

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

**DIRECTORATE:** Operations / Waste & Street Services

**MEETING:** Council

**DATE:** 9<sup>th</sup> March 2017

**DIVISION/WARDS AFFECTED**: All

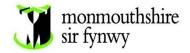
#### **PURPOSE**

1. To seek Council approval for the future configuration of the kerbside recycling service 2018-2025.

#### RECOMMENDATION

#### 2. That Council approves:-

- I. 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 residents raise concern over ability to carry a box the service will offer a green caddy (similar to the outside food waste caddy) and be given further assistance if needed;
- III. Food and green waste will be collected separately as previously approved;
- IV. That changes are introduced between April July 2018;
- V. 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 subject to a further report to full council regarding the capital investment required;
- VI. The overall service design so that the procurement process for the new fleet and design and construction of the Transfer Stations can begin;
- VII. 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



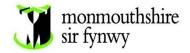
- VIII. That Select Committee and Council receive a report on implementation of the service changes after July 2018 quantifying the full benefits and cost incurred, and modelled cost of the service for its proposed 7 year life.
- IX. That grey bags for the collection of residual waste be reviewed with a view to determining whether it would be beneficial to invest in more waste education and awareness than infrastructure to increase recycling and report to Cabinet via Select in Autumn 2017.

#### **BACKGROUND**

- 3.1 MCC has carried out a robust strategic review of its recycling service which has been to Select Committee and Cabinet to ensure there is wide understanding and ownership of why any recommendations for change would be made. The full background to the review and the process that has been followed was reported to Cabinet on 16<sup>th</sup> March 2016 when the approval was sought to initiate a trial on separate glass collections. The report can be accessed here: <a href="https://democracy.monmouthshire.gov.uk/ieListDocuments.aspx?Cld=144&Mld=249">https://democracy.monmouthshire.gov.uk/ieListDocuments.aspx?Cld=144&Mld=249</a>
- 3.2 The trial of 6,500 householders was proposed to allow the service to assess whether there were financial, environmental and also community benefits from changing the way recyclate was collected. This report reports on the outcome of the trial and recommends the future configuration of the recycling service for the next 7 years (as a minimum).
- 3.3 Council should note that MCC would not be able to produce such an evidenced report without the diligence of both its public and its staff. As always Monmouthshire residents responded brilliantly to the trial. They engaged, they participated and they gave feedback which give confidence that the proposal is fit for purpose and right for Monmouthshire. MCC staff worked over and above to ensure that residents were able to clearly understand what was expected of them and worked as a team to pull together all the core data to inform this report to once more given confidence that recommendations are based on evidence and data.

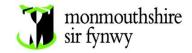
#### **KEY ISSUES - THE FUTURE SERVICE PROPOSAL**

- 4.1 It must be stressed that the foundations of the existing service which is so well regarded and high performing are being maintained.
- 4.2 Red bags will continue to be used 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 based on an income strategy for mixed



paper and card collected in bags, and both materials would be recycled in such a manner to be classed as closed loop recycling (e.g. paper to paper) in line with environmental best practice and WG policy.

- 4.3 **Purple bags** will continue to be used 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. The current modelling is based on transporting the material to the Midlands and therefore if local markets are sourced a more favourable economic profile maybe achieved.
- 4.4 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 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.
- 4.5 **Grey bags** will be reviewed for residual waste. The MCC supplied grey bags were slightly smaller than some of the refuse bags that can be bought from supermarkets and therefore restricting them to two would contain the amount of residual waste collected at kerbside. Using grey bags makes modelling for future residual waste collections easier to predict and allows MCC to more easily monitor households which have an additional bag allowance due to the number living at their property. The findings from the trial on the benefit of Council supplied bags, at a cost of £80,000 was not conclusive. The public did not think that it impacted on their behaviour where as some of the data identified that food waste participation increased and residual tonnage decreased. How much this was due to targeted communications through the pilot area and the supply of grey bags is to be explored in more detail. At its session in January 2017 Strong Communities Select Committee requested that further work be undertaken prior to a formal decision being made. This work is to be



undertaken over 2017 and will be reported through the Autumn to ensure that the public have a strong and consistent message when the new service is rolled out in 2018.

