

SUBJECT: Recycling Review – Final Proposals for Collections 2018-2025

DIRECTORATE: Operations / Waste & Street Services

MEETING: Strong Communities Select Committee

DATE: 16th January 2017

DIVISION/WARDS AFFECTED: All

PURPOSE

1. To provide Select Committee with the opportunity to scrutinise the final proposals for the future of recycling collections prior to submission to Cabinet in March 2017.

PROPOSALS

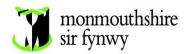
- 2. The proposals are:
 - That the principles of the existing recycling service (red and purple bags collected weekly) be maintained;
 - ii. That glass be collected fortnightly in a separate container (green box)
 - a) Where a residents raise concern over ability to carry a box the service will offer a green caddy (similar to the outside food waste caddy) and if needed further assistance;
 - iii. Food and green waste will be collected separately as previously approved;
 - iv. That grey bags are re-introduced for residual waste;
 - v. That changes are introduced between April July 2018;
 - vi. That revenue savings generated from the service change cover the cost of prudential borrowing to allow capital expenditure e.g. changes to the Transfer Stations, purchase of boxes etc.;
 - vii. That Cabinet give approval so the procurement process for the new fleet and design and construction of the Transfer Stations can begin;
 - viii. Delegate approval for decision making to the Head of Waste & Street Services in consultation with the Cabinet Member & S151 Officer on any technical details, subject to changes remaining within the existing funding envelope of the service; and
 - ix. That Select Committee and Cabinet receive a report on implementation of the service changes after July 2018 quantifying the full benefits and cost incurred and modelled cost of the service for its proposed 7 year life.

RECOMMENDATION

- 3. That Members scrutinise and comment on the proposals outlined in this report.
- 4. That Members agree to a further report later in 2018 quantifying the full benefits and costs associated with the change.

THE FUTURE SERVICE PROPOSAL

5. It must be stressed that the foundations of the existing service which is so well regarded and high performing are being maintained.



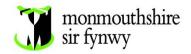
- 6. **Red bags** will continue to be collected for "fibres" i.e. paper and card. Being placed in bags ensures the material is kept dry and is a quality product to be delivered to market. Our market intelligence has also told us that there is a market for mixed paper and card collected in bags.
- 7. Purple bags will continue to be collected for "containers" i.e. plastics and metals. These materials are easily collected together and separated by technology. Officers are currently in discussion with neighbouring LAs who already collect plastics and metals together (albeit in a box) to determine joint working possibilities on pooling the material to achieve economies of scale and improve market attractiveness with greater volumes. Plastics are of little economic value (but environmentally great to recycle) and the metal markets are currently depressed so this material stream will be at a cost to MCC but far less (50-70% less than current prices) than current costs.
- 8. Glass will be collected in a green box. As trialled and previously reported to Committee glass collected with other comingled material is not being recycled in line with the waste hierarchy and is primarily used for aggregate rather than glass to glass recycling. Monmouthshire collects a lot of glass. At peak times glass has been 30-40% of total kerbside recyclate collected which is way above average from other LAs. Whilst MRFs have accepted glass in the past most MRF providers would give a far better price if glass was excluded from the recycled stream. A separate glass collection will ensure that glass becomes an income stream for the authority rather than an excessive cost. Glass needs to be collected in a box for a number of reasons. There is no market interest for glass collected in a bag and using a bag splitter will simply help crush the glass defeating the object of collecting it separately in the first place. Reusable bags for glass were tested and failed H&S tests for manual handling.
- 9. Grey bags will be used for residual waste. Feedback from householders has been that the grey bag are a stark reminder of the need to recycle. The grey bags are also slightly smaller than some of the refuse bags that can be bought from supermarkets and therefore restricting them to two will contain the amount of residual waste collected at kerbside. It makes modelling for future residual waste collections easier to predict and allows MCC to easily control households which have an additional bag allowance due to the number living at their property.
- 10. Food and garden waste will be collected as now, but will be placed into separate vehicles allowing the food to go to Anaerobic Digestion and the garden waste to open windrow processing. This change will deliver both economic and environmental improvements as previously identified in Committee and Council reports.

RESULTS FROM THE TRIAL

11. The trial which started on 19th September 2016 has collated a wealth of customer, financial and operational data as well as market intelligence to inform the final recommendation.

