contingen	cy margins			
MAINTENANCE ESTIMATE				
	_			
Lifecycle Replacement Costs		M per year	£ 2.79	
Other Routine Maintenance Costs		M per year (Annual Average over Lifetime)	£ 3.62	
Total Annual Average Maintenance Costs	£ 0.4	M per year =	£ 6	per tonne of waste feed
OPEX ESTIMATE				
VARIABLE OPERATING COSTS	(Purchase of consumate	oles and disposal of residues)		
Consumables	45.0	1. "	100.07	
Lime	15.0	kg/tonne		per tonne £ 169,267
Activated Carbon	1.0	kg/tonne		per tonne £ 40,508
Ammonia (30% Solution)	4.0	kg/tonne		
Process Water	0.6	m3/tonne	0.96	per m3 £ 34,721
Sodium Bicarbonate		kg/tonne	241.12	per tonne £ -
Urea		kg/tonne	397.85	per tonne £ -
Du Duadueta Dienasal				
By-Products Disposal	250/	of Wests Food @	24.40	t C 362 600
Bottom Ash FGT Residues	25% 4%	of Waste Feed @		per tonne £ 362,699 per tonne £ 493,271
rg i Residues	470	of Waste Feed @	205.55	per torine £ 493,271
Total Variable Costs	C 4 444 727	_	10.00	nor tonno
Total Variable Costs	£ 1,144,737	-	19.08	per tonne
FIXED OPERATING COSTS	(Staffing environmental	compliance office admin costs, evolutos ins	surance)	
FIXED OPERATING COSTS	(Staffing, environmental	compliance, office admin costs, excludes ins	surance)	
			surance)	
Staffing	£ 1,051,828	per year	surance)	
Staffing Environmental Compliance	£ 1,051,828 £ 120,900	per year per year	surance)	
Staffing	£ 1,051,828 £ 120,900 £ 48,360	per year per year per year	surance)	
Staffing Environmental Compliance Office Expenses	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450	per year per year per year per year		per tonne of waste
Staffing Environmental Compliance Office Expenses	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year		per tonne of waste
Staffing Environmental Compliance Office Expenses	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450	per year per year per year per year		per tonne of waste
Staffing Environmental Compliance Office Expenses Other Unspecified	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year		per tonne of waste
Staffing Environmental Compliance Office Expenses Other Unspecified	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36	per tonne of waste
Staffing Environmental Compliance Office Expenses Other Unspecified	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36	
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36	per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36 40.44	per tonne of waste feed per tonne of waste feed per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed per tonne of waste feed per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537	per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed
Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537 Excludes insurances	per year per year per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE Electricity Production	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537 Excludes insurances	per year per year per year per year per year per year	21.36 19.08 21.36 40.44 6.41	per tonne of waste feed
Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE	£ 1,051,828 £ 120,900 £ 48,360 £ 60,450 £ 1,281,537 Excludes insurances	per year per year per year per year per year per year	21.36 19.08 21.36 40.44 6.41 46.85	per tonne of waste feed

The NCV of the rMSW is on the low side, however this is estimated from the waste flow model and reflects the relatively high public recognition rate of paper and plastics (high calorific value) versus the lower recognition of food waste.

150,000 tpa EfW

EFW COSTS ESTIMATION						
Energy Services						
Valid for EfW projects > 120ktpa						
Positive	Alternatives CO					
Project Reference	Aberdeen CC 34149-02					
Foi	Steve Blackburn					
Ву	Brendan Sharpe					
Date	09 July 2015					
Butt	00 odly 2010					
CAPEX ESTIMATE						
Waste Stream	MSW					
Waste CV	7.74	MJ/kg				
Capacity	150,000	tonnes/year				
Location	North East Scotland					
Location Costing Factor	95%	Costing Factor (rel	ative to Base	e Case data)		
Tonnage Rating		tonnes per hour		Operating ho		
Thermal Capacity		MW(th) @		Load Factor		
Electrical Output		MW(e) @		Net Electrica		
Electrical Output	64,540	MWh per year =	430	kvvri(e) per t	onne of waste	
Estimated EFW EPC Capex						
Estimated EFW EFC Capex Thermal Element	£ 48	М				
Tonnage Element		M				
Total Final Capex Estimate			£ 902	per tonne/v	ear capacity	
Capex extimates are accurate to +/- 50%	100			,		
Capex estimates do not include contingency m	argins					
MAINTENANCE ESTIMATE						
Lifecycle Replacement Costs		M per year	£ 4.97			
Other Routine Maintenance Costs		M per year (Annua				
Total Annual Average Maintenance Costs	£ 1.7	M per year =	£ 11	per tonne of	waste feed	
-						
OPEX ESTIMATE						
WARLARI E ORERATIVO COCES	(Danish and a fine fine fine fine fine fine fine fine					
VARIABLE OPERATING COSTS Consumables	(Purchase of consumables and disp	oosal of residues)				
Consumables Lime	15.0	kg/tonne	£ 188	per tonne	£ 423,168	
Lime Activated Carbon	15.0	kg/tonne kg/tonne	£ 188	per tonne per tonne	£ 423,168 £ 101,271	
Activated Carbon Ammonia (30% Solution)	4.0	kg/tonne kg/tonne	£ 675	per tonne	£ 101,271 £ 110,675	
Process Water	0.6				£ 110,675	
1 100033 Watch		lm3/tonne	£ 0.96	per m3		
Sodium Bicarbonate	0.0	m3/tonne ka/tonne	£ 0.96 £ 241	per m3 per tonne		
Sodium Bicarbonate Urea	0.0	kg/tonne	£ 241	per m3 per tonne per tonne	£ -	
	0.0		£ 241	per tonne	£ -	
	0.0	kg/tonne	£ 241	per tonne	£ -	
Urea	25%	kg/tonne kg/tonne of Waste Feed @	£ 241 £ 398	per tonne	£ - £ -	
Urea By-Products Disposal		kg/tonne kg/tonne	£ 241 £ 398 £ 24	per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues	25% 4%	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @	£ 241 £ 398 £ 24 £ 206	per tonne per tonne per tonne per tonne	£ - £ -	
Urea <u>By-Products Disposal</u> Bottom Ash	25% 4%	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @	£ 241 £ 398 £ 24 £ 206	per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues	25% 4%	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @	£ 241 £ 398 £ 24 £ 206	per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs	25% 4% £ 2,861,843	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ =	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea <u>By-Products Disposal</u> Bottom Ash FGT Residues	25% 4%	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ =	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS	25% 4% £ 2,861,843 (Staffing, environmental compliance	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing	25% 4% £ 2,861,843 (Staffing, environmental compliance) £ 1,257,357	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ -	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ - £ 906,748 £ 1,233,177	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ - £ 906,748 £ 1,233,177	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ - £ 906,748 £ 1,233,177	
Urea By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ - £ 906,748 £ 1,233,177	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 24 £ 206 £ 19 £ 10	per tonne per tonne per tonne per tonne per tonne per tonne	£ - £ - £ 906,748 £ 1,233,177	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10	per tonne of per tonne of	£ - £ 906,748 £ 1,233,177 waste waste feed waste feed waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed waste feed waste feed waste feed waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of per tonne of	£ - £ 906,748 £ 1,233,177 waste feed waste feed waste feed waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Fixed Opex Estimate Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Fixed Opex Estimate Cost Estimate Fixed Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,350 £ 120,900 £ 48,360 £ 60,450 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year per year per year per year per year per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Fixed Opex Estimate Esimated Maintenance Cost Estimate Total O&M Cost Estimate REVENUES ESTIMATE Electricity Production Electricity Sale Price	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11 £ 40	per tonne per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	
By-Products Disposal Bottom Ash FGT Residues Total Variable Costs FIXED OPERATING COSTS Staffing Environmental Compliance Office Expenses Other Unspecified SUMMARY OF O&M COSTS Variable Opex Estimate Fixed Opex Estimate Fixed Opex Estimate Total O&M Cost Estimate REVENUES ESTIMATE	25% 4% £ 2,861,843 (Staffing, environmental compliance £ 1,257,357 £ 120,900 £ 48,360 £ 1,487,067 Excludes insurances	kg/tonne kg/tonne of Waste Feed @ of Waste Feed @ = , office admin costs per year	£ 241 £ 398 £ 206 £ 19 £ 10 £ 10 £ 10 £ 29 £ 11 £ 40	per tonne of	£ - £ 906,748 £ 1,233,177 waste feed	

The NCV of the rMSW is on the low side, however this is estimated from the waste flow model and reflects the relatively high public recognition rates of paper and plastics (high calorific value) versus the lower recognition of food waste.

Price basis is 2009 to which RPI inflation for EfW capex has been added. Benchmarked against more recent information.

For operating costs the inflation is based on Reagent Base Prices April 2008 (RPI from April 2008 to April 2015 20.6%). Note RPI all items is 20.9% from 2009 to 2015.

9. Other Costs

- ▶ Allowance for Grid connection £1,000,000.
- Allowance for Site purchase £2,200,000
- Allowance for relocation of culvert £500,000.
- ► Landfill Gate Fee £41.4/t : MT reject waste modelled to landfill. No wastes direct to landfill in EfW options.
- ▶ Special Waste Landfill Gate Fee £200/t no waste modelled to Landfill.
- ▶ Landfill tax £82.6/t from 2015 remaining stable
- No transport costs modelled.

