

EAST RENFREWSHIRE COUNCIL

CABINET

20-August 2015

Report by Director of Environment

KERBSIDE RECYCLING SERVICE IMPROVEMENT - OPTIONS REPORT

PURPOSE OF REPORT

1. The purpose of the report is to provide the Cabinet with a recommendation for improving the current kerbside recycling service.
2. Should the Cabinet consider that the recommended option is viable and desirable then the Director of Environment will pursue funding approval through the Capital Programme Appraisal process.

RECOMMENDATIONS

3. The Cabinet is asked to consider:-
 - (a) Supporting the recommended option, subject to the Capital Programme Appraisal process or;
 - (b) The continuation of the present box and bag system.

BACKGROUND

4. The Council operates one of the best performing kerbside collection schemes in Scotland. However, the underlying principle of the scheme is to maintain segregation and hence quality of recyclates which inevitably means that several receptacles have to be used in the collection process.
5. The current service comprises
 - 240 litre grey bin for residual waste – fortnightly
 - 240 litre bin for garden and food waste – weekly
 - 110 litre green sack for plastics – monthly
 - 55 litre blue box for glass – fortnightly
 - 60 litre white sack for paper - fortnightly
6. The robustness and integrity of this system has been challenged by householders and was recently the subject of a petition containing over a thousand names asking for change. This was instigated by some severe storms over the winter period which resulted in windblown bags and materials. Householders made comparisons with other neighbouring authorities where mixed collections were undertaken within a wheeled container.

7. In 2014 East Renfrewshire achieved a recycling rate of 56.1%. This substantially exceeds the national target of 50% and Scottish councils' overall performance of 42.4%.

8. In terms of cost effectiveness the Council performs reasonably well. Local Government Benchmarking Framework results for 2013/14 are attached (Appendix 1)

REPORT

9. A Project Team was established and a number of options have been considered which would reduce reliance on boxes and bags at the same time considering the impact any options would have on recycling performance. With an ambitious national target of 70% recycling of all waste by 2025, it is imperative that any options considered do not have a detrimental impact on the Council's achievements to date. Other factors influencing the choice of options were:

- Ease of use for residents
- Reduction in amount of residual waste
- Consequent reduction in landfill tax
- Increase in recycling rates
- Protection of the value and integrity of recyclable materials
- Compliance with the requirements of the Waste (Scotland) Regulations
- 'Future-proofing' with respect to anticipated legislative changes and market fluctuations
- Service equality i.e. residents can benefit from full suite of services (where applicable)
- Service flexibility i.e. vehicles can be used interchangeably
- Adherence to health & safety requirements

10. The Project Team looked at other high performing councils in Scotland and the rest of the United Kingdom to select service options to take forward but which largely do away with bags.

11. At the outset, the appraisal discounted a recycling collection service that involves all recyclates (paper, card, glass, cans and plastics) being deposited together in a single bin. A fully co-mingled recycling collection may be deemed straightforward and convenient for residents but there are a number of issues with this approach. The output from this kind of collection is undesirable and there are a limited number of facilities that will accept fully co-mingled materials. Not only would this system limit the Council's options, it could place it in a vulnerable position should these sorting facilities change their specification. There is also a substantial cost involved in the sorting of fully co-mingled materials (current market rates suggest £80 per tonne).

12. The move towards a 'circular economy', supported by the revised EU Waste Framework Directive and Scotland's Zero Waste Plan, is dependent on the availability of quality resources for reuse and recycling. A fully co-mingled collection of recyclates in a single bin is not supported by the Scottish Government and Zero Waste Scotland and access to future external funding could be compromised by taking this route.

13. While some mixes of materials are easier to sort, there are particular issues when glass is mixed with fibres (paper and card). For this reason, the option appraisal has only considered options that involve co-mingling where outputs are commonplace across councils and markets likely to be available.

OPTIONS APPRAISAL

14. Limiting the size of the residual waste bin is proving to be an effective tool in driving up recycling performance. Edinburgh City Council, and Perth and Kinross Council are already going down this route and reducing the residual waste capacity to 140 litres. Aberdeen City Council has approved the roll-out of 180 litre bins. Evidence suggests that reducing the capacity of the residual waste bin rather than reducing the frequency of collection is a more popular and successful approach. Each of the four options considered all include the provision of a smaller residual waste wheeled bin.

