Agenda Item

Meeting(s):	Environment & Transport Committee	28 August 2017
Report Title:	Implementation of Kerbside Recycling Collection Service	
Reference Number:	ES-02-17-F	
Author / Job Title:	Colin Bragg / Team Leader – Waste Management	

1.0 Decisions / Action required:

- 1.1 That the Environment and Transport Committee consider the implementation of kerbside recycling in Shetland in accordance with the Scottish Government and COSLA - Charter for Household Recycling to meet the Council's duty to recycle and sort waste prior to incineration.
- 1.2 That the Committee approve the timetable and strategy for implementation in accordance with the Charter for Household Recycling Code of Practice (CoP) and the dates as agreed with Zero Waste Scotland (ZWS). As set out in Sections 2.6 and 2.7 of this report.
- 1.3 That the Committee approves acceptance of the offer of ZWS transitional funding set out in paragraph 4.1.4 of this report.
- 1.4 That the Committee approve plans for a Business Justification Case for this project through the Council's Gateway Process for the Management of Capital Projects.

2.0 High Level Summary:

- 2.1 This report presents a plan for the implementation of kerbside recycling collections for every household in Shetland. This proposal adheres to the Scottish Government Household Recycling Charter and its Code of Practice (CoP).
- 2.2 In 2015 the Scottish Government and COSLA launched the Charter for Household Recycling and approved a Code of Practice for the collection of waste for the whole of Scotland. The aim of the new CoP is to ensure consistency of collection systems across Scotland to encourage greater participation in recycling schemes to increase the capture of resources from waste.
- 2.3 The Waste (Scotland) Regulations 2012 requires local authorities to provide a separate collection for Glass, Metal, Plastic, Cardboard, Paper and Food Waste. Food waste separation is not a requirement in remote rural areas. In addition the Regulations state that where practicable no waste, including non-ferrous metals or hard plastics, should be incinerated.
- 2.4 The current derogations that allow all of Shetland's household waste to be incinerated in the Energy Recovery Plant (ERP) will not be extended in future years, following a change to the SEPA PPC Permit at the ERP. This is fundamentally due to overriding environmental priorities and CO₂ reduction targets

in Scotland.

- 2.5 In October 2016, Shetland Islands Council (SIC) signed the Household Recycling Charter. The Charter is a declaration of the SIC's intent to provide services that deliver local and national benefits, encouraging high-levels of citizen participation in waste prevention, recycling and reuse.
- 2.6 A preferred recycling system for Shetland has been identified jointly by SIC and ZWS. Some transitional funding to assist the implementation of this service has been offered by ZWS.
 - 2.6.1 Kerbside recycling collection of two streams (paper/card and plastic/cans/cartons) would be implemented by 01 July 2018. ZWS funding will cover the cost of two receptacles for each household as well as a funding for a communications strategy and SIC staff training.
 - 2.6.2 Collection costs would not increase. Collection would, where possible, be at existing collection points and existing routes. Non-recyclable waste will be collected fortnightly from the usual collection location for each household.
 - 2.6.2.1 Glass would continue to be collected at bring sites throughout Shetland. No kerbside collection would be provided. This is to ensure current operational costs are not exceeded. Current bring sites would be enhanced to maximise recycling uptake in line with ZWS recommendations. Glass recycling bags would be provided (via ZWS funding) to all households to transport glass to these bring sites.
 - 2.6.2.2 Collection frequency at properties would not increase (one visit per household per week). The pattern of the proposed collections would be on a four weekly cycle:

Week 1: Residual Waste (Non-recyclable)

Week 2: Paper/Card

Week 3: Residual Waste (Non-recyclable)

Week 4 Plastic/Cans/Cartons

- 2.7 Other transitional costs would require to be funded by the Council. Applications for this funding will be submitted through the Council's Gateway Process for the Management of Capital Projects, including Spend to Save and Change Fund applications. The most significant is the need to provide a facility to sort and store recyclable materials prior to shipping.
- 2.8 The proposed changes would necessitate a review of commercial waste collection services and charging in 2018/19. Businesses are already required by law to separate recyclable waste streams (See Section 4.6).
- 2.9 If approved kerbside recycling would begin on one route in one area of Shetland in early-2018. This area would provide a representative sample of households and collection points for analysis prior to full implementation before 1st July 2018. During this period recycling activity within the area will be monitored to ensure good service delivery is maintained and ensure high recycling activity and quality. The area would continue recycling until full implementation across Shetland is established.
- 3.0 Corporate Priorities and Joint Working:

- 3.1 Our Plan sets out 20 Actions to be achieved by 2020. The issues set out in this report regarding the implementation of kerbside recycling in Shetland and its importance in the development of a new way of dealing with waste in Shetland relate to the following actions:
 - 3.1.1 Action 6 "Excellent financial-management arrangements will make sure we are continuing to keep to a balanced and sustainable budget, and are living within our means."