10. Income

- ▶ Electricity Sale Price £47/MWh. This is increased from the OBC 2013 and assumes a council funded option. It is note that a more conservative approach may be taken by bank/external sponsors.
- 3rd Party income for EfW headroom –none modelled by Amec Foster Wheeler.
- Income from recyclates modelled based on unit costs provided by ACC "'[ACC Profile Model V7a.xlsm] tab Unit Costs. All income from recyclables removed from the model.
- All paper and card £5/t income. All income from recyclables removed from the model.
- All textiles £250/t income. All income from recyclables removed from the model.
- All glass wood £5/t income. All income from recyclables removed from the model.
- ▶ All metals (ferrous & non-ferrous) £250/t income All income from recyclables removed from the model.

Appendix B EY Value for Money Report

See separate report submitted to the Council by Ernst & Young LLP on 7 August 2015 "Aberdeen Waste Project VFM – Business Case update".



Aberdeen Waste Project VFM

Business Case update

7 August 2015





Ernst & Young LLP 1 More London Place London SE1 2AF

Tel: 020 7951 2000 Fax: 020 7951 1345 www.ey.com/uk

Aberdeen City Council

Attention: Craig Innes

Woodhill House

Westburn Road

Aberdeen

AB16 5GB

Dear Craig

Waste Project VFM Model Update

In accordance with our engagement letter dated 17 July 2015, we ("Ernst & Young LLP" or "EY") enclose the results from the work performed on the VFM Model Update for the Waste Project ("the Project") for Aberdeen City Council ("the Council" or "ACC").

Purpose of our presentation and restrictions on its use

This report was prepared on your instructions solely to assist the Council in updating the VFM within the business case. Because others may seek to use it for different purposes, this report should not be quoted, referred to or shown to any other parties unless so required by court order or a regulatory authority, without our prior consent in writing. In carrying out our work and preparing our report, we have worked solely on the instructions of the Council.

Our report may not have considered issues relevant to any third parties. Any use such third parties may choose to make of our report is entirely at their own risk and we shall have no responsibility whatsoever in relation to any such use. This report should not be provided to any third parties without our prior approval and without them recognising in writing that we assume no responsibility or liability whatsoever to them in respect of the contents of our deliverables.

7 August 2015

Direct line: 0131 777 2130 Email: nthomson@uk.ey.com

We only accept responsibility or liability to our client in respect of this report on the basis set out in the engagement letter. We accept no responsibility or liability to any other person in respect of this report, and accordingly if such other persons choose to rely upon any of its contents they do so at their own risk.

Scope of our work

Our work in connection with this assignment is of a different nature to that of an audit. Our report to you is based on our review of the information provided by you in relation to the Project and the Council. We have not sought to verify the accuracy of the data or the information and explanations provided by management.

Yours faithfully.

Neil Thomson

Nest Thomason

Neil Thomson Executive Director

Introduction & Background

- ► EY has been engaged by Aberdeen City Council (ACC) to perform an update to the Energy from Waste Business Case to assess the following 3 options:
 - Option 1 EfW sized for Aberdeen City Council only
 - Option 3 A joint Authority EfW for Aberdeen City Council, Aberdeenshire Council and Moray Council
 - Option 5 The continued use of RDF export for Aberdeen City
 Council through use of the Altens RDF Facility post SITA contact
- In addition, the following sensitivities were performed for each option noted:
 - Capex -10% and +30%
 - Opex -10% and +10%
 - ► RDF offtake +50%
- AMEC have provided the technical information to allow EY to model the outputs contained within this pack.



Results - Base Case

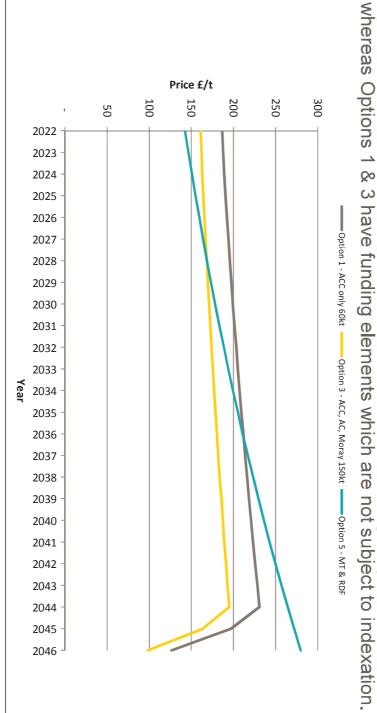
	Option 1 – 60kt EfW	Option 3 – 150kt EfW	Option 5 – MT & RDF
	£000	£000	£000
Total Nominal Price	290,710	247,967	283,880
Total NPV	98,818	84,793	87,411
	£	£	£
Gate fee/tonne Year 1 operations	187	161	143

- The results have been normalised for the Total Nominal Price and Total NPV using ACC tonnage to allow the comparability of each option.
- The results of the base case options show that Option 3 (150kt EfW) delivers the lowest NPV cost to the ACC and therefore shows best value for money.
- We note that Option 5 carries the most long term risk as the RDF gate fee will be set by the market over the life of the contract. Option 1 and 3 will allow a stable gate fee price over the length of the contract following the construction phase.



Base Case – Gate fees

- The graph below shows the gate fee for the three base case options over the contract
- debt. There is drop off in gate fee for Options 1 & 3 in the later years due to the pay back of
- Option 5 increased at a steeper rate due to all the costs being subject to indexation,





Sensitivities – Option 1 60kt EfW

	Option 1 – 60kt EfW			
Capex Sensitivity	-10%	Base	+30%	
	£000	£000	£000	
Capex Amount	53,036	58,929	76,608	
Total Nominal Price	273,838	290,710	341,327	
Total NPV	92,746	98,818	117,032	
	£	£	£	
Gate fee/tonne Year 1 operations	174	187	223	

► These sensitivities show the impact on the Option 1 base case by adjusting Capex by -10% / +30% per the scope.



Sensitivities – Option 1 60kt EfW

	Option 1 – 60kt EfW			
Opex	-10%	Base	+10%	
	£000	£000	£000	
Opex Amount	52,746	58,606	64,467	
Total Nominal Price	280,715	290,710	300,705	
Total NPV	95,707	98,818	101,928	
	£	£	£	
Gate fee/tonne Year 1 operations	181	187	192	

► These sensitivities show the impact on the Option 1 base case by adjusting Opex by -10% / +10% per the scope.



Sensitivities – Option 3 150kt EfW

	Option 3 – 150kt EfW			
Capex	-10%	Base	+30%	
	£000	£000	£000	
Capex Amount	127,856	142,062	184,681	
Total Nominal Price	232,422	247,967	294,602	
Total NPV	79,202	84,793	101,566	
	£	£	£	
Gate fee/tonne Year 1 operations	150	161	194	

► These sensitivities show the impact on the Option 3 base case by adjusting Capex by -10% / +30% per the scope.



Sensitivities – Option 3 150kt EfW

	Option 3 – 150kt EfW			
Opex	-10%	Base	+10%	
	£000	£000	£000	
Opex Amount	96,005	106,672	117,339	
Total Nominal Price	241,012	247,967	254,923	
Total NPV	82,629	84,793	86,957	
	£	£	£	
Gate fee/tonne Year 1 operations	157	161	165	

► These sensitivities show the impact on the Option 3 base case by adjusting Opex by -10% / +10% per the scope.



Sensitivities – Option 5 MT & RDF

	Option 5 – MT&RDF			
RDF Offtake	Base	+50%		
	£000	£000		
Offtake Price	£92	£138		
Total Nominal Price	283,880	384,448		
Total NPV	87,411	118,243		
	£	£		
Gate fee/tonne Year 1 operations	143	192		

► These sensitivities show the impact on the Option 5 base case by adjusting the RDF offtake price by +50% per the scope.



Assumptions

Assumption	Value	Comments
Base date	2015	EY
Operational length	25 years	AMEC
No tax modelled	0	EY
Discount Factor	3.50% Real 6.087% Nominal	EY
Funding Cost: PWLB	5.00%	Verified by ACC.
Indexation: RPI Power Indexation Third Party Waste Capex RDF Landfill Gatefee Landfill Tax	2.50% 2.50% 2.50% 4.5% 3.00% 2.50%	Per last Business Case Note: RDF indexation rate increased from 2.50% to 3.00% due to the anticipated increase in price based on the current low Euro rate and the availability in the current market driving the gate fee down.
50kt - Capex Insurance	£800,000	Per last Business Case
100kt - Capex Insurance	£1,400,000	Per last Business Case
50kt – Operational Insurance	£400,000 p.a	Per last Business Case
100kt - Operational Insurance	£800,000 p.a	Per last Business Case
MT - Operational Insurance	£53,500 p.a	AMEC
Power Generation Value	£47/tonne	AMEC – note that a more prudent approach may be taken if bank funded solution.
Third Party Waste price	£65/ tonne	EY
Landfill Gate fee	£41.40	AMEC



Assumptions (continued)

Assumption	Value	Comments
Landfill tax	£82.60	AMEC
RDF Offtake Price	£92/tonne	AMEC
Risk Adjustments: Capex Risk Opex Risk Power revenue risk TPW Risk	25.00% 5.00% -20.00% -20.00%	Per last Business Case (verified by ACC)



EY | Assurance | Tax | Transactions | Advisory

Ernst & Young LLP

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Agenda Item 5

ABERDEEN CITY COUNCIL

COMMITTEE Zero Waste Management Sub-Committee

DATE 1 December 2015

DIRECTOR Pete Leonard

TITLE OF REPORT Zero Waste Project Update

REPORT NUMBER ZWSC/7630

CHECKLIST COMPLETED Yes

1. PURPOSE OF REPORT

The purpose to this report is to update members on the progress of the Zero Waste Project.

