

Prosperous Communities Committee

Tuesday 2 November, 2021

Subject: Operational Services, Separate Paper and Card Collections			
Report by:	Assistant Director of Commercial and Operational Services		
Contact Officer:	Ady Selby Assistant Director of Commercial and Operational Services		
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Purpose / Summary:	To inform Members on progress with the introduction of a twin stream recycling collection service in Lincolnshire and to propose a timescale for roll out in West Lindsey		

RECOMMENDATION(S): That Members resolve to introduce a twin stream recycling collection service in areas of the district which receive a wheeled bin collection service, as per option 2.

IMPLICATIONS

Legal There is a need to comply with appropriate legislation, specifically TEEP regulations which assess the technical, environmental, economical and practical implications of service delivery models.

Financial : FIN/105/22/MT/SSc

There are no financial implication for this scheme. Collection would be within the current collection schedule and LCC have agreed to supply bins until 2024. As the bins are only emptied once a month rather than twice, they should last longer and therefore replacement bins will not be expected for quite some time.

WLDC holds an earmarked reserve for Wheeled Bin Replacement, with a current balance as at 31.03.2024 forecast at £28.1k. A review of the impact on bin replacement will take place once the scheme is implemented to assess whether expected costs beyond 2024 can be met from within existing budget provision for wheeled bin replacement.

Staffing : No staffing implications

None

Equality and Diversity including Human Rights : A preliminary equalities impact assessment has been carried out (Appendix 2) and a Stage 2 assessment will be undertaken as this would be a significant policy change affecting a large number of people. However, the introduction of separate paper and cardboard collections is not expected to have a negative impact on different equality groups.

All eligible households would be given waste bins at no direct charge and future equalities work would consider residents with sack collections, as policies are crystallised.

We need to ensure any changes around a new service are widely understood. A communications strategy will be developed that is visual and uses simple language to ensure language is not a barrier, and targeted media channels and engagement will be used to reach hard to reach groups. Learning from previous communication campaigns and best practice, better ways to communicate with visually impaired and deaf persons should be considered. An adequate communications budget and officer resource will be necessary to facilitate delivery of the messages and ensure all residents have access to information regarding the proposed changes.

Data Protection Implications : All relevant data will be processed in line with the Council's Data Protection Policy

Climate Related Risks and Opportunities :

In January 2020, the Council agreed a number of recommendations to enable the Council to contribute to the global efforts to tackle climate change. The first recommendation was to declare an ongoing climate and environment emergency, and a commitment to reduce the Council's carbon footprint. By arranging the recycling collection schedule as shown in 2.2 of the report, this will prevent an estimated 43.8 tonnes of CO2e compared to that of an additional recycling collection for paper and card.

There are significant environmental benefits from the separated paper/card material not being processed through the Materials Recycling Facility (power usage and emissions) before being sent to the paper mill (transport and emissions). The trials have proven that separate collections of paper and cardboard can be introduced with no increase in carbon emissions or negative environmental impact as they replace one of the other alternating mixed recycling collections.

The UK's Waste Strategy (2007) estimated that recycling one tonne of paper saves 1.4 tonnes of CO2e. This can be broken down into 0.69 tonnes of methane avoided from landfill, and 0.71 tonnes saved elsewhere in the life cycle. Recycling just one tonne of paper can save 17 trees.

Improving the Council's recycling rate, and ensuring more materials are recycled and diverted from the residual waste stream, without increasing carbon emissions from the Council's vehicle fleet in doing so, helps to meet the Council's pledge by protecting natural resources and eliminating the need to increase the Council's carbon footprint.

Section 17 Crime and Disorder Considerations : None

Health Implications: None

Title and Location of any Background Papers used in the preparation of this report:

Wherever possible please provide a hyperlink to the background paper/s

If a document is confidential and not for public viewing it should not be listed.

Risk Assessment :

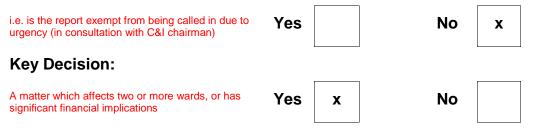
Risk of failure to effectively manage staff through change – Managed through relevant change procedures

Risk of not giving enough education and enforcement resource to support residents – Using learning from pilot scheme and implementation in North Kesteven and Boston.

Risk of not hitting government targets set out by doing nothing – Continuing to support delivery of the Joint Municipal Wastes Management Strategy for Lincolnshire

Call in and Urgency:

Is the decision one which Rule 14.7 of the Scrutiny Procedure Rules apply?