Maximising the income generated from the sale of recyclable materials will help SIC waste services to sustain services to the population of Shetland. The greater the recycling rate achieved the higher the income to the council - and the more sustainable the service in the long-term.

3.1.2 **Action 8** "We will be working in a more effective way, allowing us to cope with reduced resources. Processes that add no obvious value will have been replaced with more proportionate approaches based on effectively managing risks."

An efficient recycling sorting and storage process which adds the most value will extract as much income from the waste collected as possible while minimising future operational costs. A failure to prepare for future waste management demands, in the form of legislation without current derogation, would raise the risk of an even greater recycling transition costs being borne by SIC in the coming years.

3.1.3 **Action 10** "Our staff and the public will feel more informed about the council's activities, through excellent communications systems."

Implementing this proposed kerbside recycling collection service will enable the SIC to access funding for a communications contractor to help with public engagement during a recycling roll-out. This is crucial to facilitate the behavioural and attitude change that will be required to ensure a high recycling rate - and maximise the income generated. This implementation also offers a unique opportunity to engage with the public about one of the SICs core, and most visible, day-to-day activities.

3.1.4 **Action 17** "We will have reduced the effect we have on the local environment, particularly reducing carbon emissions from our work and buildings."

The recycling rate in Shetland in 2015/16 was just 9%, the lowest in Scotland. This is 35% below the national average (44%). Recycling is one of the most efficient ways to reduce CO_2 emissions as it significantly reduces the amount of energy necessary to produce virgin materials. Kerbside recycling in Shetland would increase the quantity of waste recycled from approximately 220 tonnes per year to 1150-1750 tonnes per annum (ZWS, 2017).

3.1.5 **Action 18** "We will be collecting more of the money due to us for the services we provide."

SIC visit over 11,000 households on a weekly basis collecting refuse. Much of the content of a typical black refuse bag in Shetland is recyclable - but very difficult to separate from residual non-recyclable waste. Adopting this

new collection model will make a sorting process viable and allow the SIC to access high-value recycling income streams. This represents an opportunity for the council to maximise income generated within our current waste collection service.

3.1.6 **Action 19** "More money will be going towards 'spend to save' initiatives, providing resources to fund innovative ways of working that save money but help us achieve our desired outcomes."

There is a 'spend to save' case for the procurement of automated sorting and baling equipment. The anticipated payback on this machinery is 2.7-4.5 years.

3.2 The implementation of kerbside recycling would require joint working with Hjaltland Housing - regarding refuse storage and collection areas in new build properties and ensuring recycling requirements are met within current stock. SIC would seek local support as well as knowledge and information from Community Councils during the implementation period. SIC would continue to work jointly with Zero Waste Scotland and the winners of an associated communication strategy tender to ensure successful roll out of kerbside recycling collection across Shetland in line with national priorities.

4.0 Key Issues:

4.1 The Charter and transitional funding

- 4.1.1 In October 2016, SIC signed the Household Recycling Charter. The Charter is a declaration of the SIC's intent to provide services that deliver local and national benefits, encouraging high-levels of citizen participation in waste prevention, recycling and reuse. Signing the Charter enables the Council to call on Zero Waste Scotland's expertise and knowledge of best practice and also opens the opportunity for the support funding to change services.
- 4.1.2 ZWS recognise that arrangements in remote rural and island authorities may, by necessity, need to be different from the urban approach to recycling. The principle of island and rural proofing appears to be recognised in an approach that seeks wider conformity across the Scottish local authorities.
- 4.1.3 SIC commitment to the Charter led to analysis undertaken by Zero Waste Scotland (ZWS) to identify gaps between the CoP and current waste services in Shetland. This options appraisal determined a preferred recycling collection system and allowed SIC to produce a Transition Plan. This identified the costs associated with meeting the CoP requirements and the preferred recycling collection identified.
- 4.1.4 This Transition Plan was submitted to ZWS in April (See Appendix 2). Some transitional funding, to help alleviate funding issues within existing budgets that may preclude the implementation the preferred recycling system, has subsequently been offered by ZWS. A total of £578,705 has been made available to SIC for 2017/18.
- 4.1.5 £499,966 of funding that has been agreed with Zero Waste Scotland for the procurement of waste receptacles for every household in Shetland, £8,000 for two further baseline service studies: collection efficiency and practicality

and route and refuse collection vehicle (RCV) efficiency.