2. RECOMMENDATIONS

It is recommended that the Sub-Committee notes the contents of the report.

3. FINANCIAL IMPLICATIONS

There are no direct financial implications from this report. The Zero Waste Project will contribute to a reduction in cost pressures associated with the increasing costs of landfilling the city's waste whilst at the same time substantially improving recycling services and meeting national regulations and targets.

4. OTHER IMPLICATIONS

Legal. Specialist legal support is being provided to ensure the variation to the Waste Management Services Contract is undertaken in accordance with best practice and minimizes risk to the Council.

Resource. The Council has allocated capital resource for the construction of new facilities at Altens East; the management of the variation process will be undertaken largely by internal staff as part of their substantive duties, specialist support is provided (from within allocated budgets) for legal and technical matters

Personnel. As above.

Sustainability and environmental. The Zero Waste Project will deliver substantial advances in sustainability and environmental performance.

5. BACKGROUND/MAIN ISSUES

5.1 Waste Management Services Contract Variation

- 5.1.1 The supplemental agreement to the Waste Management Services Contract has now been agreed and has been in operation from 1 October 2015. The supplemental agreement provides the basis for a range of new services and infrastructure that will be managed by Suez (formally SITA UK Limited).
- 5.1.2 The new services to be provided at Altens East are:
 - the construction and operation of a Materials Recycling Facility
 - the construction and operation of a Refuse Derived Fuel production
 - construction of a Waste Collection Depot alongside the above facilities at Altens East, this will have capacity for parking all of the Council's Waste Collection vehicles and car parking for all Suez and Council staff based at the site, and
 - construction of a shared office, welfare and muster facility for Suez staff, Council waste and recycling service staff and the management team for Environmental Services

In addition, Suez will provide organic waste disposal facilities at Sclattie Transfer Station and operation of 5 Household Waste and Recycling Centres.

5.1.3 The revenue and capital implications for the Council are within those outlined in the report, ZWM/14/7565, Waste Management Services Contract Variation, considered by the Sub-committee on 2 December 2015 and later approved by Council on 17 December 2014.

5.2 Altens East Planning Application

5.2.1 Suez has prepared and submitted a planning application for the Altens East site. The application will be considered at the 10 December 2015 Planning Development Management Committee.

5.3 Altens East Project Timetable

5.3.1 Suez has provided an outline timetable for completion of the project as follows:

September 2015 Appointment of Sub-contractors

August to October 2015 Pre-construction works

• December 2015 Positive planning determination

• November 2015 to December 2016 Construction

January 2017 to March 2017 Completion and Commissioning

- 5.3.2 Based on the timetable provided, this results in waste collection service changes as follows:
 - Expansion of Communal Mixed Recycling complete by December 2016
 - Start of RDF operation in March 2017
 - Start of Kerbside Mixed recycling in March 2017
 - Depot move March 2017

5.4 Joint Working on Residual Waste Management

- 5.4.1 Officers from Aberdeen City, Aberdeenshire and the Moray Councils continue to develop a joint project for the construction and operation of an Energy from Waste facility in East Tullos, Aberdeen. Recent activity has focused on the development of an Inter-Authority Agreement (IAA) for the first stage of the project from now until the formal commencement of a procurement process. This IAA establishes a formal agreement to work together to achieve the project aims, governance and project management processes for the project, levels of delegated authority to Project Board officers, budget and division of project development costs and mechanisms for and consequences of withdrawal from the project.
- 5.4.2 A draft IAA is at Appendix 1 and upon final agreement will be considered by Council on 17 December 2015. Aberdeenshire and the Moray Councils are scheduled to consider reports on this subject in November 2015.
- 5.4.3 The project officers are also managing the appointment of Technical Advisors, Financial Advisors and Project Director.
- 5.4.4 Communications are recognized as being a critical success factor for the project; a communications plan has been developed and will be considered by the Project Board and Member Engagement Group as a standard agenda item. Aberdeen City Council officers have continued to seek meetings with Community Councils in the south of the city in addition to setting up a Stakeholder Group comprising local elected community representatives, businesses and other stakeholders. Aberdeenshire and Moray Council are also seeking ways to support the communications activity that will primarily be focused within the city.

5.5 Energy from Waste Planning Application

Preparation of the Planning Application for the Energy from Waste facility is underway. Public Exhibitions of the Council's proposals were held in Torry and Altens in November. Feedback from these exhibitions and on line consultation is being collated and will be incorporated in the planning application. A further round of exhibitions will be held in January 2015 after submission of the application.

6. IMPACT

Improving Customer Experience –

A key customer benefit of the joint working will be the provision of the most costeffective waste management solution for city residents. In addition, the development will facilitate the provision of low and stable cost heat and power to up to 25,000 households.

Improving Staff Experience -

The proposal will provide clean, spacious and indoor disposal facilities for Council refuse collection crews. The Council's contractor will also benefit from improved office and welfare facilities compared to those currently in place.

Improving our use of Resources -

Development of the East Tullos EfW facility will enable the Council minimize the amount of waste sent to landfill, thereby reducing costs and mitigating the cost pressures on the service.

Corporate -

This project links to the Smarter Environment theme of Aberdeen – the Smarter City vision and is a key outcome from the Aberdeen City Waste Strategy. The project enables the Council to comply with its statutory obligations to collect recycling from all households.

Public -

AN EHRIA has been completed during the formulation of the Aberdeen City Waste Strategy. The recycling service that will be enabled by the Altens East facility will ensure that all households across the city get equal access to recycling services, addressing the current inequitable level of service delivery.

7. MANAGEMENT OF RISK

No new risks have emerged in relation to this update report.

8. BACKGROUND PAPERS

Appendix 1. Draft Inter-Authority Agreement

9. REPORT AUTHOR DETAILS

Peter Lawrence
Waste and Recycling Manager

Email: PLawrence@aberdeencity.gov.uk

Tel: 01224 489331

Appendix 1.	Draft Inter-A	Authority Agr	eement			
						[Date]
				(1)	ABERDEE	N CITY COUNCIL
				(2)	ABERDEEN	ISHIRE COUNCIL
						AND
					(3) THE I	MORAY COUNCIL
PRE-PRO	CUREMENT INT	ER-AUTHORIT	Y AGREEME	NT FOR	THE PROC	UREMENT OF AN EFW FACILITY

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BETWEEN:

- (1) ABERDEEN CITY COUNCIL, a local authority constituted under the Local Government etc (Scotland) Act 1994 and having its head office at Marischal College, Broad Street, Aberdeen, AB10 1AB ("Aberdeen City") which expression shall include their successors, permitted assignees and transferees;
- (2) ABERDEENSHIRE COUNCIL, a local authority constituted under the Local Government etc (Scotland) Act 1994 and having its head office at Woodhill House, Westburn Road, Aberdeen, AB16 5GB ("Aberdeenshire") which expression shall include their successors, permitted assignees and transferees; and
- (3) **THE MORAY COUNCIL**, a local authority constituted under the Local Government etc (Scotland) Act 1994 and having its head office at The Moray Council Office, High Street, Elgin, Moray, IV30 1BX ("**Moray**") which expression shall include their successors, permitted assignees and transferees.

(each a "Council" and together the "Councils").

WHEREAS:

- (A) The Councils wish to work in partnership to procure the appointment of a contractor to design, build and operate an Energy from Waste facility at the Site (as hereinafter defined) (the "**Project**") to assist the Councils in meeting their respective statutory obligations and targets arising out of the Waste (Scotland) Regulations 2012 and associated legislation and guidance;
- (B) Pursuant to this partnership, the Councils wish to formally create a joint working arrangement under section 56 of the Local Government (Scotland) Act 1973 for the pre-procurement stage of the Project and record the particulars (including, but without limitation to, the establishment of a board as the joint decision making body in relation to the procurement of the Project) of said working arrangements in this Inter-Authority Agreement (the "Pre-Procurement Inter-Authority Agreement").

