

SUBJECT:	Recycling Review
DIRECTORATE:	Operations / Waste & Street Services
MEETING:	Strong Communities Select Committee
DATE:	28 th January 2016
DIVISION/WARDS AFFECTED:	All

PURPOSE:

1. To seek Select Committee's views on the findings of the Recycling Review prior to a report being presented to Cabinet in March.

RECOMMENDATIONS ON PROPOSED WAY FORWARD:

2. The draft recommendations for consideration are:
 - I. The principles of the existing collection service of dry recycling materials (red & purple bag) be continued
 - II. A robust 6 month pilot is undertaken on *separating glass* at kerbside (alongside red and purple bags) to fully understand: productivity rates – what is achievable and firm up costs (incl hiring demo vehicles to test), quality of material – new MRF contract with SITA (“separate collection test”), glass flows and demand, public engagement and change management and importantly compliance with the EU Waste Framework Directive requirements;
 - III. The pilot results to be reviewed by Recycling Review Member Steering Group, Select Committee and Cabinet prior to proceeding with full implementation following the trial period and adjust collection methodology if necessary;
 - IV. The Scottish model (explained in para. 33 below) is reviewed through the pilot period; and
 - V. That food and garden waste kerbside collections will be split, with food waste to be treated via AD and garden waste via open window.

KEY ISSUES

3. Over the past 28 months, MCC has carried out a strategic review of the recycling and waste service in response to changes in EU and UK law and Welsh Government (WG) policy and guidance including WG's preference for kerbside sort collections. The background to the review and the legislative issues was fully explained in the report to Cabinet of December 2014 (<http://democracy.monmouthshire.gov.uk/CeListDocuments.aspx?CommitteeId=144&MeetingId=617&DF=03%2f12%2f2014&Ver=2>).

Collections Options Modelling and Appraisal

4. One of the key aspects of the review was the need to model MCC's current kerbside collection service (baseline), against WG's preferred 'collections blueprint'. MCC is compliant with much of the collections blueprint, including restricting residual, charging for garden waste etc. However MCC does differ with WG on collection methodologies as WG believe that kerbside sort is the most economic and environmentally beneficial collection method and fully compliant with EU requirements for 'separate collections'. This is the fundamental issue the review has been tasked to resolve. There have been a number of iterations of these options presented to Select Committee over the past 24 months and these have been reduced to a final 4 Options. The final 4 options were:-

MCC recycling collection review: Future service options			
We are modelling 4 different methods of recycling collection for future use in Monmouthshire.			
Service option	Description	Storage	Collection vehicles
1	<ul style="list-style-type: none"> Red and purple recycling bags collected by a single compartment vehicle. Split collection for food and garden waste (Vehicle with two compartments to keep waste separate). Refuse collection on standard vehicle. 		  <p>Food and garden waste kept separate in a split compartment vehicle.</p>
2	<ul style="list-style-type: none"> Mixed recycling in one bag (plastic or reusable) and glass stored separately in a box. Recycling collected by a split compartment vehicle. Garden and food waste collected by a split compartment vehicle. 	 <p>One plastic or reusable bag</p>	  <p>Food waste collected in front pod. Garden waste in rear.</p>
3	<ul style="list-style-type: none"> Mixed recycling in one bag (plastic or reusable) and glass stored separately in a box. Recycling bag, glass and food waste collected at the same time with a triple compartment vehicle. Garden waste collected on standard vehicle. 	 <p>One plastic or reusable bag</p>	  <p>Split rear compartment for mixed recycling bag and glass. Food waste collected in front pod.</p>
4	<ul style="list-style-type: none"> Kerbside sort recycling collection. Each type of material stored and collected separately. Stored in trolley boxes or stackable boxes with a reusable bag for cardboard. Collected using a kerbside sort vehicle with multiple compartments. Garden waste and refuse collected separately to recycling. 	 <p>OR</p>   <p>Both options include bag for cardboard and food bin</p>	  <p>Food and garden waste kept separate in a split compartment vehicle.</p>

5. The original modelling undertaken was at a high level and looked to ascertain the most viable service options moving forwards. Throughout this process MCC has worked with WRAP (Waste Resources Action Programme and WG's agents for supporting LAs with change and

improvement in recycling/waste). WRAP have commissioned bespoke pieces of work (e.g. the MEL study to evaluate the impact of restricting residual) and have undertaken financial modelling on the best option for MCC. The modelling considers ‘whole life costs’, so treatment costs (the process after collection e.g. composting, anaerobic digestion, energy from waste etc.) have also been determined for each collection option.