4.1.6 £63,452 of funding has been offered by ZWS for a contractor to provide communications project management support to aid the effective communication of the introduction of a waste collection service in line with the Household Recycling Charter and associated Code of Practice to households in the Shetland Islands. A further £7,287 of funding has been made available to for staff training and additional resources.

4.2 National environmental targets

- 4.2.1 The current recycling rate in Shetland is 9% as oppose to the national average of 44%.
- 4.2.2 It is likely that SIC will be required to undertake kerbside recycling in future in order to help meet Scottish Government CO₂ reduction targets. The national recycling priority is set out in 'Scotland's Zero Waste Plan' (2010) for a 70% recycling (+ composting + preparation for reuse) rate nationally and just 5% of waste to landfill by 2025.
- 4.2.3 More recently the Scottish Government published 'Making Things Last A Circular Economy Strategy for Scotland' (2016) setting out interim targets. This includes a European Union target for 'Recycling and preparing for reuse of 50% by weight of household waste and similar' by 2020. It also restates the Scottish Government's own, more ambitious, '60% recycling/composting and preparing for re-use of waste from households' by 2020 target.
- 4.2.4 Meeting these targets is especially challenging for remote rural communities

 and not possible within current SIC waste management operations.

 Nevertheless it is inevitable that SIC will be required to undertake kerbside recycling collections at some point in the short to medium term.

4.3 Regulatory compliance

- 4.3.1 The Waste (Scotland) Regulations requires local authorities to provide a separate collection for paper, card, plastics, metals and glass. In addition the Regulations state that where practicable no waste, including non-ferrous metals or hard plastics, should be incinerated.
- 4.3.2 To date the Council's waste management strategy has been focused on supplying household and commercial waste to the Energy Recovery Plant (ERP). The ERP has to conform to the Pollution Prevention and Control (Scotland) (PPC) Regulations 2012, which includes the implementation of the controls required under the European Waste Incineration Directive (WID). The controls are implemented by the conditions detailed in the PPC permit issued and enforced by SEPA.
- 4.3.3 A new condition in this year's PPC Permit states that as far as practicably possible non-ferrous metals shall be removed from the waste stream by December 2017. It is probable that SEPA will deem that SIC recycling bring sites are insufficient for separating and removing non-ferrous metals. As such there is already a need to consider kerbside recycling collection services. An alternative would be to pre-sort all waste prior to incineration, this would result in poorer quality, lower value recyclates at greater cost than

a kerbside collection.

- 4.3.4 A condition to remove hard plastic from the waste stream bound for the ERP has not been enforced in Shetland in the past. It is unlikely this derogation will remain in place in the medium and long term.
- 4.3.5 It was recognised that plastic was required to maintain the calorific value of the waste - and deliver sufficient heat output for the District Heating Scheme. To compensate for this omission the permitted maximum level of ERP waste throughput was lowered to 25,000 tonnes per year.
- 4.3.6 The calorific value of waste reduces when plastic is removed from the waste stream. This was seen clearly when the 5p carrier bag charge was introduced in Scotland. This coupled with national and international waste minimisation strategies means the quantity and quality of waste is reducing from an energy recovery perspective. There is already a requirement to burn more to deliver the same heat output.
- 4.3.7 A further decline in calorific content of waste available may necessitate an application for an increased ERP tonnage limit. This is unlikely to be granted without adhering to all relevant recycling recommendations and legislation. This scenario would threaten the ongoing operation of the ERP.

4.4 Future of the ERP

- 4.4.1 SIC are currently discussing the potential transfer of the ERP to Shetland Heat Energy and Power.
- 4.4.2 When the requirement to remove recyclable materials is enforced the ERP will have to change its business model. The most fundamental aspect of this change will be to find and use waste streams that maintain sufficient calorific content within operating tonnage limits. The ERP could secure a reliable source of waste, with suitable calorific value, via waste brokerage on the, now well established, recycling market.
- 4.4.3 This changes the operation of the ERP from burning municipal mixed waste to burning residual waste- refuse derived fuel. There is a significant demand for places to take residual waste. This will increase when there are changes to landfill legislation which will ban biodegradable waste going to landfill by 2021. The ERP charges a gate fee for accepting waste, including refuse derived fuel, which offsets its operating costs.