Our Public

- 12. One of the primary objectives of the trial was to determine if performance was affected with the introduction of a box for glass. Performance and the views of the public were measured in a number of ways:
 - Quantitative
 - a survey to 1,000 participating households (out of 6,500) was sent out 3 months into the trial to establish views on the box and the recycling service



- o satisfaction levels of the service have been measured bi-annually since 2012
- data was collated on number of complaints and queries received at trial inception

Qualitative

 Conversations with residents (from door knocking, engagement events, meetings etc.) have been reported in a framework to allow common themes and messages to be easily identified to inform the future strategy

Participation

Householders use of the recycling service is measured over a 3 week period and regular participation is based on presenting recycling at least twice over the 3 weeks monitored. Participation was undertaken before and during the trial to determine if there was a de/increase in residents use of the new service model.

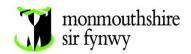
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 Residual, recycling and glass bags were taken anonymously for analysis pre and during the trial. The percentages of each material type was measured to be able to monitor whether the glass box affected people's approach to recycling and whether the amount of recycling increased in the residual waste stream.

Quantitative Results

13. 1,000 random surveys were issued to the trial area and was placed on line. In total 410 residents responded with 58 completed on line and 352 returned. The table below gives the results:

	Question	Option	Responses
1.	Were you happy with the information leaflet you received before the glass trial began?	Yes	95%
		No	5%
2.	Were you happy with the information leaflet you received with the box?	Yes	94%
		No	6%
3.	Do the grey bags increase the likelihood of you recycling more?	More likely	36%
		Less likely	2%
		No effect	62%
4.	Do you use the glass recycling box?	Yes	94%
		No	6%
5.	How often do you put the box out for collection?	Weekly	25%
		Fortnightly	28%
		Less often	47%
6.	Are you happy with the container?	Yes	70%
		No	30%



7.	Are you happy with the new recycling service?	Yes	86%
		No	14%

- 14. Most critical for the review was the acceptability of the box and whether it had a negative impact on people's willingness to recycle as the Committee was concerned that the public would not want change. Pleasingly the results are very positive in this regard and indicate that there was widespread understanding of the need for the box, there was high usage of it, with 70% of people being happy with the container and 86% of people happy with the service overall all. The detailed report with the findings is at Appendix 1.
- 15. The service also collated information concerning queries, complaints and concerns at the inception of and during the trial. 6,500 households were included in the trial and we received the following:

I want a caddy	Box not delivered	Replacement box as damaged/stole n/lost	Collect box as too many delivered/I've had a caddy	I want a lid for my box	Where do I put broken glass?	Other
12	75	11	7	4	15	3

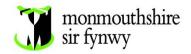
16. One other query we received particularly from people was the issue of carrying the box if they struggled with mobility. 45 queries, thereby 0.6% of participating households requested a different receptacle. Following engagement and consultation it was determined that a caddy – the same as the outdoor food waste caddy was suitable, both for the resident and for our crews. It is therefore proposed that this is offered in the literature and a green glass caddy will be delivered on a request only basis during the roll out of the new service in 2018.

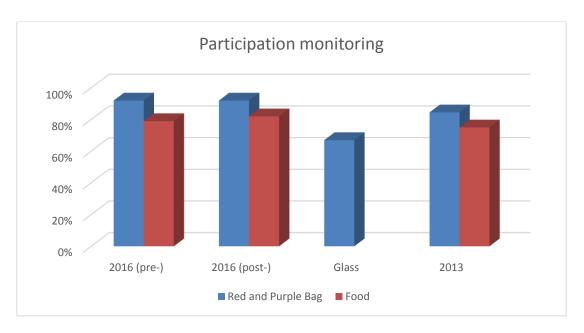
Qualitative Results

- 17. As well as issuing a survey Education Officers spoke to 186 people through door knocking or answering queries during the trial. Conversations were captured anonymously and then analysed within a framework to complement the quantitative data captured through the survey. Key responses were:
 - Generally happy with the new scheme (183/186)
 - Whilst it created more work residents understood why
 - Box was too big but when it was explained the box didn't have to be placed out weekly residents were content
 - 10 people would have liked a lid for the box
 - 38 people specifically stated that they were only placing the box out monthly
 - Liked the separation of the red and purple bags on the lorry it made sense

Participation

18. Monitoring in summer 2016 pre-glass trial and during the glass trial in November 2016 shows a slight increase in participation in food and dry recycling compared to 2013.