6. The proposal to continue with the current collection service and include further separation of glass is based on Waste and Street Services evaluation of the data provided by WRAP and actual data being run through the existing MCC WebAspx route optimisation software. The Pilot forms part of an Outline Business Case which will be subject to further assessments and tender processes followed by a submission of a Final Business Case before an absolute decision is made on full implementation of collection changes.
7. The report produced by WRAP not only highlighted the complexity of modelling each collection service but also the difficulty of assessing hypothetical modelling of fleet numbers and staffing costs compared to known actuals. The Route Optimisation exercise carried out as part of the MTFP savings for 2015/16 have enabled Waste and Street Services to better understand the actual number of vehicles necessary to carry out collections services specific to Monmouthshire and gives a far more accurate picture when compared to the high level Kerbside Assessment Tool (KAT) modelling carried out through WRAP. The table below identifies by key expenditure/income areas the financial performance of the different collection options:

Baseline	MCC Options	Option 1	Option 2		Option 3		Option 4	
	WRAP Options	0	1	2	3	4	5	6
£1,233,159	Staff	£1,197,616	£1,316,313	£1,375,469	£1,428,209	£1,580,782	£2,229,894	£2,499,881
£838,230	Vehicles	£950,746	£1,123,579	£1,131,220	£1,130,505	£1,194,863	£1,114,698	£1,198,284
£273,218	Containers	£273,218	£273,147	£196,873	£273,147	£196,873	£189,295	£330,592
£0	Dry Processing	£10,200	£20,400	£20,400	£20,400	£20,400	£182,777	£182,777
£704,405	Material Income	£704,405	£251,463	£251,463	£251,463	£251,463	-£536,998	-£536,998
£606,015	Kerbside Organics Processing	£403,381	£403,381	£403,381	£403,381	£403,381	£403,381	£403,381
-£270,000	Garden Waste Charge	-£270,000	-£270,000	-£270,000	-£270,000	-£270,000	-£270,000	-£270,000
£428,925	Kerbside Residual Disposal	£428,925	£428,925	£428,925	£428,925	£428,925	£492,825	£492,825
£627,630	Supervision	£627,630	£627,630	£627,630	£627,630	£627,630	£627,630	£627,630
£4,441,582	Total	£4,326,121	£4,174,838	£4,165,361	£4,293,659	£4,434,316	£4,433,502	£4,928,372
	Difference to baseline	-£115,460	-£266,744	-£276,221	-£147,923	-£7,266	-£8,080	£486,790
		all the above exclude pru borrowing costs of Transfer Station modifications						
	capital transfer station works	239,500	247,000	247,000	247,000	247,000	862,000	862,000

*Baseline: This is the cost of an optimised current service (i.e. the service after all collection rounds have been made efficient – a process currently being undertaken), but also with the assumption that garden and food waste is collected and treated separately.

8. Regarding capital costs points to note are:

- The depot capital cost associated with each service option results from required changes to the transfer stations, associated mainly with the onsite sorting/bulking of dry recycling materials.
- The above table does not take into account the revenue consequential of prudential borrowing this capital investment.

Income from materials / costs for processing

9. In terms of the potential material income or cost associated with each collection method actual MRF figures, quotes or for kerbside sort, as per those received by Merthyr Tydfil County Borough Council (who collect materials separately) were used. These are actual values being achieved.

10. Members must note that with any collection method there is a recycling processing risk and this will be addressed through the trial to ensure these risks associated with recycling market fluctuations are reduced as far as practically possible. Currently our risk is based on there being MRF capacity at a cost which is affordable to the authority. Originally Members of Strong Communities Select Committee recognised that the authority had benefitted from strong MRF contracts and were concerned about the risk of managing material directly given the low volumes and also lack of expertise to undertake a competitive and strong market trading role. This recommendation was duly noted by officers and is one of the reasons for the recommendation of a moderate change to the current scheme.

