

**NEWCASTLE-UNDER-LYME BOROUGH COUNCIL**

**REPORT TO CABINET PANEL TASK & FINISH GROUP**

**Date 30<sup>th</sup> August 2018.**

1. **REPORT TITLE**                      **A Future Recycling Strategy**
- Submitted by:**                      **Head of Recycling & Fleet - Andrew Bird**
- Portfolio:**                              **Operational Services**
- Ward(s) affected:**                      **All**

**Purpose of the Report**

To confirm the preferred options put forward by the Cross Party Cabinet Panel Task & Finish Group for the introduction of a new kerbside recycling service and an affordable garden waste collection service.

**Recommendations**

- (i) That the Cabinet Panel Task and Finish Group indicates which of the options within the report it prefers for the introduction of a new kerbside recycling service which makes it easier for residents to recycle, and is simpler to operate.**
- (ii) That the Cabinet Panel Task and Finish Group indicates which of the options within the report it prefers for the future provision of garden waste collections following the withdrawal of recycling credits paid by Staffordshire County Council.**

**Reasons**

The Council needs to obtain the best financial value, with the least risk in terms of a reliable and efficient collection service that makes it easier for residents to recycle.

The County Council have now confirmed its intention to reduce recycling credits for garden waste to paying for treatment costs only over the next four years. This decision will create an additional budget pressures for the Council.

The current Recycling service has had a number of operational challenges, which has affected public satisfaction since its introduction, operational costs and pressure from global material markets has meant the projected income has not been achieved, putting significant pressure on budgets.

1. **Background**

- 1.1 The Council has been operating its new recycling collection service since July 2016, and although dry recycling rates have increased, the service is under pressure from the demand on the collection service and the resources available. This is largely a result of volumes of material, vehicles having to tip more than once during a working day and, over time, increased numbers of houses built, which was not adequately reflected in the original service

modelling. To rectify this, the service requires further significant investment if it is to be reliable to the end of its projected term in 2022.

- 1.2 A budget saving of £500,000 was envisaged at the commencement of the new service in 2016, however although savings have been achieved in comparison to the previous service, they have not achieved the level of savings expected. A major factor in this has been the inability to achieve income levels for the high quality materials produced through the service, following global crashes in prices, particularly those of card and plastic.
- 1.3 As a result of these challenges, at its meeting on 4<sup>th</sup> January 2018, in response to a request from the Portfolio Holder, authority was given by Cabinet for the establishment of a politically balanced Cabinet Panel Task and Finish Group (the Group) to examine the problems arising from the operation of the waste and recycling service and for the group to bring recommendations to a future Cabinet meeting. The Group have looked at a number of collection options, and undertaken visits to look at alternative collection systems, and have reviewed alternative collection systems which have been modelled and costed to inform their recommendations to Cabinet.
- 1.4 A consultation with residents was launched on 20<sup>th</sup> February 2018. The report attached at Appendix 1, was prepared on 13<sup>th</sup> June 18, having run for 16 weeks. Within that period the survey received comments from almost 1,300 people which is the highest number of respondents to any of the Council's online consultations. Assuming that responses were one per household who responded this represents around 2.5% of households in the Borough.
- 1.5 Cabinet asked the panel to reconvene to look at: options for future recycling collection services, looking at twin stream and fully comingled collection operations incorporating the use of a wheelie bin. Modelling of these options has been undertaken and presented to The Group.
- 1.6 As part of its current recycling and waste strategy, the Council also operates a separate garden waste service to the majority of residents within the Borough. This service was introduced in the mid 2000's in response to government introduction of weight based recycling targets. A paid for subscription service for residents who wish to have additional garden waste bins was introduced in 2011.
- 1.7 As with dry recycling, recycling credits are paid to the Council by the County Council for all garden waste collected. The rate however is a little less per tonne, than that which we receive for other materials.
- 1.8 In late 2017, the County Council, as Waste Disposal Authority (WDA) initiated discussion with the eight district Waste Collection Authorities (WCA's) as they wished to stop paying recycling credits for garden waste collections, and merely reimburse WCA's for the cost of treatment for the material. This was in order for the WDA to contribute towards significant savings the County Council has to make as part of its Medium Term Financial Strategy (MTFS), and follows a similar policy approach adopted by many WDA's, operating in two tier authority systems.
- 1.9 The Council has subsequently been informed of the County Councils intention to bring in phased reductions in the payments of recycling credits for garden waste, over a four year period, down to reimbursement of treatment costs only.
- 1.10 This change will bring an additional and significant budget pressure with the loss of £275,600 in recycling credit income by 2022, when the County Council will only reimburse for the cost of treatment which currently costs £23.84p per tonne to process.