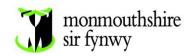


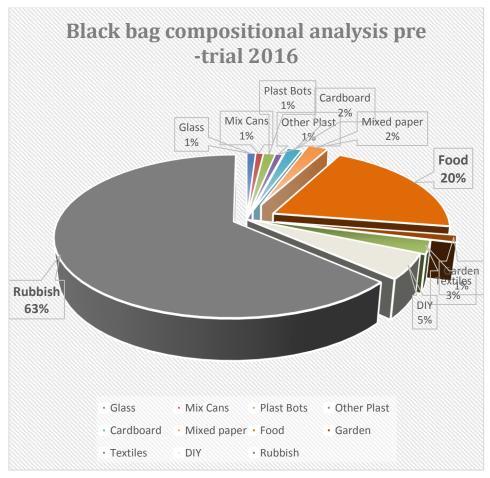


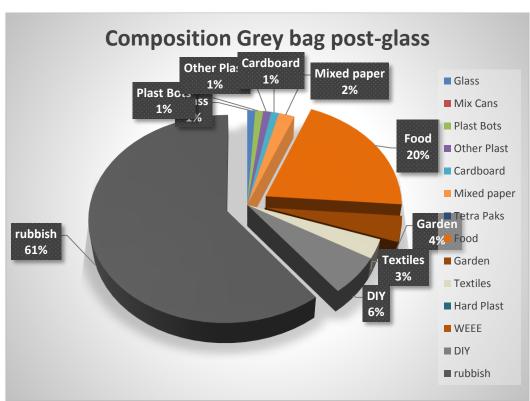
- 19. MCC already has a very high participation for dry recycling and did not anticipate an increase with the trial. What was encouraging though was that the introduction of a box for glass did not deter or put people off recycling overall and residents continued to use the red and purple bags as before.
- 20. Interestingly it was noted that the glass box was not placed out every week. Householders appeared to place the box out when it was full or partially full rather than placing it out with just a few items in it.
- 21. Food waste participation slightly increased through the trial and this we believe is down to the reintroduction of the grey bags despite some residents perception that the grey bags didn't make much of a difference.

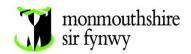
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22. Capture rates were analysed to ensure that the quantum of recycling did not increase in the residual waste as a consequence of the trial. Committee was concerned that the public would not take another change and therefore lose confidence in the recycling service overall. The charts below illustrate effectively that MCC continued to achieve a high recycling rate and residents were just as diligent with their recycling during as before the trial. Importantly glass quantum did not change and was not affected with the introduction of a box which was a concern from Members of the Committee before the trial.









- 23. Of relevance is the reduction in rubbish in the grey bag during the trial indicating the effectiveness of the grey bags in changing behaviour by residents.
- 24. The analysis has shown however that there is still 20% of food waste in the residual waste stream collected at kerbside and 17% of the residual waste taken by residents to Llanfoist CA site. Whilst food participation improved during the trial, we believe down to the re-introduction of the grey bags, food waste participation is still lower than dry recycling. Therefore the service will prioritise communications and campaigns to extract as much of this food waste as possible to ensure we meet the 70% target by 2024-25.

Conclusion of Impact of Trial on Our Public

25. Our residents responded brilliantly as always, to the trial. Participation and dry recycling performance was not negatively affected and indeed for food and residual waste it improved. Residents fully understood why glass was being collected separately and the separation of the red and purple bags at collection also appeared to give more confidence that we were truly recycling. In the past the service has had many queries about the red/purple bags being mixed at collection with some people doubting our recycling credentials. With 3 materials being kept separate it will be very clear to the public, along with the re-introduction of the grey bags, that MCC is serious about recycling.

Operational Results

26. Through the trial it was agreed that a number of options would be considered so that a fully considered final option was proposed. The options modelled were:

• Option 0 current service

Option 1a
 Vehicle 1 weekly glass, red & purple separate

Vehicle 2 weekly food and green separate

Vehicle 3 fortnightly residual

• Option 1 b Vehicle 1 weekly glass & comingled paper, card, plastics & metal (all in one bag)

Vehicle 2 weekly food and green separate

Vehicle 3 fortnightly residual

Option 2 a Vehicle 1 weekly food, red & purple separate

Vehicle 2 weekly green

Vehicle 3 fortnightly glass & residual

Option 2 b
 Vehicle 1 weekly food, & comingled paper, card, plastics & metal

Vehicle 2 weekly green

Vehicle 3 fortnightly glass & residual

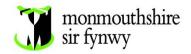
Option 3 Vehicle 1 weekly kerbside sort

(option a & b) Vehicle 2 weekly green

Vehicle 3 fortnightly glass & residual

Difference between option 3a and b was the containers used.

27. Option 1a was approved for the trial on the basis that good data could be collected for options 1b, 2a and 2b. Option c has not been trialled but kerbside sort data is based on figures provided by LAs in Wales of similar demographic to Monmouthshire and are therefore robust and modelled with confidence.