11. The WRAP results predicts income values well above those being currently achieved by neighbouring authorities using brokerage to market materials. The report points to material values being achieved by Newport Wastesavers but does not include the true costs in infrastructure for a bespoke recycling facility or the staffing necessary to market these materials to achieve these values. If MCC were for example to make use of Wastesavers expertise on trading commodities the value of income would need to be reduced as the report assumes we process and trade all the recycling to achieve maximum income values.

Key Points to Note from the Results:

12. Separation of food and garden waste gives a tangible financial benefit (please refer to Select Committee report Dec 15 recommending to join the AD Heads of the Valleys Partnership). The reduction in treatment costs from using this method outweighs the increase in collection costs resulting from the need to use different vehicles.
13. In terms of cost modelling of dry recycling options, the most viable alternative options in comparison to the present service were:
 - a. The ‘twin stream’ option (option 2), whereby MCC continues to collect red and purple bags but separates glass and materials are passed directly to the market for further treatment. Extracting glass massively reduces MRF cost and removes the glass issues with comingled collections. To allow us to fully understand the data, we will work with SITA (MRF contractor) to determine the level of compliance with requirement for “separate collections”.
 - b. The Kerbside sort option (option 4) is the 2nd cheapest option, whereby most materials are collected separately, and a small sorting operation is run in Llanfoist to separate cans and plastics. At the moment (subject to review and the results of the trial) this option is not being progressed. However given it is WG preferred policy and the default position for the requirement for separate collections kerbside sort will always remain an option and be used as a benchmark for assessing other options for compliance and performance.
14. **The Waste Framework Directive** requires local authorities to collect paper, metals, plastics and glass separately where:
 - i) necessary to ensure waste undergoes recovery operations in accordance with the waste hierarchy and to protect human health & the environment, and to facilitate or improve recovery; and
 - ii) where it is technically, environmentally and economically practicable (TEEP) to do so; and
 - iii) to promote ‘high quality’ recycling.
15. NRW is the monitoring authority for compliance with this directive. We will work with NRW and WRAP through the pilot to evaluate the quality and end destinations of materials through SITA to answer the necessity and if necessary the TEEP tests. These are explained in more detail below:

Necessity

16. Under the necessity test, MCC must consider whether it actually needs to separate materials further in order to achieve high quality recycling. A simple benchmark for this test comparing the quality of MCC's materials, at the point that they are recycled, with 'good' kerbside sort authorities. Unfortunately, terms such as 'high quality' and 'good kerbside sort authority' are not defined in the legislation or the WG statutory guidance. MCC consider these to be fundamental points when considering whether we should switch from what is a highly effective, performing and efficient service which enjoys high levels of public satisfaction at this time.
17. WG have determined that LAs should seek to achieve the best overall environmental outcome, and that where possible, should look to achieve 'closed loop' recycling. This for example, would mean to turn a glass bottle back into a glass bottle and not into road aggregate.
18. There is little guidance on how to address the necessity question, and what to compare collections to. As a starting point MCC officers compared the top destinations for MCC's recycling in 2012/13, to those used by Welsh kerbside sort authorities. The full results were reported to Cabinet in Dec 2014 and were shared with NRW and WG for consideration as to how we have approached these tests. Given no concerns or comments were raised by either organisation we believe it is an appropriate tool for analysis and aiding decision making. The results showed that MCC's end destinations are comparable to kerbside sort authorities for a number of materials. For example, the top three end destinations for MCC's glass are all closed loop manufacturers, and over 90% of glass went to these three manufacturers. With MCC's paper, although this is being sent to China, it is also being processed in a closed loop manner (comparable with kerb side sort authorities).
19. Although the above is compelling, it is important that MCC has a full understanding of the quality of its recyclable material, before a full conclusion can be made on the necessity test. With a new MRF contract starting in February 2016, a pilot to determine the impact of removing glass and a full study being undertaken by WG on the complexity of end destination reporting, it is anticipated we will be able to make a robust recommendation on material management and the necessity test in due course.