4.6 **Food and garden waste** will be presented by the public as now. However with the proposed collection method food will be collected on the same vehicle as red/purple bags and garden waste will move to a stand-alone service. This will allow 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**

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

#### **Our Public**

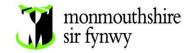
4.8 One of the primary objectives of the trial was to determine if performance was affected with the introduction of a box for glass. Performance and the views of the public were measured in a number of ways:

#### 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
- 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

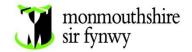


- Participation:- Householders' use of the recycling service is measured over a 3 week period and regular participation is based on presenting recycling at least twice over the 3 weeks monitored. Participation monitoring was undertaken before and during the trial to determine if there was a de/increase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

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

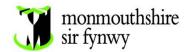
	Question	Option	Responses
1.	Were you happy with the information leaflet you received before the glass trial began?	Yes	95%
	g g	No	5%
2.	Were you happy with the information leaflet you received with the box?	Yes	94%
		No	6%
3.	Do the grey bags increase the likelihood of you recycling more?	More likely	36%
	more:		2%
		No effect	62%
4.	Do you use the glass recycling box?	Yes	94%



	Question	Option	Responses
		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%

- 4.9 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 Select 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. The detailed report of the findings is at Appendix 1.
- 4.10 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	Replacement box	Collect box as too many	I want a	Where do I	Other
instead of a	delivered	was	delivered/I've had a	lid for	put broken	
box		damaged/stolen/lost	caddy	my box	glass?	



12	75	11	7	4	15	3

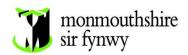
4.11 One query we received particularly was the issue of carrying the box if a resident had mobility problems. 45 queries, thereby 0.6% of participating households requested a different receptacle. Following engagement and consultation it was determined that a caddy – the same as the outdoor food waste 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. We are aware that caddy manufacturers are currently developing a specific handled-caddy type box for glass and we have requested samples. The main difference is that it doesn't have a lid and has a few holes in the bottom to allow water to escape.

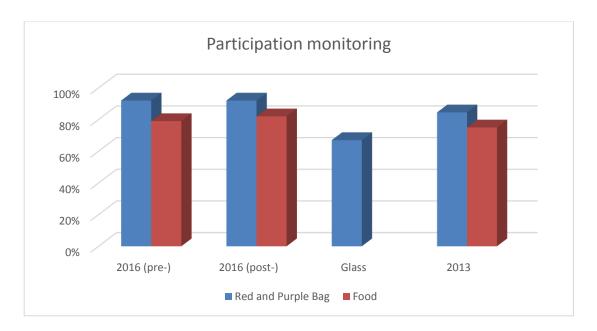
#### **Qualitative Results**

- 4.12 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:
  - o Generally happy with the new scheme (183/186)
  - Whilst it created more work residents understood why
  - O Box was too big but when it was explained the box didn't have to be placed out weekly residents were content
  - o 10 people would have liked a lid for the box
  - o 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 Monitoring**

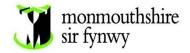
4.13 Monitoring in summer 2016 before and during the glass trial in November 2016 shows a slight increase in participation in food and dry recycling compared to 2013.



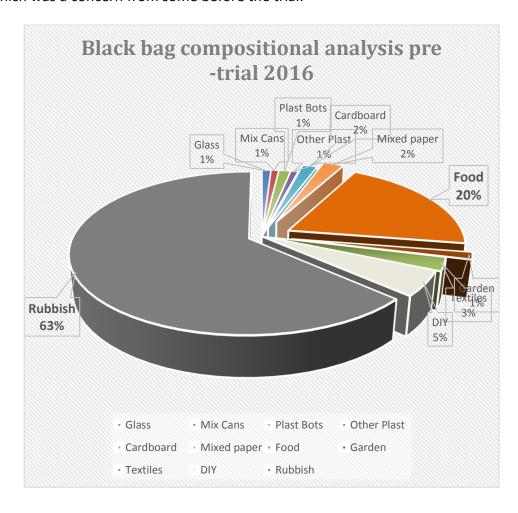


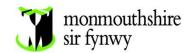
- 4.14 MCC already has a very high participation for dry recycling and did not anticipate an increase with the trial. What was encouraging though was that the introduction of a box for glass did not deter or put people off recycling overall and residents continued to use the red and purple bags as before.
- 4.15 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.
- 4.16 Food waste participation slightly increased through the trial and this we believe is down to the re-introduction of the grey bags despite some residents' perception that the grey bags didn't make much of a difference.