THE PARTIES AGREE as follows:

DEFINITIONS AND INTERPRETATION

In this Agreement, the following expressions shall have the following meanings:-

"Agreement" means this Agreement including the schedule;

"Appointed shall have the meaning given to it in Clause 0;

Representative"

"Business Day" means a day (other than a Saturday or a Sunday) on which banks are

open for domestic business in Aberdeen;

"Code" shall have the meaning given to it in Clause 0;

"Confidential Information"

means information concerning any Council or the Project that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) which is not publically known and which is used in or otherwise relates to the Project or any Council's business, affairs, finances, costs, developments, arrangements, governance, know-how, personnel and in each case regardless of whether such information is marked as "confidential". Such information shall include (but without limitation to) all Intellectual Property Rights, information whose disclosure would or would be likely to, prejudice the commercial interests of any Council or the Project, and all personal data within the meaning of the Data Protection Act 1998;

"Contract"

means the contract to be entered into with the Contractor for the delivery of the Project;

"Contract Execution Date" means the date upon which the Contract is executed by all parties

thereto;

"Contractor" means the entity selected by the Councils following the completion of

the procurement process to deliver the Project;

"Council Decision"

means any matter which has been referred for determination (or is required to be determined including the matters listed in **PART 1** of the Schedule) by the Councils in accordance with this Agreement;

"Councils' Programme" means the programme set out in **PART 3** of the Schedule;

"Day-to-Day Decisions means any day to day decisions which are not reserved to the Project

Board or the Councils:

"Disclosing Council"

shall have the meaning given to it in Clause 0;

"Effective Date"

means the last date of execution of this Agreement;

"EFW Facility

Elected Member

Engagement Group"

has the meaning given to it in Clause 0;

"EfW Facility"

means the energy from waste facility and all supporting infrastructure (including plant and amenities) to be designed, constructed, tested and

commissioned pursuant to the Contract;

"Environmental Information Regulations"

means the Environmental Information (Scotland) Regulations 2004 together with any guidance and/or codes of practice issued by the Scottish Information Commissioner or Scottish Ministers in relation to

such regulations;

"External Advisers"

has the meaning given to it in Clause 0;

"Fees

Regulations"

means the Freedom of Information (Fees for Required Disclosure)

(Scotland) Regulations 2004;

"FOISA" means the Freedom of Information (Scotland) Act 2002 and any

subordinate legislation (as defined in Section 73 of the Freedom of Information (Scotland) Act 2002) made under the Freedom of Information (Scotland) Act 2002 from time to time together with any guidance and/or codes of practice issued by the Scottish Information Commissioner or relevant Scottish Ministers in relation to such Act;

"Information" has the meaning given to it in Section 73 of the Freedom of Information

(Scotland) Act 2002;

"Initiating Council"

has the meaning given to it in Clause 0;

"Intellectual Property Rights" means any and all patents, rights to inventions, trade marks, business names and domain names, copyright and related rights, rights in design, rights in computer software, rights in databases, rights to use, and protect the confidentiality of, confidential information (including know-how) and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

"Inter-Authority Finance Lead"

has the meaning given to it in Clause 0;

"Inter-Authority Legal Lead" has the meaning given to it in Clause 0;

"Inter-Authority Technical Lead" has the meaning given to it in Clause 0;

"Lead Authority"

means the Council nominated by the other Councils to act as the lead authority for the Project (if applicable);

"Materials"

means all data, text, graphics, images and other materials and/or documents created, used or supplied by a Council to the other Council(s) in connection with the Project or this Agreement;

"Month" means a calendar month;

"Nominated has the meaning given in Clause 0; Group Representative "OJEU Notice" means the notice placed in the Official Journal of the European Union advertising the procurement of the Project; "OJEU means the date on which the OJEU Notice is published in the Official Publication Date" Journal of the European Union; "Operational shall have the meaning given to it in Clause 0 of this Agreement; Inter-Authority Agreement" "Pre-procurement means 1 November 2016 or such other date as may be agreed by the Longstop Date" Councils in writing; "Procurement shall have the meaning given to it in Clause 0 of this Agreement; Inter-Authority Agreement" "Project Budget" means the budget agreed by the Councils, for the period from the Effective Date until the OJEU Publication Date, which shall apply to the (one) development of the procurement strategy for the Project, (two) preparation of all project documentation and (three) all other steps required to prepare the Project for the advertisement in the Official Journal of the European Union as set out in PART 2 of the Schedule to this Agreement (as may be amended in accordance with this Agreement from time to time); "Project Board" means the board constituted and established by the Councils for the purpose of procuring the Project in accordance with this Agreement; "Project means any matter which has been referred for determination (or is Board Decision" required to be determined by the Project Board including the matters listed in **PART 1** of the Schedule) in accordance with this Agreement; "Project Costs" means the aggregate of the costs and expenses properly and reasonably incurred by each of the Councils in respect of the Project including without prejudice to the generality: (one) costs incurred by each of the Councils in connection with the Project prior to the Effective Date which are set out in **PART 2** of the Schedule; (two)

payment for services carried out by the Project Director and the external advisors and (three) the costs of preparing the suite of project

documentation prior to the publication of the OJEU Notice;

"Project Director" means such person as may appointed by the Project Board in

accordance with Clause 0 (Governance) from time to time and who is responsible for the management of the procurement of the Project and

leading the Project Team;

"Project means such person as may appointed by the Project Board to assist

Manager" the Project Director in the procurement of the Project;

"Project means the actions identified and agreed by the Councils as key Project

Milestones" Milestones as set out in PART 1 of the Schedule (as may be

amended by the Councils from time to time in accordance with this

Agreement);

"Project" has the meaning given to it in Recital (A);

"Project Officer" means the person engaged from time to time to provide administrative

support to the Project Team;

"Project Team" means the team constituted and established by the Councils for the

purpose of procuring and managing the Project, comprising the Project Director, Project Manager, Project Officer, Inter-Authority Legal Lead,

Inter Authority Technical Lead and Inter-Authority Finance Lead;

"Project Team means any matter (including the matters set out in PART 1 of the

Schedule) which has been delegated by unanimous decision of the Project Board to the Project Team for their determination on behalf of

the Councils;

"Proposed OJEU means the date upon which, according to the Councils' Programme,

Date" the Councils intend to issue the OJEU Notice:

"Quarter" means with effect from the Effective Date, the expiry of every three

month period during each Year in which this Agreement remains in

force pursuant to Clause 0;

"Receiving shall have the meaning given to it in Clause 1.13;

Council"

Decision"

"Requesting shall have the meaning given to it in Clause 0;

Council"

"Request for has the meaning set out in the FOISA or the Environmental Information

Information" Regulations as relevant (where the meaning set out for the term

'request' shall apply);

"Respondent shall have the meaning given to it in Clause 1.13;

Councils"

"Site" means the area edged [red] on the Site Plan;

"Site Plan" means the plan annexed and executed as relative hereto; and

"Year" means a period of 12 consecutive months commencing on the Effective Date.

1.2 In this Agreement, except where the context otherwise requires:-

- 1.2.1 the masculine includes the feminine and vice-versa;
- 1.2.2 the singular includes the plural and vice-versa;
- 1.2.3 a reference to any Clause, sub-Clause, paragraph, Schedule Part, recital or Annex is, except where expressly stated to the contrary, a reference to such Clause, sub-Clause, paragraph, Schedule Part, recital or Annex of and to this Agreement;
- 1.2.4 save where otherwise provided in this Agreement, any reference to this Agreement or to any other document shall include any permitted variation, amendment or supplement to this Agreement and/or such other document;
- 1.2.5 any reference to any enactment, order, regulation or other similar instrument shall be construed as a reference to the enactment, order, regulation or instrument (including any EU instrument) as amended, replaced, consolidated or re-enacted;
- 1.2.6 references to any documents being 'in the agreed form' means such documents have been initialled by or on behalf of each of the Councils for the purposes of identification:
- 1.2.7 a reference to a person includes firms, partnerships and corporations and their successors and permitted assignees or transferees;
- 1.2.8 headings are for convenience of reference only;
- 1.2.9 words preceding "include", "includes", "including" and "included" shall be construed without limitation by the words which follow those words;
- 1.2.10 a reference to a time of day is a reference to the time in Scotland;
- 1.2.11 any obligation on a Council to do any act matter or thing includes, unless expressly stated otherwise, an obligation to procure that it is done; and
- 1.2.12 subject to any express provisions to the contrary, the obligations of any Council are to be performed at that Council's own cost and expense.

1.3 Schedules

The Schedule (including all of its parts thereto) to this Agreement forms part of this Agreement.

DURATION

This Agreement and the rights of obligations of the Councils set out in this Agreement shall commence on the Effective Date and, subject to Clause 0 (Consequences of Termination), shall remain in force until the date this Agreement is terminated in accordance with Clause 0 (Termination) of this Agreement.

INTER-AUTHORITY AGREEMENTS

- Without prejudice to Clause 0 (Consequences of Termination), the Councils acknowledge and agree that this Agreement governs the joint working arrangements between the Councils during the period from the Effective Date until the day immediately prior to the OJEU Publication Date and that:
- this Agreement shall cease to have effect from the OJEU Publication Date;
- this Agreement shall be replaced by a second inter-authority agreement, executed on or prior to the OJEU Publication Date by the Councils, which agreement shall govern the joint working arrangements of the Councils during the period from the OJEU Publication Date until the day immediately prior to the Contract Execution Date (the "Procurement Inter-Authority Agreement"); and
- On the Contract Execution Date, the Procurement Inter-Authority Agreement shall cease to have effect and shall be replaced by a third inter-authority agreement which shall govern the joint working arrangements between the Councils during the design, build and operation of the EfW Facility procured pursuant to the OJEU Notice (the "Operational Inter-Authority Agreement").