TEEP Test

20. If it is found that it is necessary for MCC to collect certain materials separately, it will also need to be considered whether it is TEEP to do so:
 - a) Technically practicable: Given that separate collections operate in counties similar to Monmouthshire – such as Conwy, it is likely to be concluded that such collections are also practicable within Monmouthshire.
 - b) Economically Practicable: The benchmark for whether collections are economically practicable is that they must not be 'excessive' in comparison to non-separate collections. The final whole life costs of the different options will need to be assessed fully to

determine this. The Council will also need to consider the “cost of change” in light of other investment priorities that need to be delivered. The modelling above demonstrates that kerbside sort does not deliver significant savings and also incurs major capital investment, therefore should we need to consider this option further more work would have to be undertaken on maximising value and opportunities

- c) Environmentally Practicable: When looking at collection options consideration is given to fuel use and emissions (MPG and emissions) from fleet options. End destinations and final use of recyclates is also a consideration of environmental performance and will feature as part of the necessity test.

Public Satisfaction & Performance

- 21. MCC is in a very fortunate position with its recycling services with 2015-16 once more forecasting to return a recycling rate of c63% against a target by WG of 58%. Recycling services are often changed because of a failure in performance. Monmouthshire is not in that situation and therefore it was recognised that a very strong case for substantial change would need to be presented. The EU Directive calls for ‘quality’ and also ‘quantity’ in recycling. The trial will allow us to continue to review the quality issue, and it cannot be argued that MCC does not achieve quantity given that we are such a high performer. In addition the guidance from WG does not answer how to reconcile the quality versus quantity issue.
- 22. There is concern that a major change in recycling collection methods would result in a drop in performance, thereby putting at risk MCC’s reputation, public buy in and compliance with statutory recycling targets which come with fines. Whilst the restriction on residual waste should be a deterrent against such a change (and potential enforcement as reported to Committee in Dec ‘15) it is a risk that must be noted. Most recycling services are changed due to performance issues and therefore MCC does not have evidence or data to satisfy members that a major change would not affect our current performance.
- 23. To aid decision making further officers are currently seeking public views on the collection options and satisfaction ratings for the current service. During the week of 18th Jan surveys are being undertaken in our town centres and at our HWRCs. The survey was sent around Councillors and has been on line for residents to fill in.

Staff Engagement

- 24. Staff have been engaged throughout the review. Regarding this report a workshop was undertaken with staff in December 2015 to seek views on the options and frontline crews were engaged in January prior to its publication. Staff are rightly proud of the current service

and do not want to change anything which poses a risk to the Council's reputation or performance. Operationally the service is highly efficient and the crews like the ease of the operation. There are particular health and safety and operational concerns with kerbside sort, however noting that 11 Welsh Councils undertake this operation they are not insurmountable. However crews can make or break a service and in line with Council principles we want our staff to own the service they run and therefore their views are critical to the future of the service.

Stakeholder Engagement

25. Engagement with key contractual partners and interested parties has been a key feature of the review. Views of major contractors have been included throughout the review and their involvement on resolving the final configuration of the recycling service is of paramount importance for compliance with legislative requirements. SITA as the new MRF contractor will be fully engaged with the pilot to remove glass and to evidence the quality of their end destinations for other materials. Viridor will be engaged to understand Transfer Stations operational and cost implications. There are many interested community groups in Monmouthshire and these are being invited to a Stakeholder session w/c 1st February to be shared the findings from the review, comments from Select Committee and seek their involvement/view in the pilot.

The Benefits of Collecting Glass Separately

26. In environmental assessments it is common for comingled glass separated at MRFs to be used in aggregate recycling. This is due to glass being broken into small shards or even sometimes dust through the industrial extraction process. Whilst a recognised form of recycling (and meets quality protocols etc.) glass to aggregate is not as environmentally beneficial as glass being recycled back into glass. Collecting glass separately will then ensure that that material is sent to glass recycling and thereby assisting our compliance with the high quality recycling requirement contained in the Directive.
27. Glass can also be a problem within some MRFs as shards can disrupt the technology used by operators. Removing glass therefore will reduce operational MRF issues and this has a subsequent benefit of reducing potential gate fees. The initial quotes MCC has received has demonstrated that as much as a 50% reduction on the current gate fee could be achieved.

FINANCIAL IMPLICATIONS:

28. There are no immediate financial implications from this report. The MTFP for 2016/17 highlighted the need to replace some of the existing fleet, this will be done hiring in the split back vehicles for the duration of this pilot prior to full implementation.