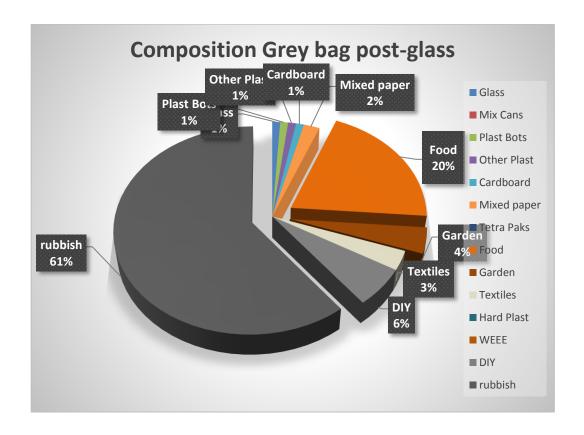
Capture Analysis



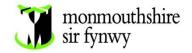
4.17 Capture rates were analysed to ensure that the quantum of recycling did not increase in the residual waste as a consequence of the trial. Scrutiny was concerned that the public would not be favourable to another change and therefore lose confidence in the recycling service overall. The charts below 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 some before the trial.







- 4.18 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.
- 4.19 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-



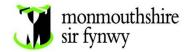
introduction of the grey bags, food waste participation is still lower than dry recycling. Therefore the service will prioritise communications and campaigns to extract as much of this food waste as possible to ensure we meet the 70% target by 2024-25.

#### **Conclusion of Impact of Trial on Our Public**

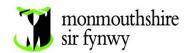
4.20 Our residents responded brilliantly as always, to the trial. Participation and dry recycling performance was not negatively affected and indeed for food and residual waste it improved. Residents fully understood why glass was being collected separately and the separation of the red and purple bags 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 point of collection with some people doubting our recycling credentials. With 3 materials being kept separate it will be very clear to the public that MCC is serious about recycling.

#### **Operational Results**

- 4.21 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 (The Trial)
    - Vehicle 1 weekly glass, red & purple separate
    - o 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 2a
    - Vehicle 1 weekly food, red & purple separate
    - o 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
  - o Vehicle 1 weekly kerbside sort
  - o Vehicle 2 weekly green
  - Vehicle 3 fortnightly residual
  - o Difference between option 3a and b was the containers used.
- 4.22 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.
- 4.23 MCC worked with Dennis, the current vehicle provider to trial a bespoke vehicle "twin back with pod". Feedback from our crews was:
  - Liked the separation of materials
  - The glass box was appropriate
  - 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.
  - More H&S issues to be considered e.g. side loading
  - Depositing glass into the Pod was noisier than existing practice.
  - 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
- 4.24 A full H&S assessment process was followed and safe working practices introduced and continually reviewed to ensure the service learnt lessons and will be able to design a service for full roll out that will be safe and fit for purpose.



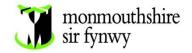
4.25 One of the key influencers on cost is the number of staff and vehicles needed to service the county. Using our Webaspx software crew and lorry numbers have been modelled which then informs the overall costing for the authority. For the options the numbers of crews and vehicles are:

<u>Vehicle nur</u>	mbers						
		OPTION 1a: weekly glass, red and purple	OPTION 1b: weekly glass, comingled	OPTION 2a: fortnightly glass, red and purple		Option 3a: kerbsort separate boxes	Option 3b: kerbsort trolley box
Totals	17	22	21	17	17	29	31
<u>Crew numbers</u>							
Driver	16	19	19	15	15	25	27
Loader	33						
Totals	49	59	59	45	45	68	74

4.26 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 theoretical reduction in crew numbers.

### Collecting Glass Fortnightly

4.27 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



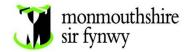
with 75% placing it out fortnightly or less, and through discussions with residents a small number (38) stated they believed they would only place the box out monthly.

#### **Fortnightly Glass**

4.28 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 a similar 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 moving glass to fortnightly it allows food waste to be collected on the same vehicle as red and purple bags. This then also means garden waste can 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

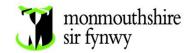
- 4.29 One of the key considerations for the review was to explore how costs could be reduced whilst ensuring that we met environmental and legislative standards on how the material should be collected. Central to this is the TEEP test and ensuring that we are delivering "quality materials" to market 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.
- 4.30 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.



- 4.31 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 directly 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.
- 4.32 Plastics & Cans:- this material is widely collected together in kerbside sort systems (albeit in a box). There is no proposed change for our residents as we will continue to use bags for this material's collection. From analysis, we do have to monitor contamination in these bags, as the purple bags are more likely to be contaminated by residents than the red. Discussions have begun with neighbouring LAs to establish if there are opportunities for joint working as they already collect plastics and metals together and have technology in place to separate the materials before distribution to market. These LAs already source good quality markets for the materials. In the short term whilst these opportunities are being explored in more detail the market testing has demonstrated a significant saving of processing these materials because the glass has been removed and good quality recycling markets can easily 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.