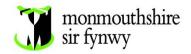
- 28. MCC worked with Dennis, the current vehicle provider to trial a bespoke vehicle "twin back with pod". Feedback from our crews were:
 - i. Liked the separation of materials
 - ii. The glass box was appropriate
 - iii. Rounds were slower and therefore could not service the same amount of properties as the current service model, which was a frustration as crews pride themselves on their productivity and efficiency, but on the flip side a smaller round will enable our crews to be more proactive on material quality.
 - iv. More H&S issues to be considered e.g. side loading
 - v. Depositing glass into the Pod was noisier than existing practice.
 - vi. The vehicle had a few technical issues but there was recognition this was an older vehicle and a new fleet would not give the same problems
- 29. A full H&S assessment process was followed and safe working practices introduced and continually reviewed to ensure the service learnt lessons and designing a service for full roll out that will be safe and fit for purpose.
- 30. One of the key influencers on cost is the number of staff and vehicles needed to service the county. Using our Webaspx software crew and lorry numbers have been modelled which then informs the overall costing of the authority. For the options the numbers of crews and vehicles are:

<u>Vehicle numbers</u>							
	extra properties and		OPTION 1b: weekly glass,				Option 3b: kerbsort trolley box
Totals	17	22	21	17	17	29	31
Crew numbers							
Driver	16	19	19	15	15	25	27
Loader	33	40	40	30	30	43	47
Totals	49	59	59	45	45	68	74

31. As can be seen from the above option 2a which is the proposed model requires the same number of vehicles as the existing service thereby not increasing fleet costs, and actually sees a reduction in crew numbers.

Collecting Glass Fortnightly

- 32. The trial collected glass weekly as the aim was to cause as little disruption as possible to the public and to gather as much data and evidence to inform the future service model. As reported above only 25% of residents stated that they were placing the box out weekly with 75% placing it out fortnightly or less and through the discussions with residents a small number (38) stated they believed they would only place it out monthly.
- 33. The tonnage data collected showed that glass volumes did not change and therefore a fortnightly collection is more suitable, particularly as it can be collected at the same time as residual waste. This allows the same vehicle to be procured for the dry and residual collections giving the service operational flexibility and efficiency. It is appreciated this is a major change for residents but the engagement work has demonstrated that the residents themselves have identified that glass does not need to be collected



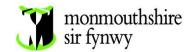
weekly. By collecting the food with the red/purple bags it allows garden waste to become a stand alone service thereby giving it more flexibility for future policy changes and ensure that the collection charge fully covers the costs incurred. Finally it is important to note that collecting glass weekly increases the costs and as shown below would be more expensive than other collection options thereby ruling it out as an option moving forward.

Managing our Materials - Ensuring Quality and Cost Effectiveness

- 34. One of the key considerations for the review was to explore how costs could be reduced whilst ensuring that we met environmental and legislative standards on how the material should be collected. Central to this is the TEEP test and ensuring that we are delivering "quality materials" to market as without this being met MCC would be vulnerable to action from NRW as the legal monitoring authority and at worst forced to change collection method.
- 35. From previous analysis reported to Committee and Cabinet (in Dec 2014) it was identified that all the materials apart from glass could be demonstrated to meet the quality market test but potentially could be improved with further separation. As continually reported glass collected at kerbside was primarily going to aggregate recycling. The separately collected glass from the trial was able to be sent to glass to glass recycling thereby improving the environmental and ecological profile of the service. Despite being a heavy material and widely recycled glass is not a high income material. At best we would hope to achieve an income of £10 per tonne but that is still an income rather than a cost which it is currently.
- 36. Paper / card:- with the complete separation from the purple bags there will be no requirement for a comingled MRF to be used and the red bags will be able to be sent to a fibres processor facility for sorting and onward sale to good quality end markets within the UK. Soft market testing and samples of the red bags from the trial have been undertaken and have demonstrated that an income of c. £30 per tonne (net cost after haulage) would be a reasonable assumption on which to base the financial model.
- 37. Plastics & Cans:- this material is widely collected together in kerbside sort systems. There is no proposed difference for our residents as we will continue to use of bags for the material's collection. From analysis we do have to monitor contamination in these bags as if our residents are likely to misuse the recycling service analysis has demonstrated that it will be the purple bags that is used rather than red. Discussions have begun with neighbouring LAs who already collect plastics and metals together and have sorting technology to establish if there are opportunities for joint working. These LAs already source good quality markets for the materials. In the short term whilst these opportunities are explored the market testing has demonstrated a significant saving of a sorting processing facility because the glass has been removed and good quality recycling markets can be sourced for the plastics and metals. Whilst it would still be a cost to us due to transporting very light material, for modelling purposes we are forecasting a worst case cost of £45 per tonne which if the material is of a really good quality could drop to £20 per tonne. As this material is so light the forecasted annual expenditure is £240k as opposed to £700k for the MRF presently.