- 1.11 Cabinet asked the Group to reconvene and look at two options for introducing a chargeable service that will avoid a significant additional financial burden being placed on the Councils finances.

## 2. **Issues**

- 2.1 It is vitally important that the Council looks to obtain the best financial value from the services it operates.
- 2.2 The separate garden waste collection collects on average around 10,500 tonnes of garden waste each year, which is processed into compost mainly for use in the agricultural market.
- 2.3 Loss or a reduction in the amount of garden waste collected will result in lower overall recycling performance for the Council due to the significance (in weight) of this stream of the Councils recycling service to the overall recycling rate of the Borough.
- 2.4 The current recycling collection service has suffered some significant operational issues since its commencement in 2016, with unreliable collections, and poor customer satisfaction. However, recycling rates have increased over the previous service, and are higher than many of our partner authorities in Staffordshire, and collection costs overall are the second lowest for a WCA in Staffordshire.
- 2.5 This Group has looked in detail previously at markets for collected recycled material. Markets for materials have suffered major volatility over the last couple of years and in particular the last nine months or so, following China's stringent restrictions on imports of materials which do not meet their high quality criteria. Much of the material going to China came from comingled collection operations, and they have encountered large amounts of contamination. This has resulted in oversupply into other markets which has had an impact on prices for lower quality materials. The situation is unlikely to improve greatly moving forward, until investment within the UK can deliver higher quality materials for recycling and reprocessing.
- 2.6 Cabinet has indicated it wishes to continue to provide separate food waste collection, therefore, in looking at alternative recycling systems systems, the Group are asked to consider how this will be achieved. Currently food waste is collected on the same vehicle as recycling on a weekly basis, however a change to a new recycling service operating with wheelie bins on a fortnightly basis, would potentially need additional resources to collect food on the week when recycling was not collected.
- 2.7 Operating any form of recycling collection system, the Council will have to maintain the operation of its transfer and bulking station as there are no facilities close enough to reprocess material which could facilitate direct delivery of collected materials. (Other than garden waste)

## 3. **Proposal**

### Recycling Collection

- 3.1 In considering the recycling collection service, it is proposed that the Group have considered the following options, with the existing system used for cost comparison purposes. –
  - Twin stream – where either paper or paper and card are kept separate and everything else is comingled in a single wheelie bin and collected fortnightly (with food collected separately).