KEY PRINCIPLES

- Save as expressly provided in this Agreement or where otherwise agreed in writing, the Councils agree that they shall each adhere to the following principles for so long as this Agreement subsists:-
- each Council shall work together with the other Councils in good faith and each will act reasonably in all matters pertaining to the Project and this Agreement;
- each Council shall co-operate fully with the other Councils at all times and shall, except where there is just cause, not act in a manner which would prevent, or cause unnecessary delay to, the Councils' achievement of the Project Milestones in accordance with the Councils' Programme and this Agreement;
- each Council shall be transparent in its dealings with each other Council and shall, without prejudice to Clause 0 (Confidentiality and Freedom of Information) endeavour to respect matters of confidentiality and political sensitivities of the other Councils;
- each Council shall not act in a manner which would cause the other Councils to incur unnecessary expense in relation to the procurement of the Project;

- each Council ensure that individuals with relevant expertise are appointed as members (including any replacements thereto) to the Project Team;
- each Council shall not make any representations, give any warranties or incur any liabilities on behalf of another Council:
- subject always to the right to withdraw in accordance with Clause 10, the Councils agree that they shall each:
 - use all reasonable endeavours to agree the terms of the Procurement Inter-Authority Agreement (and, thereafter, the Operational Inter-Authority Agreement) by no later than the date set out in the Project Programme;
 - take all steps to agree the Project Milestones on or before their relevant deadlines specified in **PART 1** to enable the Procurement Inter-Authority Agreement to be drafted and agreed in a timeous manner; and
 - use all reasonable endeavours to procure that the Procurement Inter-Authority
 Agreement is executed by duly authorised signatories by no later than the
 Proposed OJEU Date:
- each Council shall use its reasonable endeavours to act in the best interests of the Project at all times; and
- each Council shall not seek to be recompensed by the other Councils for expenditure and Project Costs (properly and reasonably incurred) which is outwith the Project Budget without having first obtained approval from the Project Board or the other Councils (where the approval of the other Councils is required) prior to the incurrence of said expenditure.
- Without prejudice to Clause 0 above, the Councils acknowledge and agree that each Council shall work in partnership with every other Council to this Agreement to achieve the Project Milestones in accordance with this Agreement.
- Each Council hereby warrants to each of the other Councils that it has obtained all necessary authorities to authorise the creation of the joint working arrangements contemplated by this Agreement including delegating to its Appointed Representative the authority to agree or approve decisions which are designated as Project Board Decisions in **PART 1** of the Schedule and to amend the Project Budget as may be necessary within the limits of the overall Project Budget.
- The Councils agree that the procurement of external advisors shall be conducted using open tendering or through a suitable framework agreement if appropriate.

GOVERNANCE

The Councils shall establish a Project Board whose members comprise of one Director (or Head of Service) from each of the Councils (each an "Appointed Representative") no later than the Effective Date. The Councils agree that any person temporarily acting up as and fulfilling the role of a director (or Head of Service) who is an Appointed Representative may also fulfill the

role of Appointed Representative provided that they are duly authorised by the relevant Council.

- An Appointed Representative from each Council shall be present at each meeting of the Project Board.
- Without prejudice to Clause 0 below, the Project Board shall meet every Month or such other period as may be agreed by the Project Board (provided that such meetings shall be no less than every Quarter) at a time (and location in the case of face-to-face meetings) agreed by the Project Board. The Project Board shall be entitled to hold additional meetings where they consider it necessary for the progression of the Project and any meeting may take place by video or telephone conference call.
- The Project Board shall be supported in its functions by a Project Team which shall include the following members:-

the Project Director;

the Project Manager;

the Project Officer;

- a nominated financial adviser (being a person employed by one of the Councils) who shall advise the Project Team on financial matters ("Inter-Authority Finance Lead");
- a nominated legal adviser (being a person employed by one of the Councils) who shall advise the Project Team on legal issues ("Inter-Authority Legal Lead");
- a nominated technical adviser (being a person employed by one of the Councils) who shall advise the Project Team on technical matters ("Inter-Authority Technical Lead"); and
- such other adviser or advisers (being a person(s) employed by any of the Councils) as the Project Board may determine is/are necessary to supplement the Project Team from time to time.
- External legal advisers, financial advisers and technical advisers, appointed by the Councils to advise the Councils in connection with the Project ("External Advisers") shall support the Project Team.
- All members of the Project Team have been or shall be appointed by the Project Board.
- Subject to the overall limit set out in the Project Budget, the Project Board shall be entitled to engage the services of any specialist, consultant or expert during the term of this Agreement for the provision of advice where the Project Board considers that such engagement is necessary for the progression of the Project.
- The Project Board may adjust the Project Budget within the overall limit of the Project Budget to incorporate any additional cost associated with the engagement of such specialist, consultant or expert (if required). Any requirement for additional budget in excess of the overall limit of the Project Budget will be referred back to the Councils for determination as a Council Decision.

- The Project Board shall have the authority on behalf of the Councils to appoint the Project Director who shall owe a duty of care to each of the Councils in connection with the procurement of the Project. The Project Director shall be initially appointed on a part time basis. The Project Board, may engage the Project Director for such additional hours as the Project Board considers is in the best interests of the Project (and subject to the overall limit, shall adjust the Project Budget accordingly).
- The Councils agree that the Project Director shall act as chairperson of the Project Board but shall not be entitled to take part in the determination of any Project Board Decision. The Project Director, in performing his role as chairperson, shall, as a minimum, (with the assistance of the Project Manager and Project Officer):-
- contact each Appointed Representative and confirm availability for Project Board meetings;
- draft an agenda (and all accompanying documentation) for each such Project Board meeting, specifying in reasonable detail the matters to be raised at the meeting which shall include:
 - any Project Board Decisions requiring to be taken at that meeting;
 - any Project Board Decisions which remain outstanding from previous meetings;
 - review of the progress of the preparation of the project documentation pursuant to the issue of the OJEU Notice:
 - review of the progress of the preparation of the Procurement Inter-Authority Agreement;
 - confirmation of matters which each Project Board member shall action prior to subsequent meetings; and
 - such other matters which the Project Director considers necessary for the progression of the Project.
- draft a note or report setting out the Project Director's recommendations (if any) on the course or outcome to be taken by the Project Board in respect of each Project Board Decision referred to in the agenda;
- notify the Appointed Representative of arrangements for Project Board meetings reasonably in advance of the meeting;
- provide all Appointed Representatives copies of all agendas and reports in good time for the Project Board meeting; and
- attend and chair all Project Board meetings.
- Each of the Councils agree that they shall make available such of their officers as may be necessary for the purposes of the Project and the governance arrangements described in this Agreement and shall each procure that it shall establish a management and governance structure within its own Council which is sufficiently robust and has the requisite authority to enable its representatives on the Project Board and Project Team to legitimately take Project Board Decisions and Project Team Decisions.

The Project Director and the Project Team shall act under the direction of the Project Board.

The Councils agree that no later than 5 Business Days following the last day of each Month (or such other period as may be agreed by the Project Board), the Project Team shall be required to provide the Project Board (which shall provide all reasonable information and assistance to the Project Team during its preparation) with a report which shall include, without limitation to, the following items:-

status of the Councils' Programme;

status of the achievement of the Project Milestones;

statement of expenditure of the Project Budget;

a summary of any Project Team Decisions, Project Board Decisions and/or Council Decisions;

a summary of any Project Team Decisions, Project Board Decisions and Council Decisions which remain outstanding at the date of issue of such report;

review of the progress of the preparation of the Procurement Inter-Authority Agreement;

review of the progress of the preparation of the project documentation pursuant to the issue of the OJEU Notice; and

such other matters which the Project Team and/or the Project Board consider necessary for the progression of the Project from time to time.

DECISION MAKING AND AUTHORITY

- The Project Director shall have sufficient authority to make Day-to-Day Decisions and shall liaise on a regular basis with the Project Team and the Project Board.
- Where the Project Board is required to make a Project Board Decision, such decision shall not be implemented unless it has the unanimous approval of all Appointed Representatives. All Council Decisions shall require the approval of all of the Councils.
- Where any matter is to be determined as a Council Decision under this Agreement, the Project Board shall provide the Councils with a recommendation prior to such Council Decision being taken.
- The Councils have identified and categorised a number of key decisions and other actions (listed in PART 1 of the Schedule) which are required to be agreed and, thereafter, implemented in accordance with the Councils' Programme in accordance with PART 1 of the Schedule to this Agreement by the Councils, the Project Board and the Project Team as indicated in PART 1 of the Schedule.
- The Councils shall procure that the Project Board makes arrangements for the key decisions indicated as being Project Team Decisions in **PART 1** of the Schedule to be taken by the Project Team.

EFW FACILITY ELECTED MEMBER ENGAGEMENT GROUP

The Councils shall create and establish an elected member engagement group for the purposes of promoting and optimising co-operation between the Councils in connection with the Project (the "EFW Facility Elected Member Engagement Group") no later than two months after the Effective Date. The EFW Facility Elected Member Engagement Group shall act as advisory consultative body to the Project.

The EFW Facility Elected Member Engagement Group shall comprise of at least two and not more than three nominated elected representatives (each a "Nominated Group Representative") from each Council. Where for any reason any Nominated Representative is unable to fulfil its role as a member of the EFW Facility Elected Member Engagement Group (including, for the avoidance of doubt, attending any meeting under Clause 0 below), each Council shall use reasonable endeavours to procure that a fellow elected representative assumes and fulfils their role as a member of the EFW Facility Elected Member Engagement Group until such time the Nominated Representative is able to re-assume its duties as member.