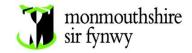
#### Financial Modelling

- 4.33 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.
- 4.34 The modelling demonstrates that the proposed collection method (2a) is the most cost effective:



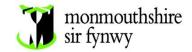
	OPTION 0: as is with extra properties and rounds reduced	OPTION 1a: weekly glass, red and purple	OPTION 1b: weekly glass, comingled	OPTION 2a: fortnightly glass, red and purple	OPTION 2b: fortnightly glass, comingled	Option 3a: kerbsort separate boxes	Option 3b: kerbsort trolley box
Total no vehicles	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

- 4.35 It must be stressed these are modelled costs of just managing the kerbside element of the service so exclude CA sites, contract expenditure etc.
- 4.36 To translate the above into a model which aligns to the current service budget the change has indicated a potential cash saving as evidenced below.



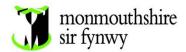
Indica	455,515		
Budget	5,784,947	6,073,572	5,329,432
Income	-2650305	-2494680	-2673710
Sale of recycling	0	0	-179030.2
Garden waste	-£296,250	-£296,250	-£296,250
Trade waste	-£506,171	-£506,171	-£506,171
Grant (future based on 17-18	-1847884	-1692259	-1692259
Ехр	8,435,252	8,568,252	8,003,142
Pru borrowing - boxes	ailliual Coi	sequential	15,000
Pru Borrowing - Five Lanes	annual cor	saguantial	64,000
Contracts	4,074,215	3,997,215	3,547,105
Supplies	551,000	551,000	357,000
Transport	1,236,159	1,336,159	1,336,159
Premises	38,500	38,500	38,500
Staff	2,535,378	2,645,378	2,645,378
		would need	р пол = п
	budgeted cost	cost - what we	State Option 2a
	Existing 16-17	current service	Alternative Future
		Optimised	2017-18 Proposed
		2017-18	

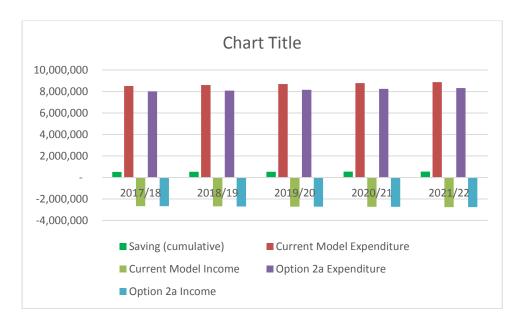
- 4.37 However it must be noted these are indicative costs and are dependent on a number of factors:
  - Outcome of vehicle procurement exercise
  - Outcome of HWRC Contract re-procurement (as reported to Council on 9<sup>th</sup> March 2017)
  - Recycling market performance at time of award of contracts for processing recycling
  - Start-up costs required for service implementation
  - Prudential borrowing interest rate costs at time of execution
  - Cost of capital works at Five Lanes (currently built into the model as £1m)



- 4.38 At Select Committee on 16<sup>th</sup> January 2017 Members requested that the final report demonstrate the potential longer term financial impact of the service change. Therefore officers have worked with finance colleagues and developed a model which applies some assumptions to both the current and future model to demonstrate the potential financial benefit of change. The profile has been done across the next term of the MTFP and consistently demonstrates that there are benefits to be achieved from the change.
- 4.39 There are differences in the longer term model compared to the figures provided above. This is due to:
  - Above is based on 16-17 actual costs and have then optimised the current service to demonstrate need but kept income levels static
  - The data below is based on the projected 17-18 optimised costs of the current service provision with inflation applied
  - The data below inflates income projections in line with the MTFP forecast

	2017/18	2018/19	2019/20	2020/21	2021/22
Saving (cumulative)	521,921	529,397	536,984	544,683	552,498
Current Model Expenditure	8,521,719	8,609,356	8,698,180	8,788,207	8,879,453
Current Model Income	- 2,670,366	- 2,690,928	- 2,712,004	- 2,733,607	- 2,755,750
Option 2a Expenditure	8,003,142	8,082,802	8,163,525	8,245,326	8,328,218
Option 2a Income	- 2,673,710	- 2,693,771	- 2,714,333	- 2,735,409	- 2,757,012

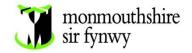




4.40 It is clear from both models that there are potential financial benefits to be achieved by the change. As per recommendation 7 it is proposed that delegated authority is given to the Head of Service in consultation with the Cabinet Member and S151 officer to execute the service proposal as long as all costs (incl. prudential borrowing) remain within the existing funding envelope. The above table strongly evidences the benefits of a service change. However it is difficult at this moment in time, when vehicles haven't been procured and new contracts let for the recycling to give absolute certainty on the level of saving to be generated. Therefore it is proposed that Scrutiny and Council will receive a report in Autumn 2018 with a fully costed plan for the service to build into the MTFP and beyond.