15. The table below summarises the various options that were considered for the collection of paper, cardboard, glass, cans and plastics:

	Dry recycling receptacle(s)	Frequency
<u>Option 1</u> 3 bins & box	1 x 240l bin for paper/cardboard/plastics/cans	Fortnightly
	1 x 55 litre blue box for glass	Fortnightly
<u>Option 2</u> 4 bins	1 x 240 litre bin for paper/cardboard/plastics/cans	Fortnightly
	1 x 140 litre bin for glass	Monthly
<u>Option 3</u> 4 bins with reduced residual capacity	1 x 240 litre bin for glass/cans/plastics	Monthly
	1 x 240 litre bin for paper/cardboard (grey bin currently used for residual waste)	Monthly
<u>Option 4</u> 2 bins & 1 x Box Stack	1 x 40l box for paper/cardboard, 1 x 55l box for glass/ cans, 1 x 55l box for plastics	Weekly

The Kerbside Recycling Service Improvement Option Appraisal Full Report (2015) can be accessed at <http://www.eastrenfrewshire.gov.uk/CHttpHandler.ashx?id=15019&p=0>

16. A summary of the options appraisal is as follows

- Options 1 and 4 incur significantly higher annual revenue expenditure costs than the current operation (£96,000 and £462,000 additional staff costs respectively). Options 2 and 3 result in similar revenue expenditure to the current operation
- Options 1, 2 and 4 all require an increase in capital expenditure for the current fleet (£270,000, £30,000 and £558,000 respectively)

- Option 3 significantly avoids fleet capital expenditure
- Options 2, 3 and 4 all require the purchase of additional bins (£1.23 million, £1.35 million and £1.77 million respectively). Option 1 would only cost £650,000 for the purchase of bins but this option does not do away with the blue box and also incurs increased annual revenue expenditure (as pointed out above)

17. Evaluation of quantitative and qualitative scores, ranked Option 3 the highest. This provides the best solution for an improved service. In particular:

- it costs the least in terms of ongoing revenue expenditure;
- it may encourage residents who have been put off recycling due to the method of containment to participate;
- it provides flexibility due to the uniformity of the collection fleet which enhances efficiency;
- it reduces the risk of manual handling injury compared to handling non-wheeled containers;
- it protects the quality of materials;
- while the risk of contamination is increased by using wheeled bins, it is considered that this risk is manageable due to the fact that we are moving from a partially source segregated system of collection, i.e. residents are used to taking the time and effort to separate items and it is likely to be less problematic than other wheeled bin solutions with a fully co-mingled capture.

18. Based upon the above the preferred option for all kerbside collections is outlined below:

4 Bin Service	240 litre brown bin for garden and food waste	Weekly
	180 litre grey bin for residual waste	Fortnightly
	240 litre bin for paper and cardboard and Tetra paks	Monthly
	240 litre bin for plastics, glass and cans	Monthly

This option removes the box for glass and cans, the green sack for plastics and the white sack for paper/card. New features of the service include:-

- A reduced size “residual” waste container (180l instead of 240l) to encourage residents to recycle more
- A recycling wheeled bin to take a mix of glass, cans and plastics. This will be a larger than standard size container but the frequency of collection will be monthly rather than fortnightly to reduce collection costs.
- A new recycling wheeled bin to take a mix of “fibrous material” i.e. paper, card and Tetra pak. This will be collected monthly.

- Residents will be restricted to one bin for each recycling stream but would have a maximum of 4 bins per household. This would mean that the brown bin for garden and food waste would be restricted to one bin per household in much the same way as general waste to landfill is restricted. This is necessary for logistical and cost purposes. Excess garden waste can be taken to household waste recycling centres.
- All collections will be undertaken by standard rear loading Refuse Collection Vehicles, which adds uniformity to the collection fleet.
- Residents who cannot accept more wheeled bins can retain their boxes and bags.

19. There are no additional staffing or vehicle requirements but the specification of the existing recycling collection fleet will have to change.

20. It is anticipated that as a result of implementation, recycling performance would be improved due to increased participation and capacity for dry recyclates, and the inclusion of cardboard and Tetra paks. There is a small risk that limiting garden and food waste collection to one bin per household may have a detrimental effect in recycling performance of this particular waste stream. However, it is hoped that this can be mitigated through clear communications and promotion of household waste recycling centres.