29. Whilst indications on savings have been referenced in the report no figures for savings feature within the current MTFP as it would be premature to do so. The figures provided do not also take fully into account the capital investment required. However if a change was proposed the Business Case, in line with the principles on capital investment would need to explore the implications of using any savings to enable borrowing to fund this capital expenditure.

LEGAL IMPLICATIONS:

30. It is very important that the final recommendation for the recycling service is compliant with existing law and future proofed for any subsequent changes. Legal Advice has been sought regarding our assessment of compliance with the Directive for 'separate collections'. This advice will be a key feature in the final report to Cabinet in March.

31. In particular, MCC will continue to review its service provisions to ensure that it meets its legal obligations including:

- the general obligation to encourage separate collection so as to facilitate recovery;
- the general obligation to introduce separate collection so as to facilitate recycling;
- the obligation to introduce separate collection for paper, metal, plastic and glass so as to facilitate recycling of these waste streams; and
- the obligation not to mix waste of specific type or nature with other waste or other material with different properties,

32. subject always to the principle of proportionality (subject to the Article 10(2) of the revised Waste Framework Directive necessity and technical, environmental and economic practicability tests). Considering that the aim of separate collection is high quality recycling, the introduction of a separate collection system may not be necessary if the aim of high quality recycling can be achieved just as well with a form of co-mingled collection.

NEXT STEPS

33. Comments from Select Committee as well as findings from the survey and stakeholder engagement will be analysed to inform the final report to Cabinet in March. If the recommendations are as drafted in this report next steps will be:

- Identification of suitable pilot areas:- it is intended a vehicle will be brought in to run from 1 depot 5 days a week. This means the trial area will be about 7,500-8,000 properties. Given the nature of our rounds the trial will be in both urban and rural areas to fully

understand how the service can run taking into account the needs of different communities. Once the areas have been established all members will be informed and the relevant Ward Members will be fully engaged in the communications plan.

- Work with Viridor to determine transfer station needs for the pilot (it is likely that the pilot will have to be in the North of the County given that Llanfoist Transfer Station will not require any additional infrastructure works done where as Five Lanes would)
- Identification of the vehicles to be piloted and relevant and engagement with staff
- Drafting of communications and engagement plan on pilot – involving local members, interest groups, schools etc.
- Work with SITA to determine management of glass and £ for the remaining recyclates
- Development of key measures for data capture through the review.

34. It is anticipated that the trial would not begin until the summer/autumn as rounds will need to be configured and vehicles ordered.

The Scottish Model

35. Last month COSLA (the representative body of all Scottish Councils) announced that an agreement had been reached by all 32 LAs to move to a common collection method. The materials to be collected separately were:

- Glass
- Paper/card (in red bag?)
- Plastics / metals (in purple bag?)
- Food

36. The vehicles they intend to use have not yet been finalised. This option is quite similar to the option being recommended for the pilot and we are keen to understand more particularly on operational efficiency and vehicle types. The key difference with this compared to ours is that food does not appear to be collected with garden waste and therefore gives more flexibility to how garden waste is managed in the future. Initial assessments by WRAP have identified that as much as £95k could be saved if garden waste was a stand-alone service and only collected at peak season (Mar-Oct). A separate garden waste service would also allow the charge to fully cover the cost of collection – something we are not able to currently do because we cannot charge for food waste. This is not a formal recommendation but has been highlighted as an alternative and on which Members views would be greatly appreciated.

37. Given the potential alignment to our current method of collection our risk of legal compliance would be reduced as if Scotland believe this to be EU compliant then MCC could make the same argument. It is proposed that during the pilot further investigations into how this is to be implemented are to be undertaken and will feature in the final report through the Member process.

Conclusion

38. For Members to provide a view on MCC undertaking a robust pilot on the following service configuration:
- a. Red and purple bags as now
 - b. Glass to be collected separately
 - a & b to be collected on the same vehicle

 - c. Food and garden waste to be collected separately but on the same vehicle
 - d. Residual as now
39. For Members to note the Scottish developments and comment on their appropriateness for MCC taking into consideration the comment about garden waste.

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