The EFW Facility Elected Member Engagement Group shall meet every Quarter or such other period as may be agreed by the EFW Facility Elected Member Engagement Group at such time (and location in the case of face-to-face meetings) as may be agreed. The EFW Facility Elected Member Engagement Group shall nominate one member of the EFW Facility Elected Member Engagement Group, during their first Quarterly meeting, to act as chairperson. Where for any reason the chairperson is unable to chair any meeting, the participating members must appoint one of themselves to chair such meeting.

The chairperson of the EFW Facility Elected Member Engagement Group shall be responsible for drafting an agenda for each Quarterly meeting of the EFW Facility Elected Member Engagement Group. During his preparation of the agenda, the chairperson shall be required to seek input from each of the members of the EFW Facility Elected Member Engagement Group and the Project Director in advance of any such meetings as to any items they consider ought to be discussed during such meeting. The chairperson shall be responsible, during each such Quarterly meeting, for encouraging open discussion and dialogue on each point of the agenda and shall seek agreement from the members (including himself) as to what course they consider the Project Board should adopt. The chairperson shall, thereafter, relay all such considerations following such meeting to the Project Director who shall advise the Project Team and the Project Board.

Any consideration provided by EFW Facility Elected Member Engagement Group pursuant to Clause 0 shall constitute a matter for consideration during the determination of any Council Decision, Project Board Decision and/or Project Team Decision and shall not be binding on the Project Board, the Project Team or the Councils.

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¹ Councils to confirm timescales

PROJECT BUDGET AND COSTS²

Subject to each Council complying with Clause 0, the Project Costs, for the period from the Effective Date until the OJEU Publication Date, shall be borne by the Councils according to the percentages set out in the following table:-

NAME OF COUNCIL	PROPORTION OF PROCUREMENT COSTS FOR WHICH EACH COUNCIL IS LIABLE (%)
Aberdeen City	38.4%
Aberdeenshire	46.5%
Moray	15.1%

- Each Council shall be required to pay, in accordance with this Clause 0, their proportion (as calculated in accordance with Clause 0 above) of any Project Costs properly and reasonably incurred by any Council prior to the Effective Date.
- Each Council shall pay the amount(s) allocated to it in accordance with the forecast set out in the Project Budget. The first instalment of the Project Budget shall be payable by each Council (with regard to their requisite share specified in the table above) no later than 3 months after the Effective Date.³
- The Project Team shall provide the Project Board with a statement, on a Quarterly⁴ basis, showing the expenditure and costs during that Quarter together with a variance analysis and commentary between the forecast Project Budget and the actual Project Costs incurred to that particular date. The Project Board shall provide the Project Team with all reasonable information and assistance during the preparation of such statement.
- The Project Board shall review the forecast Project Budget and shall assess such Project Budget against the actual Project Costs on a not less than quarterly basis. If it becomes evident that the total Project Costs will exceed the overall limit of the Project Budget, the Project Board shall be required to refer the matter to the Councils for determination as a Council Decision. The Councils shall assess whether the Project Budget remains fit for purpose and, where the Councils are satisfied that additional funding is necessary, shall make the necessary allocation of additional funds.
- The Project Board shall be required, upon the termination of this Agreement, to produce a final statement of the remaining balance of the Project Budget and shall arrange for all funds, if any, to be returned (according to the proportion applicable at that time) to each Council within 28 days of issuing said statement.
- If a Council (the "Initiating Council") (a) carries out any work or incurs any cost or expenses, or (b) requests the Project Team (or any member of it) to carry out any work relating to the Project,

³ Councils to confirm which Council will assume responsibility for payment of invoices – which Council will receive the monies?.

² Councils to confirm whether the proportion of Project Costs is to be allocated according to tonnage.

or (c) requests the Project Team (or any member of it) to incur any cost or expense that, in the reasonable opinion of the Project Director, is not an efficient use of time and/or resources, the matter shall be referred to the Project Board for determination (as a Project Team Decision) as to whether such work, cost or expense shall form part of the Project Budget and/or the Project Costs or whether such work, cost or expense should borne by the Initiating Council.

Any dispute as to the allocation of the Project Costs shall be resolved in accordance with Clause 0 (Dispute Resolution Procedure) of this Agreement.

PRINCIPLES OF DESIGN, BUILD AND OPERATIONAL COSTS AND REVENUE INCOME APPORTIONMENT

The Councils shall agree the principles for the apportionment of the design, build and operational costs and revenue income to be documented in the Procurement Inter-Authority Agreement and the Operational Inter-Authority Agreement prior to the Contract Execution Date. The key decisions to be taken are set out in **PART 1** of the Schedule.

WITHDRAWAL DURING THE PROCUREMENT PROCESS

- Each Council acknowledges and agrees that its withdrawal from the Project (and thereby this Agreement) may result in the remaining Councils either incurring additional costs for the remainder of the procurement, or abortive costs having been required to abandon the procurement.
- A Council shall be entitled to withdraw from the Project at any time prior to the execution of the Procurement Inter-Authority Agreement upon providing written notice, in accordance with Clause 0 (Notices), to each of the other remaining Councils under this Agreement and the Project Board (marked for the attention of the Project Director). Such notice under this Clause shall state the following:-

the date upon which the withdrawal is to be effective; and

the reasons for its withdrawal from the Project.

- Without prejudice to Clauses 0 (Council Liabilities), 0 (Termination) and 0 (Consequences of Termination) of this Agreement, where a Council has withdrawn from the Project:-
- the withdrawing Council shall not recover any contributions made by it in connection with the Project prior to the date of its intimation of withdrawal;
- the withdrawing Council shall be required to pay their proportion (as calculated in accordance with Clause 8) of the total costs set out in the Project Budget (as at the date of the withdrawing Council's withdrawal) to be incurred prior to the OJEU Publication Date;
- the remaining Councils shall not be entitled to receive any compensation from the withdrawing Council for any additional costs, claims and expenses which the remaining Councils have incurred or will incur in connection with the withdrawing Council's withdrawal from the Project; and

save as otherwise agreed by the Councils, the withdrawing Council's rights and obligations in relation to the delivery and governance of the Project shall cease forthwith.

ABANDONMENT OF THE PROJECT

- Without prejudice to Clause 0 below, the Councils shall be entitled to abandon the Project (provided that it is a unanimous decision) at any time prior to the execution of the Procurement Inter-Authority Agreement.
- Where the Procurement Inter-Authority Agreement has not been executed by each of the Councils by the Pre-procurement Longstop Date, the Project Board shall be required to seek instructions from the Councils (by referring the matter as a Council Decision) as to whether they wish to abandon the Project.
- Where the Project has been abandoned pursuant to Clause 0, the Councils shall use all monies within the Project Budget at the date of abandonment to settle the Project Costs which are due and payable at such date. Where there are insufficient funds within the Project Budget to settle all such Project Costs, each Council shall pay their proportion (as set out in Clause 0) of the remaining costs from their own internal budget. Any surplus monies from the Project Budget following settlement of such Project Costs shall be apportioned with reference to each Council's share under Clause 0 and each Council shall receive their respective share of the surplus monies no later than thirty (30) days after full settlement of the Project Costs.

COUNCIL LIABILITIES

Subject to Clause 0, each Council's total liability under this Agreement (including, but without limitation to, Clauses 0 (Withdrawal During the Procurement Process) 0 (Termination) and 0 (Consequences of Termination)) whether in contract, delict (including negligence or breach of statutory duty) or otherwise arising out of or in connection with this Agreement shall be limited to their proportion set out in accordance with Clause 0 of the total Project Budget.

Nothing in this Agreement shall exclude or limit:

- any Council's liability for fraud or fraudulent misrepresentation; or
- any Council's liability for death or personal injury caused by its (or its agent's or sub-contractor's negligence).
- Each Appointed Representative shall be deemed to be acting on behalf of the Council in respect of which they are a director (or Head of Service), regardless of whether the particular matter under consideration by the Board relates to their particular Council or another Council.
- Subject to Clause 0 below, each member of the Project Team and any other officer engaged in connection with the Project shall be required to act in the best interests of the Project at all times.
- Subject to Clause 0 below and without prejudice to Clause 0 above, each member of the Project Team shall be deemed to be acting on behalf of the Council in respect of which they are an employee, regardless of whether the particular matter under consideration by the Project

Team relates to their particular Council or another Council and shall be entitled to report all matters to their Council.

- Where a member of the Project Team considers at any time that their compliance with the obligation under Clause 0 above could (one) conflict with their duties as an employee of a Council or (two) adversely affect their Council's commercial or financial interests, such member shall be required to promptly relay their concerns to the Project Director. The Project Director shall, thereafter, promptly refer the matter to the Project Board for consideration.
- The Project Team and the Project Board shall, when working on the Project, be deemed to be made available and working on behalf of all Councils in accordance with the powers granted to each Council under Sections 56 and 57 of the Local Government (Scotland) Act 1973.
- No Council or any of its members, directors or officers shall be liable to any other Council for any loss such Council incurs as a result of any act or omission by any such member, director, or officer during their engagement with the Project.