1. Executive Summary

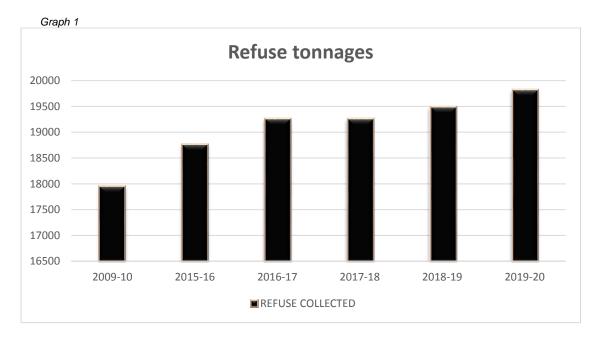
- 1.1 The purpose of this report is to enable a decision by Members on the introduction of a twin stream dry recyclate collection service in West Lindsey. The report will provide an overview of the case for a move to twin stream recycling system, by introducing a separate paper and card collection service, which would supersede the current co-mingled collection system. The report will outline the current national and local context, also the work undertaken to date, to identify the most suitable recycling collection and processing system for Lincolnshire, in line with the requirements of the Environment Bill 2020.
- 1.2 It is proposed that a separate paper and card collection will be rolled out across Lincolnshire by 2024, following a successful trial in three districts. Over 7,200 households in North Kesteven, Boston and South Holland participated in a pilot and have been putting their clean, dry paper and card into a separate purple recycling bin/bag over the past 12 months. This has now been extended and Boston Borough Council have now rolled out the service across all of their area since April 2021 and North Kesteven begin operating the new collection service from September 2021.
- 1.3 Two options are presented within the report, a do-nothing option and the roll out of a twin stream collection service. If Members approve the new twin stream recycling service, separate paper and card collections could begin in West Lindsey in Spring 2022.

2. Introduction

- 2.1 In 2009, WLDC introduced the Triple Bin Scheme for all households, except those in the South West Ward of Gainsborough and some remote properties; residents in those areas continue to receive a weekly sack collection for waste and recycling. Since implementation of the Triple Bin Scheme, the Council has delivered a fortnightly mixed dry recycling collection to circa 41,000 households (wheeled bins) and a weekly service to 2,015 households in the SWW (bagged collection). This co-mingled collection service includes paper, card, plastics, glass and tins. Some changes have been made, including the introduction of a subscription-based garden waste service back in 2017.
- 2.2 As part of the implementation of the Triple Bin Scheme, a district wide communication plan was developed; one part of this was a wide-ranging education campaign to support residents with the change. The current collection regime is very popular with residents and Members, consistently achieving 90+% satisfaction rates via annual Citizens Panel surveys. In addition, the Operational Services team benchmark services through the Association of Public Service Excellence (APSE) and have won awards on the national stage.

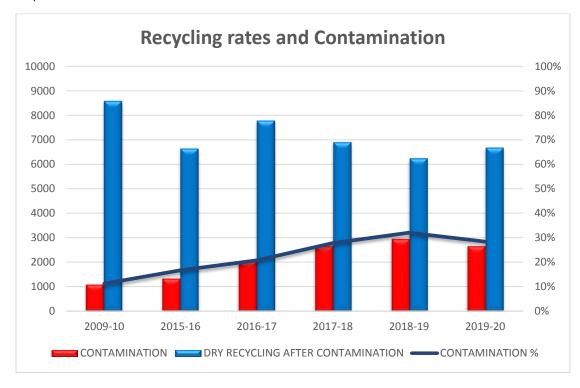
3. Current performance

3.1 The graphs below demonstrate performance of the Triple Bin Scheme over the last few years They also shows that when the scheme was initially introduced back in 2009, that although the same amount of recyclables were collected, contamination rates were around the 10% range. Graph 1 shows the increase in household waste collected year after year (10% rise compared with an 8% rise in population), this is in line with national trends.



3.2 Graph 2 shows the amount of recyclables collected, but demonstrates a gradual and significant increase in contamination. Increased levels of contamination results in poor environmental and financial outcomes.

Increasing contamination cannot be explained by one reason, rather a combination of complex market conditions, new regulations imposed on processors, a reduction in education and enforcement activity and a general weariness with the green agenda within the general public. There is no single solution, however, there is a general trend within the industry and with legislators towards harmonising collection methods and encouraging the collection and processing of improved quality products.