## Explaining the Cost Difference – Income / Cost of Managing Materials

4.41 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.

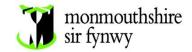


4.42 The table below demonstrates the financial analysis for managing the kerbside materials in a different way. Members need to note that the modelling is based on actual for the current service (option 0) and worst case scenario particularly for income levels. Option 2a is the recommended option and 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 Purple	£686,562.50	- £155,475.78 £236,452.13	£287,247.19	-£155,475.78 £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

- 4.43 As well as looking to secure the most economic and publicly acceptable service profile, this review has also been about ensuring MCC meets its statutory, environmental and sustainability obligations. As highlighted above the end markets for glass, paper and card will improve through additional separation.
- 4.44 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



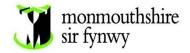
evidence if we are meeting the quality standards. Below is the conclusion of our analysis on how the proposed model meets legal requirements.

#### 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 resident's perspective.
- 4.45 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

#### **Timescales of Implementation**

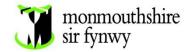


4.46 It is proposed that the service changes are introduced April – July 2018. From April 2018 the Council has to collect food waste separately to meets it obligations through the Heads of the Valleys AD partnership. It is anticipated that the dry recycling service would not be ready for roll out then 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 11<sup>th</sup>. Members will of course be kept fully informed of any implementation proposals.

#### **Risk Management**

4.47 A service change of this magnitude does not come without any risks. A risk register has been developed and is being carefully monitored by the Head of Service with colleagues as they embark on planning the implementation of this service change. Key risks and mitigating actions are:

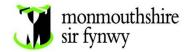
Key Risks	Mitigating Actions
Financial – change does not deliver anticipated savings	Comprehensive modelling been undertaken, tested and reviewed
	<ul> <li>Full market engagement to inform financial model for costs of vehicles and recyclate commodity prices/income</li> </ul>
	<ul> <li>Savings not yet built into MTFP until actual costs are fully known and will be reported Autumn 2018</li> </ul>
	<ul> <li>Robust procurement exercises being followed to ensure best value is achieved</li> </ul>
	<ul> <li>Procurement timescales are aligned to ensure all costs are fully known and their implications understood</li> </ul>
	<ul> <li>Monthly meetings with finance been established to ensure they are fully aware of developments and emerging costs</li> </ul>
Public – acceptance of change and continue to recycle	<ul> <li>Pilot informed the best communications methods and messages to be used</li> </ul>
	Pilot identified that performance did not drop
	<ul> <li>Communications and engagement plan to be developed for full service implementation</li> </ul>



Key Risks	Mitigating Actions
	Investment in capacity to enable the public to fully engage with the service during implementation period to keep their support and buy-in
Policy/Legislative – future service configuration does not meet with statutory obligations	
	<ul> <li>Natural Resources Wales have been consulted as they are the monitoring authority for the Waste Regulations and will determine if MCC's service is legally compliant</li> </ul>
	<ul> <li>Robust evidence gathered on how materials will be managed to demonstrate they are meeting market requirements</li> </ul>
Performance – MCC fails to achieve its own recycling aspirations and statutory targets	<ul> <li>Service already above required statutory level</li> <li>Regular analysis on the waste in Monmouthshire</li> </ul>
	<ul> <li>Assessment to be done on whether grey bags v investment in education/awareness will be best to continue to drive recycling behaviour</li> </ul>
	<ul> <li>Recognition that attention in future needs to be given to food waste capture</li> </ul>

## **Financial Implications**

5.1 The modelling has demonstrated that the changes *should* deliver a saving to the Council but this will not be fully reported and reflected in the MTFP until the changes are made and procurements have been completed. It is proposed that Council will receive a report in Autumn 2018 which will outline the outcome of the implementation process and give the Council a robust financial plan for the 7 year life of the service. For assurance purposes the S151 Officer will be kept fully engaged in all procurements to provide confidence in the processes being followed in these major service changes.