Financial Modelling

- 38. As well as ensuring that the service meets statutory environmental legislation it is critical that the service remains affordable for MCC in light of ever challenging budget settlements. The service has delivered savings of 30%+ from its 2012 base budget but in 2016-17 had an injection of funding in light of the struggling MRF market and the need to cover hire vehicle costs whilst the review was completed.
- 39. The modelling demonstrates that the proposed collection method (2a) is the most cost effective:



	OPTION 0: as is with extra properties and rounds reduced	OPTION 1a: weekly glass, red and purple	OPTION 1b: weekly glass, comingled	OPTION 2a: fortnightly glass, red and purple	OPTION 2b: fortnightly glass, comingled	Option 3a: kerbsort separate boxes	Option 3b: kerbsort trolley box
Total no vehicles	17	22	21	17	17	29	31
Total no crew	49	59	59	45	45	68	74
£ Vehicles/yr	£306,498.34	£476,984.06	£473,571.43	£400,714.29	£400,714.29	£451,750.13	£487,586.23
£ Crew/yr	£1,305,000.00	£1,570,000.00	£1,570,000.00	£1,200,000.00	£1,200,000.00	£1,825,000.00	£1,978,582.90
£ Receptacles/yr	£309,540.00	£342,066.80	£342,066.80	£342,066.80	£342,066.80	£242,178.70	£326,772.30
Income/yr	£686,562.50	£57,421.98	£263,692.81	£57,421.98	£263,692.81	-£507,457.76	-£507,457.76
Total annual cost	£2,607,601	£2,446,473	£2,649,331	£2,000,203	£2,206,474	£2,011,471	£2,285,484

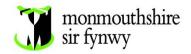
- 40. It must be stressed these are modelled costs of just managing the kerbside element of the service so exclude CA sites, contract expenditure etc.
- 41. Modelling against the current service budget has indicated the following for the proposed option (2a)

	16-17	Optimised current	Future			
	budgeted	service cost - what we	State			
	cost	would need	Option 2a			
Staff	2,535,378	2,645,378	2,560,378			
Premises	38,500	38,500	38,500			
Transport	1,236,159	1,306,159	1,306,159			
Supplies	551,000	551,000	357,000			
Contracts	4,074,215	3,997,215	3,547,105			
Ехр	8,435,252	8,538,252	7,809,143			
Grant	-1847884	-1847884	-1847884			
Trade waste	-£506,171	-£506,171	-£506,171			
Garden waste	-£296,250	-£296,250	-£296,250			
Sale of recycling	0	0	-179030.2			
Income	-2650305	-2650305	-2829335			
Budget	5,784,947	5,887,947	4,979,807			
all the above exclude capital investment at Transfer Stations						
saving to cover cost of pru borrowing for capital						
impl	ementation	costs will be required				

42. It must be noted that the above indicative savings are gross and exclude the costs the service will incur from prudential borrowing. However indications from finance is that the borrowing required would still deliver a saving. As per recommendation 7 it is proposed that delegated authority is given to the head of Service in consultation with the Cabinet Member and S151 officer to execute the service proposal as long as all costs (incl. prudential borrowing) remain within the existing funding envelope.

Explaining the Cost Difference – Income / Cost of Managing Materials

43. There are two main expenditure areas which overall influence the final recommendation: operational (crews & vehicles) and the cost/income of managing materials. The proposed option should utilise the same number of vehicles as presently thereby not increasing the fleet expenditure. Critical therefore is the cost of managing materials which is the major contributor to a financial saving and improvement in environmental performance.



44. The table below demonstrates the financial analysis for managing the kerbside materials in a different way. Members need to note that the modelling is based on actual for the current service (option 0) and worst case scenario particularly for income levels. Option 2a is the recommended option and as clearly demonstrated there is a £629k saving on managing materials compared to the current system.

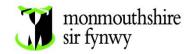
Income/ Expenditure Worst case scenario		OPTION 1a	OPTION 1b	OPTION 2a Recommended Option		Option 3a	Option 3b
Red		-£155,475.78	C207 247 10	-£155,475.78	C207 247 10		
Purple	£686,562.50	£236,452.13	£287,247.19	£236,452.13	£287,247.19		
Glass		-£23,554.38	-£23,554.38	-£23,554.38	-£23,554.38		
Kerbside						-£507,458.00	-£507,458.00
Total	£686,562.50	£57,421.98	£263,692.81	£57,421.98	£263,692.81	-£507,458.00	-£507,458.00