FINANCE AND EFFICIENCY

21. The implementation of this option requires the capital purchase of approximately 35,000 new 180 litre residual waste containers and 35,000 new 240 litre recycling bins. The current grey bin for residual waste would be retained as the “fibre” container. A reduction in annual revenue costs is expected through reduced landfill. The one off capital costs and estimated revenue savings for full implementation are shown below:

Year 1 Revenue Expenditure (Saving)	Capital Expenditure Bins (one-off)
£ 300,000	£ 1,350,000

22. It is important to note that the revenue expenditure saving is based solely on landfill diversion tonnage. There is an estimated recurring annual saving of £300,000 achieved through the diversion of material from disposal. This element would need to be managed robustly.

23. It is estimated that failure to implement the system will cost the Council an available £1.5 million in revenue costs over a 5 year period (assuming the scheme is fully rolled out in the first year).

24. There is an option to implement the new system in a phased approach over a number of years. For example, a 3 year implementation programme would require the release of approximately £450,000 capital each year, thereby spreading the costs. This would produce a revenue saving of £100,000 per annum rising to £300,000 after the third year. Clearly, the preferred option would be to implement the scheme fully and as quickly as possible.

25. Global recycling markets are currently experiencing reduced buying prices for recyclable material, in the main due to subdued oil prices. The Council is currently receiving substantially less for recyclates than it did in previous years, with little hope of short term recovery in these markets. Since 2013 the Council has seen income from recyclates reduce by almost 50%. It is possible that there could be zero income in future.

26. Collecting more materials, expanding the range of materials to include cardboard and Tetrapaks, and maintaining a degree of quality via a twin-stream recycling collection as proposed offers the best way to manage costs within the service.

27. Funding for implementation would be dependent on a successful bid to the Council's Capital Programme.

28. A recent soft market test of the option for a contractor to provide the bins in exchange for a long term assurance of supply of recyclates revealed no market interest. This indicates the degree of uncertainty about markets at the present time.

CONSULTATION

29. Discussions have been held with Transport and Health and Safety staff to make sure that any proposed vehicles and potential changes to operations are acceptable. Trade Unions and Cleansing staff will also be consulted. At this stage it would be inappropriate to undertake any formal consultation with the wider community. Should capital funding be allocated then further consultation would take place.

PARTNERSHIP WORKING

30. The Project Team has worked with Zero Waste Scotland, who provided guidance and information with respect to benchmarking against other local authorities, tonnage assumptions and best practice in the United Kingdom and other European countries.

31. Informal discussions have also taken place with other neighbouring Councils and Clyde Valley partners who are considering changes to their collection systems. There is potential if a mutual quality of recyclates is collected between Councils that a larger quantity of materials could attract better market rates.

IMPLICATIONS OF THE PROPOSALS

32. There are no implications associated with this report in terms of property, legal, IT or equalities. The financial implications are explained within the report.

33. The recommendation supports sustainability in its delivery of a service that recovers high quality materials for recycling in support of a circular economy. By helping to keep resources in use for as long as possible and extract the maximum value from them, East Renfrewshire Council can play its part in the delivery of a more competitive economy, creating jobs, addressing resource security and scarcity issues, and reducing environmental impacts of production.

CONCLUSIONS

34. Following a comprehensive kerbside recycling service options appraisal, the favoured option is to move to a four wheeled bin system of collection.

35. This proposal is intended to mitigate customer dissatisfaction over the method of containment for kerbside recycling (although this proposal does not eliminate the use of boxes and sacks for those households who cannot contain up to 4 wheeled bins).

36. The new system would require substantial capital funding to be released to accommodate the introduction of wheeled bins for all materials.

37. When taking into account financial constraints, statutory requirements and the future direction of travel in terms of resource management, the Project Team believes that this proposal is the best way to meet the dual objective of increasing customer satisfaction and recycling performance whilst minimising risk.

RECOMMENDATIONS

38. The Cabinet is asked to consider:-

- (a) Supporting the recommended option, subject to the Capital Programme Appraisal process or;
- (b) The continuation of the present box and bag system.

REPORT AUTHOR

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BACKGROUND PAPERS

Reports to Cabinet:

23 June 2011, Cleansing and Recycling- Managed Weekly Collections Progress.

16 May 2013, Update on Waste (Scotland) Regulations 2012.

Kerbside Recycling Service Improvement Options Appraisal
Cleansing and Waste Strategy financial calculations- supporting documents.

Local Authority Kerbside Good Practice Guide (kerbside waste and recycling collections)
published September 2012 (ZWS).