- 5.2 It is anticipated that the service will absorb the implementation costs. It is intended implementation will be robustly project managed drawing on previous experience of service changes, and implementation/change costs will be reported to Council with the final financial profile of the service as recommended above.
- 5.3 The financial modelling above indicates the need to borrow to invest in capital works to deliver the review. The modelling includes the potential cost of borrowing and demonstrates there is sufficient headroom in existing costs for any reasonable variances in interest or capital costs. When costs are finalised for the works a further submission will be made to Council to add the works to the Capital Programme and seek approval for the investment. Officers are also exploring the Welsh Government Invest to Save fund as a way of borrowing for capital investment with a 0% interest rate which will also improve the financial performance of the service.

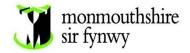
# Future Generations & Well Being Assessment (including sustainable development, equalities, safe guarding and corporate parenting requirements)

- These changes are all about ensuring that the recycling and waste service is right for Monmouthshire residents now and in the future. The proposal is only for an initial 7 years as the recycling industry is still really in its infancy and will continue to evolve and develop over time. The review has been inclusive and fully delivers against the principles and goals of the Future Generations and Well Being Act.
- 6.2 The trial did highlight that people with disabilities or the elderly could struggle with the glass box. This concern has been mitigated by recommendation 2 (a(ii)) that a box with a handle (like an external food waste box) would be issued on request.
- 6.3 There are no corporate parenting or safeguarding implications.

## **Background Papers:**

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

#### **Consultees**



Strong Communities Select Committee. Select Committee requested that more work be done on assessing the benefit of grey bags for residual waste as opposed to further investment in education and awareness. This was agreed with and therefore the report proposes that a further report will go before Members in Autumn 2017 with a proposal.

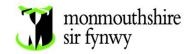
NRW – as monitoring authority for the Waste Regulations the Select Committee report of Jan 2017 was shared with them for comment. At the point of publication of this report no response has been received and therefore it is assumed they are content.

The public in the trial area
Welsh Government
Climate Change Champions Network

#### **Report Author**

Rachel Jowitt **Head of Waste & Street Services**<u>racheljowitt@monmouthshire.gov.uk</u>

01633 748326 / 07824 406356

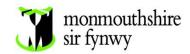


# Well-being and Future Generations Assessment

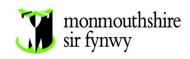
	Please give a brief description of the aims of the proposl
Name of the Officer Rachel Jowitt, Head of Waste & Street Services	
Phone no: 07824 406356 / 01633 748326	To seek Council approval for the future configuration of the kerbside
E-mail: racheljowitt@monmouthshire.gov.uk	recycling service 2018-2025.
Name of Service	Date Future Generations Evaluation
Waste & Street Services	20 <sup>th</sup> February 2017

1. Does your proposal deliver any of the well-being goals below? Please explain the impact (positive and negative) you expect, together with suggestions of how to mitigate negative impacts or better contribute to the goal.

Well Being Goal	How does the proposal contribute to this goal? (positive and negative)	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
A prosperous Wales  Efficient use of resources, skilled, educated people, generates wealth, provides jobs	The review is all about how the Council can maximise the natural resources it collects as recyclate from MCC residents.	
A resilient Wales	If managed properly waste management contributes to wider CO2 climate change	



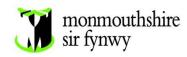
Well Being Goal	How does the proposal contribute to this goal? (positive and negative)	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
Maintain and enhance biodiversity and ecosystems that support resilience and can adapt to change (e.g. climate change)	programmes and therefore assists with biodiversity outcomes.	
A healthier Wales	No direct impact	
People's physical and mental wellbeing is maximized and health impacts are understood		
A Wales of cohesive communities  Communities are attractive, viable, safe and well connected	Good recycling and waste management promotes a good local environment. Litter will be reduced therefore making communities attractive and people feel safe.	
A globally responsible Wales  Taking account of impact on global well-being when considering local social, economic and environmental wellbeing	Recycling is all about managing resources to benefit the environment and the economy. This service change will ensure that we are protecting natural resources and thereby reducing human activity's impact on the environment.	
A Wales of vibrant culture and thriving Welsh language	No direct impact but all measures taken by the service are fully in line with the Welsh Language policy of the Council.	