4.5 No increase to operational costs

4.5.1 Current SIC waste collection and disposal service costs are estimated to be £1,171,414 annually - as described in ZWS' draft Report on Transition Planning attached as Appendix 1. The introduction of kerbside recycling and an overall recycling rate of 20.2% is projected to reduce service costs by £24,708 per year - by increasing recycling income.

4.6 Commercial recycling

4.6.1 SIC currently undertakes free collection of some recyclable materials (glass and cans) for approximately 90 businesses in Shetland. This includes public halls, as many allow commercial activity on their premises.

Businesses are already required by the Waste (Scotland) Regulations 2012 to separate recyclable materials into six streams (Glass, Metal, Plastic, Cardboard, Paper and Food Waste*). Food waste separation is not a requirement in remote rural areas. This is enforced by the Scottish Environmental Protection Agency (SEPA).

- 4.6.2 Adherence to the Charter CoP for household waste will open up the possibility of Shetland-wide recycling collection for businesses as well. The operation of this service would be covered by the collection charges all commercial premises pay the SIC annually and the collected materials would boost recycling income streams.
- 4.6.3 Businesses that choose to pay the SIC for waste collection will be able to present waste in four Charter streams (Residual, Paper/Card, Plastic/Cans/Cartons and Glass). Each will be asked to take part in a survey to determine the quantity of these waste types they generate by volume. Engagement with business will form part of the overall communications strategy.

5.0 Exempt and/or confidential information:

5.1 NONE

6.0 Implications:

6.1 Service Users, Patients and Communities:

This proposed change to refuse collections will affect every resident and business in Shetland.

Any change to waste and recycling services will need an effective community engagement strategy to maximise participation with waste prevention, recycling, and reuse.

Funding is available from ZWS for communications, staff training and the dissemination of information to the public prior to any service change. A timetable for this work has been set out in principle in conjunction with ZWS.

Community Councils and organisations such as Living Lerwick and Sandveien & Nederdale Tenants and Residents Association will be consulted throughout the implementation period.

The project plan for implementation of the Shetland wide recycling service will include early implementation of kerbside recycling in early 2018 on one refuse collection route. In order to assess the practicalities of the new collection system and engage the public in the development of the new service.

6.2 Human Resources and Organisational

The impact of these changes on the workforce will be minimal.

Development:	It is anticipated that the proposed changes to the service will continue to utilise existing staff in existing roles and within existing job specifications.		
	The planned household collection frequency will ensure we can utilise our existing vehicle fleet.		
	There will be no significant change to working hours or working locations for staff.		
	Training will be provided to staff for use of any new machinery. Sorting recycling may offer an opportunity for 'lighter' duties within the service for staff requiring temporary adjustments to duties (e.g. if recuperating from injury).		
6.3 Equality, Diversity and Human Rights:	These service changes will not require an Equalities Impact Assessment. Receptacles will be provided free of charge to every household.		
	Whilst the intention is to provide individual households with two receptacles to recycle - part of the project considers how best to find solutions for challenging locations. For example, where wheeled bins may not be a safe collection solution		
6.4 Legal:	Statutory duties regarding household waste collection are set out by part 11 of Environmental Protection Act 1990 'Waste on Land' (Sections 45 to 47); and subsequent amendments to this Act in the Waste (Scotland) Regulations 2012.		
	In summary the SIC has the following legal duties and rights with respect to waste collection:		
	1. To arrange for the collection of household waste in its area except waste— (i) which is situated at a place which in the opinion of the authority is so isolated or inaccessible that the cost of collecting it would be unreasonably high and (ii) as to which the authority is satisfied that adequate arrangements for its disposal have been or can reasonably be expected to be made by a person who controls the waste.		
	No charge shall be made for the collection of household waste except in cases prescribed in regulations.		
	3. Where a waste collection authority has a duty to arrange for the collection of household waste from any premises, the authority may, by notice served on him, require the occupier to place the waste for collection in receptacles of a kind and number specified.		
	4. An authority must, from 1st January 2014, arrange for there to be provided to the occupier of every domestic property in its area such receptacles as will enable the separate collection of dry recyclable waste from the property. Subject		

- to certain exceptions including for rural properties where the authority considers that the separate collection of dry recyclable waste from the property would not be environmentally or economically practicable.
- 5. An authority must, from 1st January 2016, arrange for there to be provided to the occupier of every domestic property in its area a receptacle which enables the separate collection of food waste from the property. Subject to certain exceptions including for rural properties.
- 6. Separate collection means that waste is presented for collection, and collected, in a manner that ensures that—(i)dry recyclable waste is kept separate from other waste; (ii)waste from one dry waste stream is kept separate from waste in another such stream; and (iii)food waste is kept separate from other waste.
- An authority must, from 1st January 2014, take such steps as the authority considers reasonable to—

 (a) promote separate collection (including the making of arrangements for the provision of a food waste receptacle); and
 - (b) promote recycling in any other manner.