Duty of Care: A Code of Practice published October 2012 (SG).

Scotland's Zero Waste Plan issued June 2010 (SG).

Safeguarding Scotland's Resources: A Programme for the Efficient Use of Our Materials issued October 2013 (SG).

Guidance on Applying the Waste Hierarchy published 15 June 2011 (DEFRA).

Recyclate Quality Action Plan published online December 2013 (SG).

KEY WORDS

A report outlining a kerbside recycling service improvement options appraisal that was recently undertaken. The report recommendation requests Member approval to offer properties an optional 240 litre wheeled bin for the containment of mixed plastics for recycling, which will continue to be collected on a monthly basis.

Recycling, Kerbside, Options Appraisal, Co-mingling, Wheeled bins, Plastics.

LGBF 2013/14

Environmental Services

Local Authority	Gross cost of waste collection per premises				Comments
	2012/13		2013/14		
	Value	Rank	Value	Rank	
Aberdeen City	£45.45	1	£76.04	14	
Aberdeenshire	£73.44	12	£75.11	12	
Angus	£98.99	29	£111.26	29	
Argyll & Bute	£86.60	23	£87.18	26	
Clackmannanshire	£73.15	10	£70.48	10	
Dumfries & Galloway	£62.02	6	£62.61	5	
Dundee City	£78.25	17	£67.79	7	
East Ayrshire	£67.82	9	£82.91	18	
East Dunbartonshire	£90.96	26	£108.65	28	
East Lothian	£73.32	11	£50.01	2	
East Renfrewshire	£82.44	19	£80.50	16	
Edinburgh City	£97.32	28	£84.22	21	
Eilean Siar	£81.00	18	£85.91	23	
Falkirk	£86.10	22	£83.50	19	
Fife	£83.18	20	£81.43	17	
Glasgow City	£59.95	5	£78.56	15	
Highland	£130.87	30	£125.40	30	
Inverclyde	£67.20	7	£58.43	4	
Midlothian	£95.18	27	£85.63	22	
Moray	£76.92	16	£70.25	9	
North Ayrshire	£75.83	14	£84.00	20	
North Lanarkshire	£47.31	2	£48.55	1	
Orkney Islands	£89.21	24	£93.50	27	
Perth & Kinross	£84.18	21	£86.13	24	
Renfrewshire	£57.39	3	£67.91	8	
Scottish Borders	£76.48	15	£70.74	11	
Shetland Islands	£176.72	32	£146.66	32	
South Ayrshire	£90.92	25	£87.06	25	
South Lanarkshire	£67.81	8	£65.27	6	
Stirling	£162.93	31	£142.35	31	
West Dunbartonshire	£57.86	4	£54.96	3	
West Lothian	£73.76	13	£75.27	13	

Scotland	£77.78	£79.50
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Local Authority	Net cost of waste collection per premises				Comments
	2012/13		2013/14		
	Value	Rank	Value	Rank	
Aberdeen City	£21.21	1	£47.08	9	
Aberdeenshire	£72.50	26	£72.27	27	
Angus	£79.53	28	£93.47	29	
Argyll & Bute	£45.38	8	£45.30	5	
Clackmannanshire	£30.82	2	£47.78	10	
Dumfries & Galloway	£44.79	7	£46.09	8	
Dundee City	£46.12	9	£46.04	7	
East Ayrshire	£47.89	11	£45.62	6	
East Dunbartonshire	£81.69	29	£97.65	31	
East Lothian	£63.24	16	£55.57	12	
East Renfrewshire	£65.61	21	£64.96	23	
Edinburgh City	£70.01	24	£57.68	14	
Eilean Siar	£55.30	14	£60.79	18	
Falkirk	£71.13	25	£68.81	25	
Fife	£63.57	18	£60.73	17	
Glasgow City	£47.69	10	£67.65	24	
Highland	£101.87	31	£90.93	28	
Inverclyde	£42.97	6	£37.14	1	
Midlothian	£76.47	27	£60.56	16	
Moray	£58.98	15	£53.69	11	
North Ayrshire	£50.35	12	£58.52	15	
North Lanarkshire	£37.11	3	£37.44	2	
Orkney Islands	£53.90	13	£55.71	13	
Perth & Kinross	£69.22	23	£71.41	26	
Renfrewshire	£42.85	5	£43.81	4	
Scottish Borders	£65.24	20	£61.26	19	
Shetland Islands	£144.16	32	£128.72	32	
South Ayrshire	£63.74	19	£62.74	20	
South Lanarkshire	£66.25	22	£62.85	21	
Stirling	£88.63	30	£95.90	30	
West Dunbartonshire	£41.01	4	£37.70	3	
West Lothian	£63.51	17	£64.17	22	
Scotland	£59.12		£61.01		