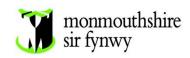
Well Being Goal	How does the proposal contribute to this goal? (positive and negative)	What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?
Culture, heritage and Welsh language are promoted and protected. People are encouraged to do sport, art and recreation		
A more equal Wales  People can fulfil their potential no matter what their background or circumstances	Any employment undertaken through the service or its contract will ensure that equal opportunities are fully promoted	

# 2. How has your proposal embedded and prioritised the sustainable governance principles in its development?

Sustainable Development Principle	How does your proposal demonstrate you have met this principle?	What has been done to better to meet this principle?
Balancing short term need with long term and planning for the future		

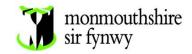


Sustainable Development Principle	How does your proposal demonstrate you have met this principle?	What has been done to better to meet this principle?	
Collaboration  objectives  Working together with other partners to deliver	MCC's service delivery model is fully inclusive. We work with partners depending on what outcome is being sought.		
Involving those with an interest and seeking their views	The review has been fully inclusive and engaging. There has been consultation throughout and the recommendations are based on a robust trial of 6,500 householders and their views – both quantitative and qualitative.		
Putting resources into preventing problems occurring or getting worse	Whilst this review is about MCC managing the waste it collects, it is recognised that we should also focus on waste prevention. The service promotes waste prevention activities and will continue to keep abreast of prevention initiatives at a regional and national scale.		
Positively impacting on people, economy and environment and trying to benefit all three	This service change is about integration. We want to improve our environmental performance, by reducing costs and by delivering a service that fully engages with people and keeps them on board with the recycling agenda.		



**3.** Are your proposals going to affect any people or groups of people with protected characteristics? Please explain the impact, the evidence you have used and any action you are taking below.

Protected Characteristics	Describe any positive impacts your proposal has on the protected characteristic	Describe any negative impacts your proposal has on the protected characteristic	What has been/will be done to mitigate any negative impacts or better contribute to positive impacts?
Age		Carrying the proposed glass box proved to be difficult	An alternative will be offered to residents on request.
Disability		As above	As above
Gender reassignment	No negative impacts as about the recycling service	2.	1
Marriage or civil partnership			
Race			
Religion or Belief			
Sex			
Sexual Orientation			
Welsh Language			

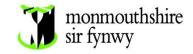


4. Council has agreed the need to consider the impact its decisions has on important responsibilities of Corporate Parenting and safeguarding. Are your proposals going to affect either of these responsibilities? For more information please see the guidance note <a href="http://hub/corporatedocs/Democratic%20Services/Equality%20impact%20assessment%20and%20safeguarding.docx">http://hub/corporatedocs/Democratic%20Services/Equality%20impact%20assessment%20and%20safeguarding.docx</a> and for more on Monmouthshire's Corporate Parenting Strategy see <a href="http://hub/corporatedocs/SitePages/Corporate%20Parenting%20Strategy.aspx">http://hub/corporatedocs/SitePages/Corporate%20Parenting%20Strategy.aspx</a>

	Describe any positive impacts your proposal has on safeguarding and corporate parenting		What will you do/ have you done to mitigate any negative impacts or better contribute to positive impacts?
Safeguarding	The proposals do not affect individuals and thereb	by do not affect or impact on the Council's corpo	orate parenting and safeguarding duties.
Corporate Parenting			

#### 5. What evidence and data has informed the development of your proposal?

Waste dataflow
End destinations of collected recycling
Views of the public (as evidenced in the report) on the trial option
Financial modelling – prices from the market



6. SUMMARY: As a result of completing this form, what are the main positive and negative impacts of your proposal, how have they informed/changed the development of the proposal so far and what will you be doing in future?

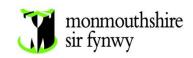
There was a change to the box to be offered to the elderly or to people with disabilities.

7. Actions. As a result of completing this form are there any further actions you will be undertaking? Please detail them below, if applicable.

What are you going to do	When are you going to do it?	Who is responsible	Progress
Implement the review	Over 2017-18	Rachel Jowitt	

8. Monitoring: The impacts of this proposal will need to be monitored and reviewed. Please specify the date at which you will evaluate the impact, and where you will report the results of the review.