- Fully comingled – where all materials are mixed together in a single wheelie bin and collected fortnightly (with food collected separately)
- 3.2 A wheelie bin is usually provided for fully comingled services and many two stream operations, although a number of authorities do operate a twin stream system using kerbside boxes such as we operate in the Borough, the closest being our neighbouring authority of Shropshire. The Councils other neighbouring WCA, Stafford Borough operates a two stream system using a wheelie bin with an internal caddie (box) to contain paper.
- 3.3 Each system has its advantages and disadvantages. A summary of these are attached at Appendix 1. Whilst the advantages and disadvantages of the current system are well known, a twin stream and fully comingled system will be easier for the householder to use, together with simplified collection operations utilising standard compaction vehicles with or without food pods. The biggest risk will be dealing with increased levels of contamination, which the Council will need to ensure it manages effectively and robustly in order to avoid costly rejection payments.
- 3.4 Initial modelling work undertaken and presented previously, and now updated, shows that a twin stream or fully comingled service can be delivered cost effectively, although it will be more expensive than the budgeted cost of the current service.
- 3.5 Within the modelling and feasibility studies for the recycling service, the Group are asked to consider and express a preference for how to integrate continuing the provision of a separate food waste collection service, as this has a significant impact on the design and provision of a new service moving forward as well as the option to collect recycling on a fortnightly or weekly basis in the future.
- 3.6 The modelling work undertaken has shown it is possible for the Council to continue to collect separate food waste cost effectively; however the type and combination of vehicles to be used for recycling and food waste collections will require further detailed consideration before a recommendation on the types of vehicles can be made.
- 3.7 Collecting paper and card separate results in reduced gate fees payable to the Material Recovery Facility (MRF) as paper / card (fibre) is costly to separate, and the Council maintains control of selling the higher value materials (paper). Collecting just paper alone will increase the gate fee for the MRF, as they will have to deal with the card comingled with the other materials, and the overall income value will be lower. Additionally paper quantities being collected are dropping nationally, as fewer newspapers and magazines are being purchased. At the same time volumes of card are increasing as more home deliveries are taking place as result of increased internet shopping undertaken by householders. Further the paper and card industry are reluctant to purchase paper and card from MRF's due to the poor quality of the material as it goes through the collection and sorting process, leading to this material largely going to export markets.
- 3.8 It is proposed therefore that the Group recommends an option to be considered by Cabinet for further planning and modelling work in order to move to the preferred collection service.
- 3.9 Further detailed planning and modelling will inform the potential timescales for introducing a major service change. This will be dependent on a number of key factors such as service design, procurement and financing to implement the change.

### Garden Waste Collection

- 3.10 With reference to the garden waste service, the Group are asked to consider options for the continuing provision of this service incorporated within the proposed redesign of the recycling collection service, not least to identify ways of dealing with the increased budget pressure resulting from the County Councils withdrawal of recycling credits.
- 3.11 There are two options that views of the group are being sort on:
- Introduce a chargeable garden waste collection service, whereby residents wishing to receive a garden waste collection service pay an annual subscription fee. This system is now operated by around 60% of WCA's in England.
  - Outsource the provision of a garden waste collection service to a private sector waste management company, a number of who operate services in this way to a number of authorities.
- 3.14 In either of the options above, it is recommended that the service to residents be extended to a full twelve months, unlike the current service which has an eight week shutdown during the winter.
- 3.15 For this timescale to be achieved there would be considerable preparation work required to be undertaken over the next 7 months. The key aspects of this are to ensure operational round planning, customer services support, electronic payment systems and communications plans with residents are all put in place.

#### **4. Reasons for Preferred Solution**

- 4.1 Members and the public are unhappy with the current recycling collection service, and have recognised it requires further significant resource investment to make it more reliable. The service has been unable to generate the levels of savings in the MTFS during its first two years of operation, mainly as a result of poor and worsening global markets for recycled materials and due to the lack of resilience in the service to meet the demands placed on the service to complete collections.
- 4.2 Additionally the County Councils decision to withdraw recycling credits for the collection of garden waste will have a significant additional pressure on the Councils budget.
- 4.3 The advantages and disadvantages of alternative collection strategies are as set out in this report.

#### **5. Outcomes Linked to Sustainable Community Strategy and Corporate Priorities**

- 5.1 The proposal is key to having in place an up-to-date efficient and customer focused Integrated Municipal Waste Management Strategy for Newcastle under Lyme Borough Council, and will contribute to the following corporate priorities:
- creating a cleaner, safer and sustainable Borough
  - creating a Borough of opportunity
  - transforming our Council to achieve excellence

6. **Legal and Statutory Implications**

- 6.1 The Council has a legal duty under the Waste Framework Directive 2012, to provide collection services for none recyclable waste, and to collect separately four streams of recycling, namely, paper/card (fibre), metal, plastic, and glass all free of charge.
- 6.2 The Council has no statutory responsibility to provide garden waste collection services, and can make a charge for doing so if it so wishes.
- 6.3 Currently the Council does not have any statutory recycling targets imposed by Central Government; however there is a service level agreement with the County Council to deliver recycling levels above 50% as part of their PFI arrangements for their Energy from Waste Plant in the South of the County.
- 6.4 Government will be publishing its Resource and Waste Strategy in late 2018; this may incorporate new targets for local authorities, and may mandate separate food waste collections, to bring England's Local Authorities in line with the devolved governments of Wales, Scotland and Northern Ireland. The Council will need to be mindful of this emerging work and any implications it may have on its future recycling and waste strategy moving forward.