Does the Service Meet the Quality & TEEP tests

- 45. As well as looking looking to secure the most economic and publicly accepting service profile this review has also been about ensuring MCC meets its statutory, environmental and sustainable obligations. As highlighted above the end markets for glass, paper and card will improve through the additional separation.
- 46. Guidance on the legislative position is that materials *should* be separately collected and if not should be TEEP and meet the quality standards of the industry. MCC's stance as outlined in Dec 2014 has been that through analysis of end destinations for materials we can evidence if we are meeting the quality standards. Below is the conclusion of our analysis on how the proposed model meets legal requirements.
 - Meet Quality Standards:-
 - Glass will go to glass recycling.
 - Paper/card will go to fibres reprocessing
 - Plastics/metals easily separated and sent to separate markets
 - Technical:- technically any of the service options modelled are feasible given the demography and topography of Monmouthshire
 - Environmentally:- as identified above the change to end destinations will improve the environmental performance of the service compared to current performance
 - Economically:- it is believed the proposed option is the most economically beneficial for the service
 - Practicable:- any of the service options are feasible but the trial has demonstrated that the proposed option is practicable from an operational and importantly a residents perspective.

Has the Review met its Objectives

47. Select Committee has been fully engaged in the development of the review and has received regular reports through its development. At the very beginning Committee received a project plan which clearly articulated the intended outcomes of the review.



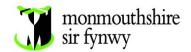
- For the service's outcomes to be aligned to the community's outcomes and the community take ownership of the resources they produce and understand the choices the Council make when designing and delivering a service.
- The service will have a vision and plan of how it will meet the strategic outcomes of MCC and its Community.
- For the service to determine how it can balance the demands of MCC's outcomes as well as align to the national agenda of sustainable waste management and application of the waste hierarchy.
- 48. It is timely for these outcomes to be reviewed and assess whether they have been achieved.
- 49. Engagement and consultation has been a key feature of the review, and other initiatives the service has introduced over the review period. There have been regular surveys, stakeholder events, door knocking initiatives and monitoring of participation in recycling collections to understand how our residents actually use our services. There is confidence from the information received during the pilot that residents understand why there needs to be change and they have provided us with valuable feedback on how we can improve our engagement to ensure a successful county wide service roll out. There is a comprehensive account of all engagement activity in the strategy document.
- 50. The service now has a very clear vision on what is wants to achieve, what its purpose is and how the service contributes to the wider goals and priorities of MCC. Future service plans and actions will be tailored and measured against our strategic purpose which are:
 - Economic benefit/value of the service and the resources we manage are maximised
 - Communities, businesses and members of the public are stimulated to do more for themselves
 - The general public is informed and engaged with the service

These outcomes are underpinned by:

the service is sustainable and environmentally and economically efficient

51. The review has continuously wrestled with the conundrum between local priorities and national policy recognising that there has at times been a stark difference, not on outcomes, but on how they should be achieved. The final proposal carefully balances the two and has managed to ensure WG understanding and appreciation of our proposed approach. To ensure that the final service option clearly delivers against the service outcomes Members agreed an evaluation matrix which defined the outcomes into key criteria. For reference purposes the evaluation matrix is at Appendix 2. Importantly independent evaluation by officers gave the following results:

	Current Service	Proposed option	Kerbside Sort
Score	42	50	46
	3rd	1st	2nd



52. It therefore is concluded that the review has met the outcomes it set out to achieve and the service option will deliver against the vision set by Members at the beginning of the review.

Timescales of Implementation

53. It is proposed that the service changes are introduced April – July 2018. From April 2018 the Council has to collect food waste separately to meets it obligations through the Heads of the Valleys AD partnership. It is anticipated that the dry recycling service would not be ready for roll out then and given the number of bank holidays in April and May (which impact on collection days) these are not good months for new service change. Therefore it is proposed that the service will look to issue the new service literature and infrastructure over May 2018 with a change- over date of June 11th.

Financial Implications

54. As detailed in the report

Future Generations & Well Being Assessment

55. The report seeks member feedback prior to consideration by Cabinet. When Cabinet receive the report a full FGEA will be presented.

Safeguarding

56. Not applicable

Background Papers:

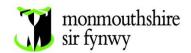
57. As previously presented to Select Committee and to referred to in the body of the report.

CONCLUSION

58. That through a robust process of option appraisal, public engagement, market intelligence and financial modelling that the proposed service model is approved for rollout in 2018.