Local Authority	Gross cost of waste disposal per premises				Comments
	2012/13		2013/14		
	Value	Rank	Value	Rank	
Aberdeen City	£110.56	18	£114.34	18	
Aberdeenshire	£120.90	24	£125.24	24	
Angus	£98.52	13	£101.09	15	
Argyll & Bute	£155.77	29	£164.77	29	
Clackmannanshire	£90.01	10	£91.13	10	
Dumfries & Galloway	£115.83	21	£180.28	31	
Dundee City	£104.32	15	£97.28	13	
East Ayrshire	£93.12	12	£85.86	8	
East Dunbartonshire	£114.87	20	£102.47	16	
East Lothian	£86.26	8	£94.77	11	
East Renfrewshire	£85.86	7	£84.20	7	
Edinburgh City	£79.63	4	£74.57	2	
Eilean Siar	£242.45	31	£242.49	32	
Falkirk	£66.29	1	£67.41	1	
Fife	£119.97	23	£129.78	25	
Glasgow City	£126.04	26	£113.09	17	
Highland	£107.53	17	£116.89	22	
Inverclyde	£78.62	3	£81.14	4	
Midlothian	£85.59	6	£83.29	6	
Moray	£122.68	25	£116.80	21	
North Ayrshire	£104.36	16	£98.32	14	
North Lanarkshire	£139.06	27	£130.72	26	
Orkney Islands	£141.59	28	£149.03	27	
Perth & Kinross	£100.92	14	£116.66	20	
Renfrewshire	£80.93	5	£82.04	5	
Scottish Borders	£92.05	11	£90.54	9	
Shetland Islands	£325.69	32	£172.37	30	
South Ayrshire	£76.50	2	£77.16	3	
South Lanarkshire	£88.78	9	£96.94	12	
Stirling	£159.30	30	£158.53	28	
West Dunbartonshire	£111.78	19	£120.26	23	
West Lothian	£119.01	22	£116.07	19	
Scotland	£108.65		£109.22		

Local Authority	Net cost of waste disposal per premises				Comments
	2012/13		2013/14		
	Value	Rank	Value	Rank	
Aberdeen City	£107.76	26	£107.43	25	
Aberdeenshire	£82.65	15	£86.19	17	
Angus	£74.08	7	£74.17	9	
Argyll & Bute	£148.55	31	£158.03	30	
Clackmannanshire	£79.85	14	£81.48	15	
Dumfries & Galloway	£97.87	22	£159.98	31	
Dundee City	£92.76	20	£90.34	19	
East Ayrshire	£77.68	12	£73.12	7	
East Dunbartonshire	£105.45	24	£90.81	20	
East Lothian	£76.65	10	£80.17	14	
East Renfrewshire	£73.94	6	£74.02	8	
Edinburgh City	£75.41	9	£71.16	5	
Eilean Siar	£155.37	32	£166.72	32	
Falkirk	£57.64	1	£58.68	3	
Fife	£76.82	11	£76.24	11	
Glasgow City	£110.27	28	£96.33	22	
Highland	£102.94	23	£112.16	27	
Inverclyde	£72.37	4	£72.81	6	
Midlothian	£72.52	5	£56.61	2	
Moray	£96.59	21	£87.76	18	
North Ayrshire	£88.97	19	£82.86	16	
North Lanarkshire	£129.89	30	£126.93	29	
Orkney Islands	£115.76	29	£112.84	28	
Perth & Kinross	£85.55	17	£98.46	23	
Renfrewshire	£78.20	13	£77.09	12	
Scottish Borders	£69.20	3	£69.90	4	
Shetland Islands	£58.35	2	£16.83	1	
South Ayrshire	£74.65	8	£75.67	10	
South Lanarkshire	£85.72	18	£94.96	21	
Stirling	£83.23	16	£79.82	13	
West Dunbartonshire	£108.36	27	£110.16	26	
West Lothian	£106.23	25	£104.03	24	
Scotland	£92.28		£92.25		