7. **Equality Impact Assessment**

- 7.1 The proposal supports the Equality Impact Assessment undertaken for the effective delivery of the Integrated Municipal Waste Management Strategy for Newcastle under Lyme Borough Council

8. **Financial and Resource Implications**

- 8.1 The proposal has significant financial and resource implications for the Council.
- 8.2 A full high level cost analysis by the various options modelled and is detailed in Appendix 2.
- 8.3 A full high level cost analysis for chargeable garden waste is detailed in Appendix 3.
- 8.4 The table below details the estimated operational costs for the preferred option of a twin stream recycling collection service with separate paper and card and separate food (A), as recommended by the Cabinet Task & Finish Group. The table also includes column's detailing the financial cost of collecting paper only (B), and a comparison to the Councils current kerbside recycling collection service (C).

It should be noted that these figures are subject to refinement as further detailed planning and modelling is required on the preferred option and that these are operational costs only, and do not include any overheads or capital charges which would also be incurred by the Council.

<b>Cost</b>	<b>Column A Twin Stream with separate paper / card and separate food waste</b>	<b>Column B Twin Stream with separate paper only and separate food waste</b>	<b>Column C Fully Comingled with separate food waste</b>	<b>Column D Comparison with current service</b>
Operation of NBC Transfer Station	£365,000	£365,000	£365,000	£405,000

Gate Fee for Food Waste processing based on 2017/18 cost	£29,623	£29,623	£29,623	£29,623
Gate Fee for MRF processing – including transport & rebate for sale of materials (no fibre)	£279,000	£516,000	£624,000	N/A
Collection Costs – vehicles and staff, including managements & supervision	£1,300,000	£1,300,000	£882,146	£1,813,600
<b>Income</b>				
Paper / Paper & Card	£189,000 (paper/card)	£164,680 (paper)	N/A	£164,680 (paper)
Other Income – plastic card, metal, glass	N/A	N/A	N/A	£145,000
Recycling Credits – based on current tonnage	£580,162	£580,162	£580,162	£580,162
<b>Net Cost of service</b>				
	£1,204,461	£1,465,781	£1,320,607	£1,358,381

8.5 As stated in paragraph 3.3, it is a proven fact that collecting recycling materials in a wheelie bin will incur levels of contamination, which can equate to 12% of the total quantity of material collected for recycling. Contract arrangements with the MRF will take account in dealing with a level of contamination, typically around 5%, but anything additional would incur additional cost and rejected loads. A rejected load equating to around 12 tonnes of material could incur costs of around £3,000, and therefore it is imperative the Council manages collections appropriately through effective communication with residents, and monitoring collections closely to ensure contamination rates remain within excepted thresholds of the MRF contract conditions.

8.5 Significant capital costs will be incurred for provision of the new service, including procurement of wheelie bins, vehicles, and alterations to the Councils Transfer Station. Indicative figures are detailed in the table below.

Capital requirement	Cost
Procurement of Wheelie Bins and distribution	£913,000
Procurement of internal bin Caddie (box)	£154,000
Procurement of vehicles	Between £1,445,000 (Comingled + Food) or 1,785,000 (Twin Stream + Food)
Modifications to Knutton Lane Depot Transfer Station	£500,000 - TBC

8.6 With regard to garden waste collections, to continue to operate the service with reduced payments of Recycling Credits from Staffordshire County Council would have the following additional financial burden on the Council.

- 2019/20 - £68,900.
- 2020/21 - £137,800.
- 2021/22 - £206,700.
- 2022/23 - £275,600.

8.7 Charging for the collection of garden waste, introduced at a £36 charge per bin, per year would offset the loss in recycling credit payments, and provide revenue saving at the following levels. Figures assume an initial uptake of 20% rising to 35% in four years.