TERMINATION

Without prejudice to Clause 0 (Consequences of Termination) below, this Agreement shall terminate on the earliest of:-

the OJEU Publication Date:

the date upon which a second Council has exercised its rights to withdraw under Clause 0 which has resulted in one Council remaining a party to this Agreement;

the date upon which all Councils agree in writing to its termination; and

the date upon which the Councils collectively decide to abandon the Project in accordance with Clause 0.

CONSEQUENCES OF TERMINATION

The termination of this Agreement pursuant to Clause 0 (Termination) above shall:-

be without prejudice to any other rights or remedies which any Council may be entitled to under this Agreement;

not affect any accrued rights or liabilities which any Council may then have; and

not affect any provision of this Agreement that is expressly or by implication intended to come into or continue in force on or after such termination. Such provisions shall include but not be limited to this Clauses 0 (Project Budget and Costs), 0 (Withdrawal during the Procurement Process), 0 (Abandonment of the Project), 0 (Council Liabilities), 0 (Consequences of Termination) 0 (Intellectual Property), and 0 (Confidentiality and Freedom of Information).

INTELLECTUAL PROPERTY

- Each Council shall own all property rights (including all Intellectual Property Rights) in its respective Material.
- Each Council hereby grants each of the other Councils under this Agreement a non-exclusive, perpetual, non-transferable and royalty-free licence to use, modify, amend and develop any such Material for the purposes of the Project.
- Without prejudice to Clause 0, if more than one Council has a legal or beneficial right or interest in any aspect of the Material for any reason (including the eventuality that no Council has the ability to demonstrate that it independently supplied or created the Material without the involvement of any of the other Councils), each Council which has contributed to that Material shall grant to the other Council(s) under this Agreement a non-exclusive, perpetual, non-transferable and royalty-free licence to use such Material pursuant to or in connection with the Project.
- Each Council hereby warrants that it has the necessary rights to grant the licences under Clauses 0 and 0. Subject to Clause 0 (Council Liabilities), each Council shall indemnify the other Councils against any loss arising out of any dispute or proceedings brought by a third party alleging infringement of its intellectual property rights as a result of that Council's use of another Council's Intellectual Property Rights pursuant to or in connection with the Project.

CONFIDENTIALITY AND FREEDOM OF INFORMATION.

- The Councils agree that the provisions of this Agreement shall not be treated as Confidential Information and may be disclosed without restriction.
- The Councils shall keep confidential all Confidential Information received by one Council from the other Council(s) relating to this Agreement and shall use all reasonable endeavours to prevent their employees and agents from making any disclosure to any person of any such Confidential Information.

Clauses 0 and 0 above shall not apply to:

- any disclosure of information that is reasonably required by any person engaged in the performance of their obligations under the Agreement for the performance of those obligations;
- any matter which a Council under this Agreement can demonstrate is already or becomes generally available and in the public domain otherwise than as a result of a breach of this Clause 0 (Confidentiality and Freedom of Information);
- any disclosure to enable a determination to be made under Clause 0 (Dispute Resolution Procedure);
- any disclosure which is required pursuant to any statutory, legal (including any order of a court of competent jurisdiction) or Parliamentary obligation placed upon the Council making the disclosure or the rules of any stock exchange or governmental or regulatory authority;

any disclosure of information which is already lawfully in the possession of the receiving Council(s), prior to its disclosure by the disclosing Council;

any provision of information to the Council's own professional advisers or insurance advisers;

- any disclosure by any Council of information relating to the design, construction, operation and maintenance of the Project otherwise than in accordance with this Agreement;
- any disclosure of information by any Councils to any other department, office or agency of the Government or their respective advisers or to any person engaged in providing services to the Council for any purpose related to or ancillary to this Agreement;

any disclosure for the purpose of:

- (a) the examination and certification of any of the Council's accounts;
- (b) any examination pursuant to the Local Government in Scotland Act 2003 of the economy, efficiency and effectiveness with which the Council has used its resources;
- (c) complying with a proper request from any Council's insurance adviser, or insurer on placing or renewing any insurance policies; or
- (d) (without prejudice to the generality of Clause 0 above) compliance with the FOISA and/or the Environmental Information Regulations;

provided that, for the avoidance of doubt, neither Clause 0 nor Clause 0(d) above shall permit disclosure of Confidential Information otherwise prohibited by Clause 0 above where that information is exempt from disclosure under section 36 of the FOISA.

- Where disclosure is permitted under Clause 0 (other than Clauses 0, 0, 0 and 0 above), the Council providing the information shall procure that the recipient of the information shall be subject to the same obligation of confidentiality as that contained in this Agreement.
- The Councils acknowledge and agree that they are subject to the requirements of the FOISA, the Environmental Information Regulations, the INSPIRE (Scotland) Regulations 2009 and the Data Protection Act 1998 and shall facilitate the other Councils' compliance with their legal obligations or Information disclosure requirements pursuant to the same in the manner provided for in Clauses 0 to 0 inclusive below.
- Where a Council receives a Request for Information in relation to Information ("Requesting Council") that another Council ("Disclosing Council") is holding on its behalf and which the Requesting Council does not hold itself, the Requesting Council shall refer to the Disclosing Council such Request for Information that it receives as soon as practicable and in any event within five (5) Business Days of receiving a Request for Information and the Disclosing Council shall:
 - provide the Requesting Council with a copy of all such Information in the form that the Requesting Council requires as soon as practicable and in any event within ten (10) Business Days (or such other period as the Requesting Council acting reasonably may specify) of the Requesting Council's request; and

- provide all necessary assistance as reasonably requested by the Requesting Council in connection with any such Information, to enable the Requesting Council to respond to a Request for Information within the time for compliance set out in section 10 of the FOISA or Regulation 5 of the Environmental Information Regulations.
- Following notification under Clause 0, and up until such time as the Disclosing Council has provided the Requesting Council with all the Information specified in Clause 0, the Disclosing Council may make representations, within 5 Business Days of receiving such notification, to the Requesting Council where it considers that:
 - the Information is exempt from disclosure under the FOISA or the Environmental Information Regulations;
 - in the circumstances of the particular case, the public interest in maintaining the exemption outweighs the public interest in disclosing the Information referred to in the Request for Information;
 - the Information should not be disclosed in response to the particular Request for Information; and/or
 - further information should reasonably be provided in order to identify and locate the information requested.
- Where the Disclosing Council has made representations under Clause 0 (save a representation under Clause 0), the Requesting Council and the Disclosing Council shall discuss such representations with a view to agreeing (which, in any event, shall be no later than the tenth day of the Disclosing Council receiving the Requesting Council's notification under Clause 16.6) as to whether the Requesting Council should refuse the Request for Information in accordance with the FOISA or Environmental Information Regulations (as applicable). Where the Disclosing Council and the Requesting Council are unable to agree by the tenth day of the Disclosing Council receiving the Requesting Council's notification, the Requesting Council shall determine in its absolute discretion as to whether the Request for Information is to be refused and shall be entitled to require the Disclosing Council to provide the Requesting Council with all such Information and assistance to enable the Requesting Council to respond to the Request for Information within the time for compliance set out in section 10 of the FOISA or Regulation 5 of the Environmental Information Regulations.
- In the event of a request from the Requesting Council pursuant to Clause 0 above, the Disclosing Council shall as soon as practicable, and in any event within five (5) Business Days of receipt of such request, inform the Requesting Council of the Disclosing Council's estimated costs of complying with the request to the extent these would be recoverable if incurred by the Requesting Council under Section 13(1) of the FOISA and the Fees Regulations. Where such costs (either on their own or in conjunction with the Requesting Council's own such costs in respect of such Request for Information) will exceed the prescribed amount referred to in Section 12(1) of the FOISA and as set out in the Fees Regulations, the Requesting Council shall inform the Disclosing Council in writing whether or not it still requires the Disclosing Council to comply with the request and where it does require the Disclosing Council to comply with the request, the ten (10) Business Days period for compliance shall be extended by such

number of additional days for compliance as the Requesting Council is entitled to under Section 10 of the FOISA. In such case, the Requesting Council shall notify the Disclosing Council of such additional days as soon as practicable after becoming aware of them and shall reimburse the Disclosing Council for such costs as the Disclosing Council incurs in complying with the request to the extent the Requesting Council is itself entitled to reimbursement of such costs in accordance with the its own FOISA policy from time to time.

The Disclosing Council acknowledges that (notwithstanding the provisions of this Clause 0) the Requesting Council may, acting in accordance with the Scottish Ministers' Code of Practice on the Discharge of Functions of Public Authorities Under the Freedom of Information (Scotland) Act 2002 (the "Code"), be obliged under the FOISA, or the Environmental Information Regulations to disclose Information concerning the Disclosing Council or this Agreement:

in certain circumstances without consulting with the Disclosing Council;

following consultation with the Disclosing Council and having taken their views into account,

provided always that where Clause 0 above applies the Requesting Council shall, in accordance with the recommendations of the Code, draw this to the attention of the Disclosing Council prior to any disclosure.