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Waste & Street Services glass recycling trial survey results

Responses:

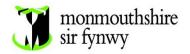
Total responses: 410

Online responses: 58 Postal responses: 352

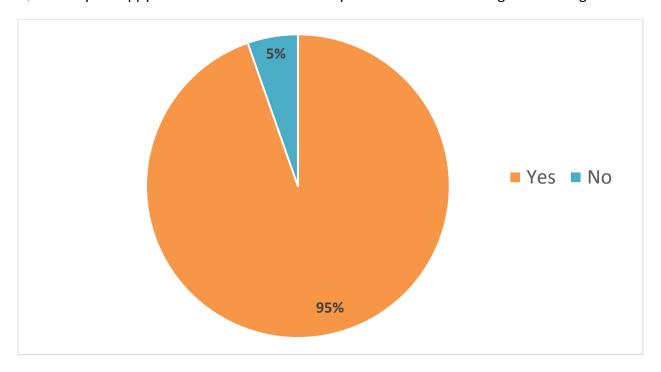
Welsh responses: 10 English responses: 400

Results:

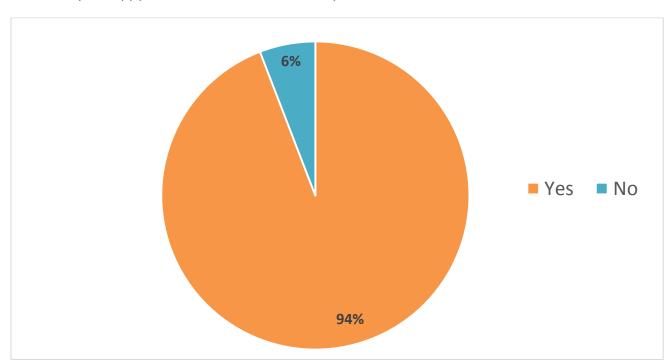
Q	Question	Response	Number of responses
1	Were you happy with the information leaflet you received before the glass trial began?	Yes	388
	grant and grant and grant	No	22
2	Were you happy with the information leaflet you received with the box?	Yes	386
		No	24
3	Do the grey bags increase the likelihood of you recycling more?	More likely	148
	, 0	Less likely	8
		No effect	254
4	Do you use the glass recycling box?	Yes	385
		No	25
5	How often do you put the box out for collection?	Weekly	103
		Fortnightly	112
		Less often	195
6	Are you happy with the container?	Yes	289
		No	121
7	Are you happy with the new recycling service?	Yes	354
		No	56

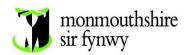


Q1. Were you happy with the information leaflet you received before the glass trial began?

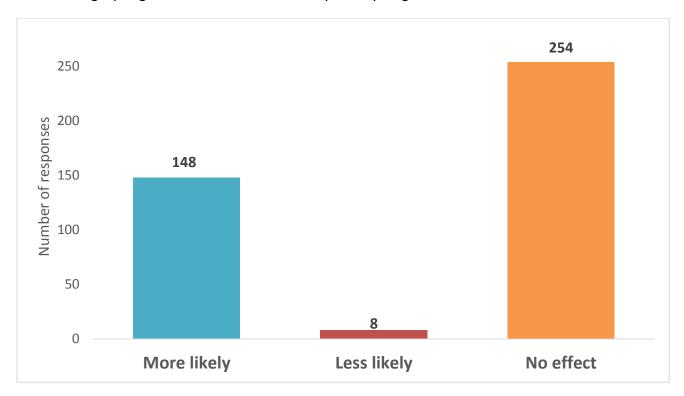


Q2. Were you happy with the information leaflet you received with the box?

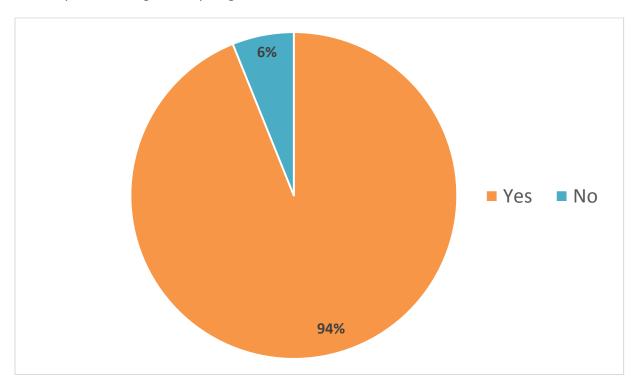


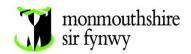


Q3. Do the grey bags increase the likelihood of you recycling more?

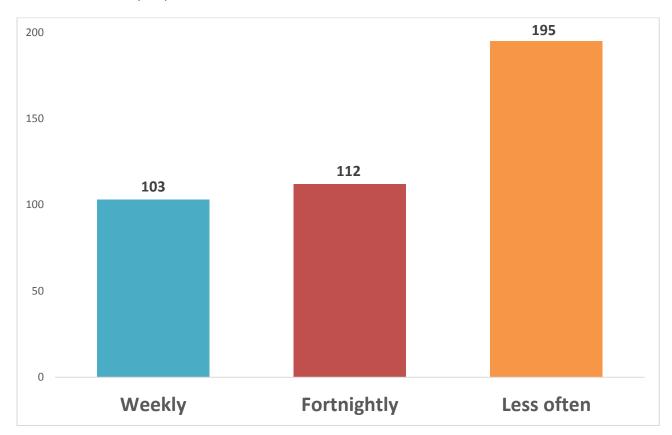


Q4. Do you use the glass recycling box?