Graph 2

4. Why we need to change and why working with the Lincolnshire Waste Partnership is important.

- 4.1 West Lindsey, with the other Districts, the County Council, and the Environment Agency, form the Lincolnshire Waste Partnership (LWP). In 2019, all partners approved a refreshed Joint Municipal Waste Management Strategy (JMWMS). Within the document are ten strategic objectives including:
 - Objective 1 To improve the quality and therefore the commercial value of our recycling stream
 - Objective 2 To move towards a common set of recycling materials
 - Objective 5 Contribute to the UK recycling target of 55% by 2025
 - Objective 10 To consider appropriate innovative solutions in the delivery of our waste management services
- 4.2 Waste management is changing; there is a real drive to find quality and value in the materials we collect. Export markets are diminishing and UK

processors are now demanding top quality products, in general this quality can only be ensured by collecting materials separately. The co-mingled collection methodology favoured by many authorities, including those in Lincolnshire, is increasingly falling out of favour. Here is quote from the Waste and Resource Action Programme (WRAP):

"On the evidence available to WRAP, our view is that kerbside sort systems offer reliable material quality and lower net costs for council taxpayers. They are also capable of capturing the same volume of material as co-mingled schemes. There is no evidence that their operation - properly explained and justified - is unacceptable to householders and the physical evidence of sorting of materials happening at the kerbside is reassuring to sceptical residents. There appear to be no unmanageable health and safety considerations. Because of our priority for quality materials as a way to improve resource efficiency, WRAP believes that kerbside sort collections should be preferred where they are practical and should be in the majority of local authority areas. Where there are practical and operational barriers to kerbside sorting, two stream co-mingled collections have significant advantages over single stream collections, mainly through improved material quality and value as a result of keeping paper and card separate from other materials, particularly glass".

- 4.3 It is likely the Government will legislate food waste collections for all from 2024 and is encouraging authorities to harmonise collection regimes in future years. Against this background, the LWP has commissioned pilots of different collection methodologies. Food waste collections have been trialled in some areas of South Kesteven; whilst these proved popular with residents and levels of food waste collected are above expectations, this additional service is very expensive to provide and there is a lack of current disposal facilities in Lincolnshire. It is not expected that this pilot will be rolled out across the County at this stage.
- 4.4 Additionally, three authorities (North Kesteven, Boston and South Holland) have been trialling separate paper and card collections on some of their collection rounds. Residents have been supplied with an additional purplelidded bin which is collected on a four weekly basis as demonstrated in Table 1 below.

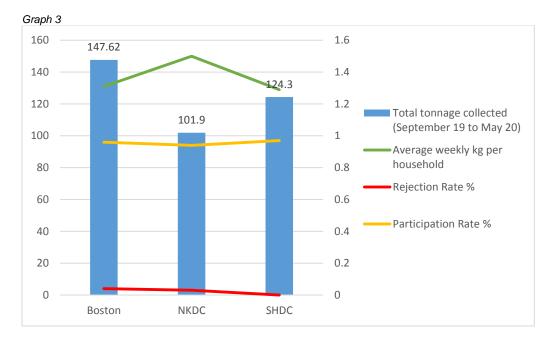
Tabla 1

Week	1	2	3	4
Residual	X		X	
(black) bin				
Recycling		Х		
(blue) bin				
Paper/card				X
(purple) bin				

Outcomes from these trials have been positive, participation has been high and the material collected has been high-quality. 4.5 In West Lindsey, a change to twin stream collections would mean the blue co-mingled recycling bin would be collected monthly, rather than the current fortnightly regime. A new, purple-lidded bin for paper and card would be collected in the alternate fortnight. There are no current proposals to change any collection days.

5. Performance Measures

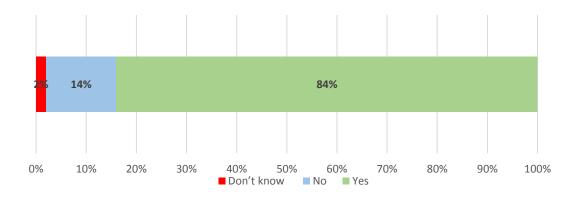
5.1 The current figures from Boston and North Kesteven clearly show that the quality of materials collected in the paper and card bins has been of a very high standard. Data has been gathered since the commencement of the trial and shows the following performance for each authority (Graph 3)



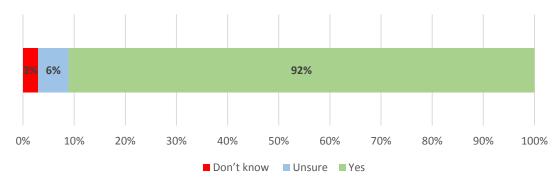
The quality of paper and cardboard has been measured by the receiving paper mill. They advise that quality remains consistently high at an average in excess of 98.5% per load with moisture content at an average of 7%, both measures being well within the targets set.