1.12 The obligations in this Clause 0 shall survive the termination of this Agreement.

OMBUDSMAN AND COMPLAINTS

- 1.13 Where a Council under this Agreement receives a request for comments or information from the Scottish Public Services Ombudsman (the "Receiving Council") regarding a complaint which the Scottish Public Services Ombudsman has received and such complaint relates to matters pursuant to this Agreement or the Project, the Receiving Council shall:-
 - (a) notify the other Councils (the "Respondent Councils") as soon as practicable after receipt and in any event within two (2) Business Days of receiving a request for comments and/or information; and
 - (b) provide the Respondent Councils with a copy of its draft response to the complaint within five (5) Business Days or such other time period considered necessary by the Receiving Council (provided that such period does not exceed any time limit imposed by the Scottish Public Services Ombudsman in which the Receiving Council is required to respond).
- 1.14 The Respondent Councils shall provide all necessary assistance as reasonably requested by the Receiving Council to enable it to respond to the complaint within the time for compliance set by the Scottish Public Sector Ombudsman.
- 1.15 The Respondent Councils shall provide comments and any relevant information requested by the Receiving Council to the Receiving Council no later than five (5) Business Days of receiving such request.

- 1.16 The Receiving Council shall forward the final copy of the response (incorporating as appropriate the comments and information from the Respondent Councils) to the Responding Councils upon sending such response to the Scottish Public Services Ombudsman.
- 16.17 Where the Scottish Public Services Ombudsman issues a report under sections 15 and 16 of the Scottish Public Services Ombudsman Act 2002, the Respondent Councils shall provide all reasonable assistance and information to ensure that the Receiving Council complies with its obligations under such Act and shall, where requested, assist the Receiving Council in remedying the issue pursuant to the complaint.

NOTICES

Subject to Clause 0, any notice given under or in connection with this Agreement is to be in writing and signed by or on behalf of the Council giving it.

Any notice under Clause 0 is to be served by delivering it personally or by commercial courier or sending it by pre-paid recorded delivery or registered post or by electronic mail to the address and the attention of the relevant party set out below:-

Aberdeen City:

Address: Marischal College, Broad Street, Aberdeen, AB10 1AB

Att: Peter Leonard, Director of Communities, Housing and Infrastructure

E-mail: PLeonard@aberdeencity.gov.uk

Aberdeenshire:

Address: Woodhill House, Westburn Road, Aberdeen, AB16 5GB

Att: Alan Wood, Head of Finance

E-mail: alan.wood@aberdeenshire.gov.uk

Moray:

Address: The Moray Council Office, High Street, Elgin, Moray, IV30 1BX

Att: Rhona Gunn, Corporate Director (Economic Development, Planning and

Infrastructure)

E-mail: rhona.gunn@moray.gov.uk

or such other address, designated person or e-mail address as may be notified from time to time by the relevant Council to the other Council(s).

Any notice served under Clause 0 shall be deemed to have been received:-

if delivered personally or by commercial courier, at the time of delivery;

in the case of pre-paid recorded delivery or registered post, two (2) Business Days from the date of posting;

in the case of e-mail, on the day of transmission if sent before 4.00 pm on any Business Day and otherwise at 9.am on the next Business Day, subject to confirmation of completion of transmission (which shall, for the avoidance of doubt, include the sender not receiving an error message indicating failure to deliver after sending such e-mail).

WAIVER

No failure or delay by any Council to exercise any right or remedy provided under this Agreement is to constitute a waiver of that (or any other) right or remedy, nor preclude or restrict its further exercise. No single or partial exercise of such right or remedy is to preclude or restrict the further exercise of that (or any other) right or remedy. Any express waiver of any breach of this Agreement shall not be deemed to be a waiver of any subsequent breach.

ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the Councils and supersedes any prior drafts, agreements, undertakings, understandings, representations, warranties and arrangements of any nature between the Councils, whether or not in writing, in relation to the subject matter of this Agreement.

ASSIGNATION

No Council shall be entitled to assign, novate, sub-contract, transfer or dispose of any of its rights or obligations under this Agreement.

VARIATION

No variation of this Agreement shall be valid unless recorded in writing and signed by a duly authorised representative on behalf of each of the Councils.

SEVERANCE

If any provision (or part of a provision) of this Agreement is or becomes, or is declared to be invalid, unenforceable or illegal by the courts of any competent to which it is subject, such invalidity, unenforceability or illegality shall not prejudice or affect the remaining provisions (and parts of that provision) of this Agreement which shall continue in full force and effect notwithstanding such invalidity, unenforceability or illegality.

THIRD PARTY RIGHTS

It is expressly declared that no rights shall be conferred under and arising out of this agreement upon any person other than the parties hereto and, without prejudice to the generality of the foregoing, there shall not be created by this agreement a jus quaesitum tertio in favour of any person whatsoever.

DISPUTE RESOLUTION PROCEDURE

Any disputes or differences arising between the Councils in relation to this Agreement shall be resolved in accordance with this Clause 0 having regard to their obligation under Clause 0 to act in good faith.

Where a dispute or difference is considered by the Project Team to be incapable of swift and satisfactory resolution, the matter shall be referred to the Project Board for determination as a Project Board Decision. The Project Board shall refer the matter to the Councils for determination as a Council Decision where the members of the Project Board are unable to reach a consensus on the matter.

GOVERNING LAW AND JURISDICTION

This Agreement and any dispute or claim arising out of, or in connection with, its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of Scotland.

The Councils unconditionally and irrevocably agree that the courts of Scotland have exclusive jurisdiction to settle any disputes or claims arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims).

The Councils agree that this Agreement may be executed in counterpart.

IN WITNESS WHEREOF these presents consisting of this and the preceding [19] pages together with the Schedule of [3] parts are executed as follows:

SUBSCRIBED for and on behalf of)	
Aberdeen City Council by)	
At		
On		
In the presence of:		
Signature		
Name		
Address		

SUBSCRIBED for and on	behalf of		
Aberdeenshire Council)	
by	, Director)	
At			
On			
In the presence of:			
Signature			
Name			
Address			

SUBSCRIBED for and o	n behalf of		
Moray Council)	
by	, Director)	
At			
On			
In the presence of:			
Signature			
Name			
Address			

SCHEDULE

PART 1

PROJECT MILESTONES AND KEY DECISIONS

NO.	DESCRIPTION OF MILESTONE	PROJECT TEAM DECISIONS	PROJECT BOARD DECISIONS	COUNCILS DECISION S	DATE TO BE ACHIEVED
1.	Establish Project Board			√	17 December 2015
2.	Appoint Project Director		√		29 January 2016
3.	Procure and appoint technical, legal and financial advisers in accordance with Project Budget		~		29 January 2016
4.	Establish Project Team		√		17 December 2015
5.	Recommend to Project Board procurement strategy, including form of procurement, operational options and risk allocation between Contractor and Councils	√			1 April 2016
6.	Develop and recommend to Project Board form of contract	√			1 April 2016
7.	Agree procurement strategy and form of contract		✓		1 April 2016
8.	Approve publication of Prior Information Notice in OJEU for main contract		√		6 Jan 2016
9.	Agree tonnage capacity requirements of the EFW Facility.		~		1 April 2016
10.	Recommend to Councils form of Contracting Entity for construction and operation		~		1 April 2016
11.	Agree Evaluation Criteria for Procurement Process (including PQQ and main tender evaluation criteria)		V		1 April 2016
12.	Approve funding structure (including agreement on payment terms and security package)			~	1 April 2016

13.	Agree Mandatory Requirements for the Invitation to Participate in Dialogue which shall include but not be limited to:-		✓		1 April 2016
	Duration of Contract;				
	 Operation requirements; 				
	Maintenance				
	Requirements;				
	Testing and Commissioning requirements; and				
	Contract Waste				
14.	Recommend design, build and operational costs and revenue income apportionment and principles		*		1 April 2016
15.	Recommend Project Budget for period following publication of the OJEU Contract Notice		✓		1 April 2016
16.	Recommend the strategy for the sale of electricity and heat from the facility and the mechanism on how the partners benefit from any income		✓		1 April 2016
17.	Prepare tender documentation (including terms and conditions of Contract)	√			1 April 2016
18.	Approve tender documentation including detailed form of contract		~		1 April 2016
19.	Recommend terms of Procurement Inter-Authority Agreement for approval by Councils		✓		1 April 2016
20.	Agree terms of detailed planning application		✓		22 January 2016
21.	Submit detailed planning application			√	22 January 2016
	(Aberdeen City Council Only)				
22.	Conclude missives for the			✓	31 Jan 2016

	purchase of the Site (Aberdeen City Council Only)			
23.	Approve and sign Procurement Inter-Authority Agreement incorporating Project Board's recommendations including approval to publish Contract Notice in OJEU		✓	3 June 2016
24.	Publish Contract Notice in OJEU for main contract	√		17 June 2016
25.	Where Project Milestones [23] and [24] have not been achieved, Councils shall consider whether the Project should be abandoned pursuant to Clause 0		~	Pre- Procurement Longstop Date 1 November 2016

PART 2

PROJECT BUDGET

[TO BE INSERTED]

PART 3

COUNCILS' PROGRAMME

[TO BE INSERTED]

INSERT SITE PLAN

Agenda Item 6

Dates of Zero Waste Management Sub Committee 2016

It is proposed that meetings be held on the following dates:

- 23 February
- 12 May
- 30 June
- 4 October
- 22 November

All meetings will commence at 2pm in the Town House.

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