- 2019/20 - £84,984 (based on 20% take up)
- 2020/21 - £162,517 (based on 25% take up)
- 2021/22 - £248,159 (based on 30% take up)
- 2022/23 - £314,411 (based on 35% take up)

8.8 Outsourcing the service to the private sector, for them to provide the whole service, including revenue generation would result in a saving to the Council of £545,184. This would be subject to any TUPE negotiations.

8.9 With exception of the last option, it is assumed that the same level of resources employed to carry out the garden waste collection service currently in terms of vehicles and staff are maintained until a clear picture of take-up is known.

8.10 In terms of other resources, a Project Steering Group will to be formed to include officers from Finance, ICT, Customer Services, and Communications. Further expertise will be required as the project moves forward from Human Resources, Procurement and Planning.

8.11 As the project develops, and once a Cabinet decision is made further resources may need to be required to ensure the project is delivered efficiently and within agreed timescales.

## 9. **Major Risks**

9.1 The international market for sale of recycled materials is very volatile and carries major financial and legal risks, particularly in export markets. China, has been the main destination for European recycled materials, and has through its customs process clamped down on quality, particularly mixed paper and plastics, where they have experienced high levels of contamination.

9.2 Moves such as this put pressure on other markets with additional quantities of materials chasing other markets, with the potential that values for materials can fall due to oversupply.

9.3 Obtaining and sustaining UK markets provide better security for the sale of materials so long as they remain of suitably high quality. This has now become a real issue for comingled collections, which can have high levels of contamination, or 'non-target' materials. The result is that the gate free for processing material in this way has risen significantly over the last few years. Additionally the Council will need to undertake a rigorous TEEP (Technically, Environmentally, Economically and Practical) assessment to prove that the twin stream collection and sorting system produces materials to the same quality to those collected separately.

9.4 In considering the garden waste collection service, charging for a service which was previously provided free of charge for one garden waste bin per household will need to be managed effectively in respect of information available to residents.



- 9.5 Poor take up of service with resources maintained at their current level could result in overall savings/income not being achieved.
- 9.6 A reduction in garden waste tonnage collected will have an adverse effect on the Councils Recycling performance. Assuming a take up of the chargeable garden waste service of 20% of residents, the Councils overall recycling rate could drop by around 12 %. This reduction in performance in turn could impact on the County Council's ability to reach an overall 55% recycling target for Staffordshire, imposed as part of the WDA's PFI contract arrangements with DEFRA, which are valued at around £5million a year. Failure to achieve the 55% recycling target for Staffordshire could see PFI credit payments reduced by DEFRA, placing an additional financial burden on the County Council.

10. **Background Papers**

- 10.1 Appendix 1 - Advantages/disadvantages of service model options
- 10.2 Appendix 2 – detailed cost analysis for kerbside recycling collection models.
- 10.3 Appendix 3 – detailed cost modelling for chargeable garden waste collections.

**Appendix 1.**

**Advantages & Disadvantages of Twin Stream Recycling Collections**

<b>Advantages</b>	<b>Disadvantages</b>
Easier for the householder to use	Householder will still need to separate paper / card
Provides more consistency with some Staffordshire and other neighbouring authorities collection systems	Difficult to integrate separate food waste collection
Maintains the 'high' value high quantity materials separately. This takes some of the volatility risk out of the operation	Contamination levels will increase, which will lead to increased costs if not effectively managed.
Increased productivity in collections.	Glass in the comingled element remains a problem. Difficult from a TEEP issue.
Easier to recover following bad weather / other incidents	Twin pack vehicles not as reliable as standard RCV's

**Advantages & Disadvantages of Comingled Recycling Collections**

<b>Advantages</b>	<b>Disadvantages</b>
Very easy for the householder to use	System will generate high levels of contamination, which could lead to increased costs, and will need to be managed effectively.
Requires a standard RCV for collections, therefore more flexibility in the fleet	Volatile markets for materials will increase gate fees
Provides more consistency with some Staffordshire and other neighbouring authorities collection systems	Materials likely to be exported following sorting process
Fast collection process similar to collecting residual waste	Will require rigorous TEEP assessment
Very easy to recover from bad weather / other incidents	Industry does not like materials from comingled collections. As they will be paying for collections under EPR, they will want more say in how it is collected / processed.
	Difficult to integrate separate food waste collection