5.2 A recent satisfaction survey was sent to all participants on the trial. Below are a sample of the headline questions

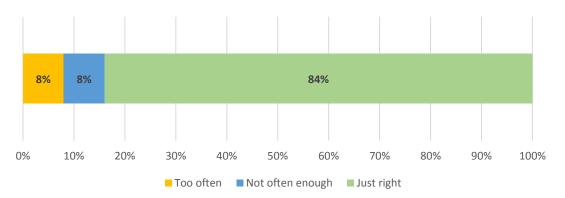
Q1. Do you fully understand what can go in the purple bin? 861 respondents answered this question.



Q2. Do you understand why we are asking you to separate your paper and card from the rest of your recycling? 861 respondents answered this question.



Q6. What do you think about how often the purple bin is collected? 862 respondents answered this question.



The above responses clearly show that, through utilisation of a good communications plan, customers understand why the separation is occurring and what items need to be separated.

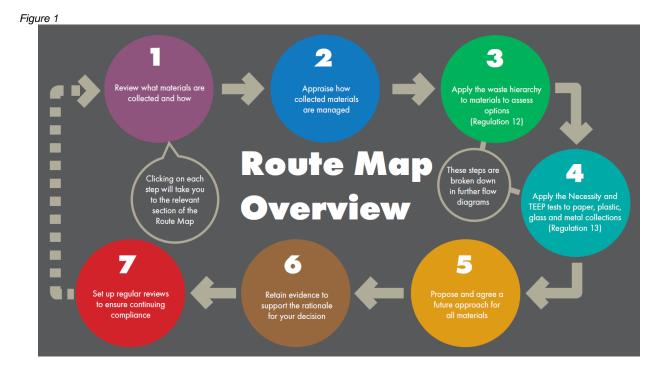
The current performance from both Boston and North Kesteven is summarised below;

Since Rollout Boston BC – Apr 21 to Sep 21 - 856.78 tonnes of paper and card, with contamination rates in the mixed dry recyclables (MDR) dropping from 35% to an average of 21%.

Since Rollout North Kesteven – Oct 21 - 419.17 tonnes of paper and card (still awaiting full data collection from the MDR collections).

6. Technically Environmentally Economically Practical (TEEP) Assessment

- 6.1 In Lincolnshire, total waste arising has increased over the last few years. Recycling rates have been on the decline and contamination rates have been increasing, this is in line with the national picture and may be due to a number of reasons, including those set out above.
- 6.2 Contamination rates of the Mixed Dry Recyclables (MDR) have risen in recent years, currently averaging 30%. This not only adds additional costs to all partners (over £1.2 million last year), but also increases carbon footprint and loses valuable materials which could be recycled and reused in line with the waste hierarchy. Under legislation, the authority must comply with waste regulations, including ensuring collection of materials is carried out separately where it is Technically Environmentally Economically Practical (TEEP).
- 6.3 In order to satisfy Regulation 13 of the Waste (England & Wales) Regulations 2011 (amended 2012), West Lindsey, in common with other Lincolnshire Districts has carried out a draft assessment of its recycling collections. It has been completed using the Waste Regulations Route Map¹ (see Figure 1 below), produced by the Waste and Resources Action Programme (WRAP).



Although it includes an assessment of compliance with the waste hierarchy, the Route Map's focus is on the separate collection of four specified materials (paper, plastic, metal and glass). It presents a step by step process for councils to follow in order to assess their current collection arrangements and compliance with the Regulations.

6.4 A summary of the findings are shown in the tables below. As can be seen, separate collections of paper & card is shown to be Technically, Environmentally, and Economically Practicable – which mean that they should be brought in as a new collection methodology under current UK and EU law.

Summary

o anninar y				
Multi-stream	Not economically practicable – Costs are			
(kerbside sort)	considerably higher than the current comingled			
	collections in 2018 a WRAP report was produced and			
	the additional gross cost of this method across the			
	District would have been c£860,000pa			
Two-stream	Economically practicable - Collection costs are			
(separate paper &	essentially the same as the current comingled			
card)	collections, and processing costs are considerably			
	lower.			