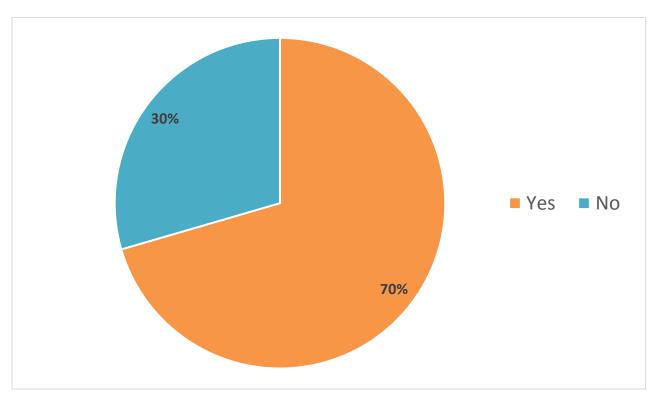


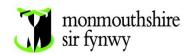


Q5. How often do you put the box out for collection?

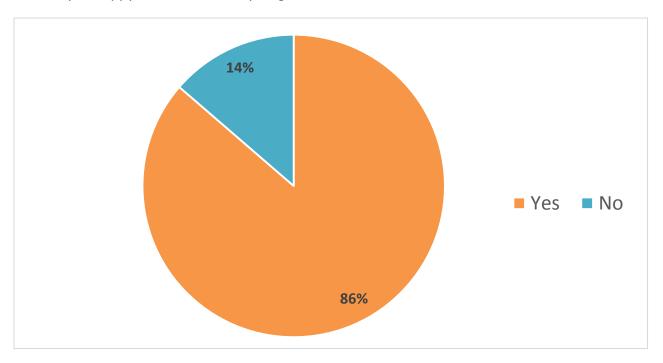


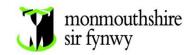
Q6. Are you happy with the container?



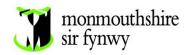


Q7. Are you happy with the new recycling service?





Appendix 2: Evaluation Matrix Level 1 Criteria ('Vision')	Weight	Level 2 Criteria	Weight	Level 3 Criteria	Weight
Facularia		Value of resources is	17.92	Income is generated from valuable materials/resources.	9.54
Economic benefit/value of	35.00	maximised.	17.92	Cost of disposing of non-valuable materials/resources is minimised.	8.38
service is	35.00	Cost of service delivery		An economically efficient service profile. Is adopted.	6.70
maximised		is minimised.	17.08	Contracts and partnerships are designed to offer best value for Monmouthshire.	10.38
The service is		Material management is undertaken in a sustainable and	9.33	Materials are managed in a way that facilitates high quality recovery and recycling in terms of application of the waste hierarchy and/or product life cycle thinking.	4.33
		environmentally efficient way*		Ecological footprint is minimised (One Wales: One Planet by 2050).	2.17
The service is sustainable and				Resource security is ensured.	2.83
environmentally	19.25			An environmentally efficient service profile is adopted.	3.17
efficient*.		Waste operations do not endanger human	- -	No fly tipping resultant from waste operations.	2.08
		health or the environment*	9.92	No litter caused by waste operations – ie keep streets clean.	2.17
		environment		Service delivery method meets national health and safety standards	2.50
Communities,		Community		Community reduction is maximised.	1.50
businesses and		Community schemes	6.08	Community reuse is maximised.	1.67
members of		are supported and facilitated.	0.06	Community recycling is maximised.	1.67
public are	20.08	racintateu.		Community composting is maximised.	1.25
stimulated and	20.00	Businesses are		SMEs are supported to maximise reduction, reuse and recycling.	2.83
supported to do more for themselves.		motivated to engage in reducing, reusing and recycling waste.		Manufacturers and businesses in Monmouthshire are driven to consider and implement resource management practices in all aspects of production.	2.50



		Householders are		Home composting is maximised.	3.75	
		encouraged to do more in the home.	8.67	Reduction and reuse of materials within the home environment is maximised.	4.92	
General public is informed and engaged with the service.	25 67	Service well		Public understand how to get maximum use out of the services available.	6.25	
			communicated to public	13.67	Public understand reasons and benefits for sustainable resource management.	7.42
		Positive public		High participation in services	5.83	
		acceptance of service 12.00		High recycling rates achieved	6.17	