6.5 Finance:	The modelling of the proposed recycling scheme in the ZWS Transition Planning report, attached as Appendix 1, demonstrates an overall revenue saving of £25k per year (at a recycling rate of 20.2%). If more recyclable waste is diverted from residual disposal methods savings will increase. This is due to the high value of separated metals and a cheaper disposal route for recycled plastic (see Table 1 below). A total of £578,705 has been made available to SIC by ZWS for 2017/18 - to roll out a kerbside recycling collection scheme, as described in paragraphs 4.1.4 to 4.1.6 above. This transitional funding is only available in 2017/18. Table 1 Cost of disposal/recycling routes to SIC waste services (subject to market fluctuation/ includes transportation)					
	(subject to market nuctuation/ includes transportation) Cost per					
	Disposal route	tonne (April 2017)	Current Cost	Projected Recycling Cost		
	Residual Disposal Landfill Residual Disposal ERP	£84.40 £45.50	£452,837	£397,700		
	Recycled Paper/Card	£59.59	-	£44,236		
	Recycled Aluminium	-£585.85	0440*	·		
	Recycled Steel	-£34.15	-£442*	-£19,107		
	Recycled Plastic	£6.11	£98*	£1,028		
	Recycled Cartons	£95.59	-	£1,339		
	Recycled Glass	£36.85	£7,077	£9,667**		
		TOTAL	£459,570	£434,862		
	*current costs/income from business and/or bring site recycling (in Lerwick and Scalloway) **higher due to estimated increase in glass recycling (+70t per year) Additional capital funding of approximately £750k will be required for a shed and sorting equipment referred to in paragraph 2.7 which will be the subject of a business case for capital funding including spend to save and change fund applications under the Council's Gateway Process.					
6.6 Assets and Property:	A shed and sorting equipment will be required for this project. A business justification case for this will be subject to the Council's Gateway Process for the Management of Capital Projects and prioritisation in the Council's Asset Investment Plan.					
6.7 ICT and new technologies:	An SMS recycling collection reminder service is being considered as part of the overall strategy. This will inform people the evening before a collection the correct material to be presented the following day. This would be delivered in conjunction with the SIC Communications team.					
6.8 Environmental:	Despite Shetland's remote location recycling is one of the most efficient ways to reduce CO ₂ emissions. It significantly reduces the amount of energy necessary to produce virgin materials.					
6.9 Risk Management:	Current and anticipated changes to the ERP's permit regarding metals and plastic will require a suitable and sufficient					

separation method to satisfy SEPA (See 4.3.3 & 4.3.4). The Council must operate lawfully and its current waste collection regime cannot demonstrate that non-ferrous metals are removed. Failing to meet recycling regulations in future puts at risk the operation of the ERP (see 4.3.7). The Council has a statutory duty to recycle, however it had been able to demonstrate that the ERP was the best practicable environmental solution to deal with Shetland's waste. This was due to the environmental benefit of the district heating scheme. This held the caveat that when an alternative heat source could be found for the District Heating Scheme burning mixed municipal waste would no longer be acceptable. The increased availability of Refuse Derived Fuel that can be disposed of at the ERP means that recycling would be a better environmental solution than burning waste (see 4.4.3). It is inevitable therefore that the Council would be challenged to increase its recycling activity in the near future in any case but at that stage SIC will not have access to any future ZWS transitional funding (see 2.6.1, 4.1.4 - 4.1.6). This means that if the recycling collection does not progress now the Council would pay the full cost of implementation at a later date, as well as missing out on specialist support from ZWS. The collection of recyclable waste in future without investment in a suitable facility with suitable sorting equipment would mean SIC would fail to maximise recycling income streams (See 4.5.1 & 6.5). 6.10 **Policy and Delegated** In accordance with Section 2.3.1 of the Council's Scheme of **Authority:** delegations, the Environment and Transport Committee has responsibility for discharging the powers and duties of the Council within its functional area. 6.11 **Previously**

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Appendices:

Appendix 1 - Code of Practice: Transition Planning (ZWS, April 2017)

Appendix 2 - Charter for Household Recycling – Transition Plan Application (SIC, April 2017)

Background Documents:

Code of Practice –Household Recycling in Scotland, http://www.zerowastescotland.org.uk/sites/default/files/Household%20Recycling%20 COP%20v2.pdf