Practicability Test – Summary (Completed by LCC and NKDC)

	Multi-stream (kerbside sort)	Two-stream (separate paper & card)
Technically Practicable?	Yes	Yes
Environmentally Practicable?	No	Yes
Economically Practicable?	No	Yes
Overall Assessment	Not practicable	Practicable

7. Proposal for West Lindsey

- 7.1 Implementation of the new collection regime was rolled out in Boston in Spring 2021, this provided more in-depth data on the impact on recycling rates, contamination rates, roll out schedule, faq's, issues arising and residents opinions. This data will be valuable to all involved in further roll outs, making them not only more efficient, but all answers will be in place. Following on from Boston, North Kesteven are currently rolling out the scheme, officers have been monitoring the roll out of both schemes.
- 7.2 Table 2 below portrays the available options for Members to consider; Table 2

Options	Pro's	Con's	Implications (financial and legislative)
1. Do nothing	No disturbance to the customer	Failure to achieve national targets.	There would be no new financial burden should this option be chosen. Choosing this option could result in a challenge to our legal

		Valuable resources being lost. Non- compliance with TEEP.	compliance with TEEP Regulations. Failure to achieve the Council's carbon management ambitions.
2. Introduce twin stream collections including separate collections of paper and card	As shown by the figures from the trial areas a better quality of material is being produced in both the blue and purple bins. Not increasing carbon footprint by separating materials to gain a more reusable and valuable resource. Be able to achieve national targets for recycling by reducing the contamination and increasing the quantity of material that can be recycled. No increased costs to West Lindsey or its residents.	Public not wanting an additional bin at their property. Public not "buying into" the new collection methods.	All this comes at a cost at the delivery stage of the new methodology. There are ongoing negotiations with the Waste Disposal Authority about funding new costs which emerge from this project. It is envisaged the Waste Disposal Authority will fund most, if not all new burdens. This is a project to implement and begins with a full TEEP assessment, communication plan to all residents, delivery of new bins, additional members of staff in the collection vehicles to be able to have a thorough look through bins, customer service staff, education officers. LCC expect that it will take six months to fully deliver this project in each Authority.

8. Further Considerations

8.1 The proposed collection regime is portrayed below:

Week	1	2	3	4
Residual	Х		х	
(black) bin				
Recycling		Х		
(blue) bin				
Paper/card				Х
(purple-				
lidded) bin				

- 8.2. Lincolnshire County Council are the Waste Disposal Authority (WDA), as such they will be the main financial beneficiary from the introduction of the scheme. This is because there is value in the clean paper and card, also other recyclate should have less contamination and thereby reduce the disposal cost. Therefore, LCC are completely funding the introduction of this service, including purchase of bins, a communication campaign and other project support. Discussions with BBC and NKDC have identified that there have been few unanticipated costs. Officers consider it prudent to assign a level of internal support from Operational Services, Customer Services and Communications to add strength during the roll-out period, however it is not predicted there will be an additional cost to this.
- 8.3 There is a need to further understand the options for delivery of the scheme in areas where sack collections are in place, such as the South West Ward (SWW) of Gainsborough and some remote properties. The paper mills will be working closely with the Lincolnshire Waste Partnership to try and resolve sack-based paper and card collection issues, which have been raised as part of the trials.
- 8.4 Operational Services have a lot of experience in delivering major projects, including the Triple Bin Scheme, a subscription-based garden waste service and construction of a new Depot facility. This experience will be utilised to deliver this change, officers will work closely with County Council officers who have delivered the scheme in Boston and North Kesteven.
- 8.5 Members should be aware that in Boston and North Kesteven, a zero tolerance approach has been taken to contamination of the paper/card bin. It is felt that a full education programme, including additional officers supporting the crews throughout collections in early weeks, would produce better outcomes in the long term. A Frequently Asked Questions document, similar to the one used by North Kesteven (Appendix 1) will be developed for use in West Lindsey.
- 8.6 Operating risks are mitigated by learning from others and going a little later in the programme. It is proposed that a full risk analysis be built up in the further report for Members to keep all informed by the current trials and full roll-outs in Boston and North Kesteven.

Officer's recommendation

Officers recommend Option 2 for the following reasons:

- To contribute towards the strategic objectives of Lincolnshire's Joint Municipal Waste Management Strategy, the Council's Corporate Strategy, and to meet the commitments previously made by the Council to reduce the impact of climate change.
- To contribute to meeting the Governments targets for recycling with our countywide partners.
- To ensure compliance with forthcoming legislation contained within the Environment Bill 2020.
- To follow the waste hierarchy, and encourage waste reduction by reducing the amount of additional waste presented
- To collect a high quality recyclate, and reduce contamination, which contributes towards the Council's recycling and composting rate.