The impacts of this proposal will be evaluated on:	Autumn 2018



#### Annex 1

# **Waste & Street Services glass recycling trial survey results**

# **Responses:**

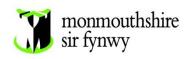
Total responses: 410

Online responses: 58 Postal responses: 352

Welsh responses: 10 English responses: 400

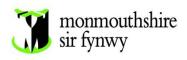
## **Results:**

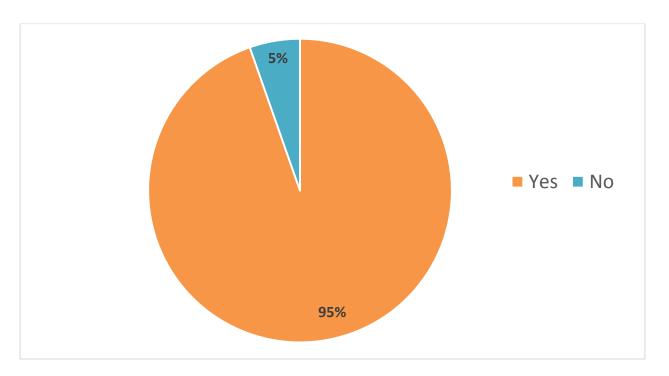
Q	Question	Response	Number of responses
1	Were you happy with the information leaflet you received before the glass trial began?	Yes	388
		No	22
2	Were you happy with the information leaflet you received with the box?	Yes	386
		No	24
3	3 Do the grey bags increase the likelihood of you recycling more?	More likely	148
	more:		8



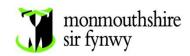
		No effect	254
4	Do you use the glass recycling box?	Yes	385
		No	25
5	How often do you put the box out for collection?	Weekly	103
		Fortnightly	112
		Less often	195
6	Are you happy with the container?	Yes	289
		No	121
7	Are you happy with the new recycling service?	Yes	354
		No	56

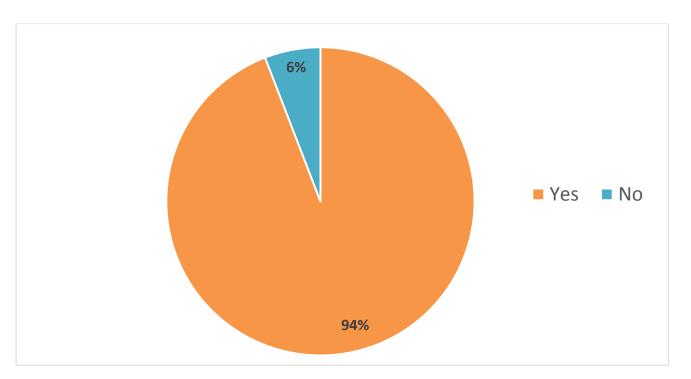
Q1. Were you happy with the information leaflet you received before the glass trial began?



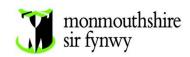


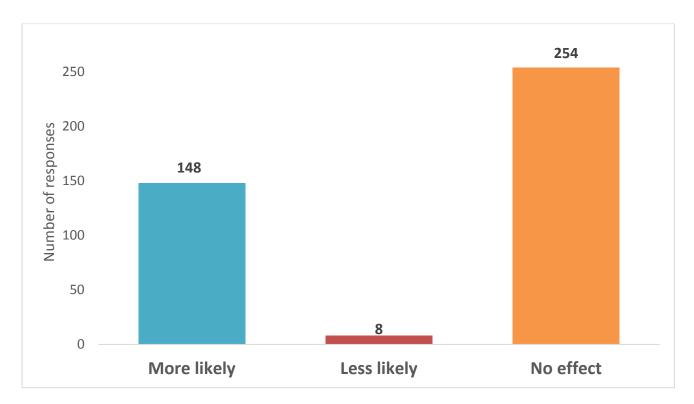
Q2. Were you happy with the information leaflet you received with the box?



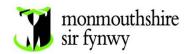


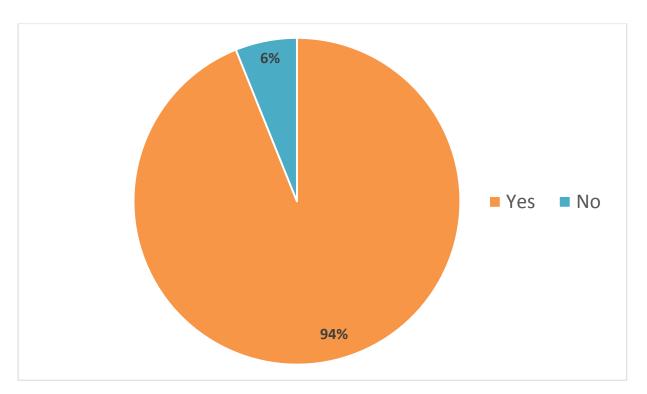
Q3. Do the grey bags increase the likelihood of you recycling more?



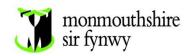


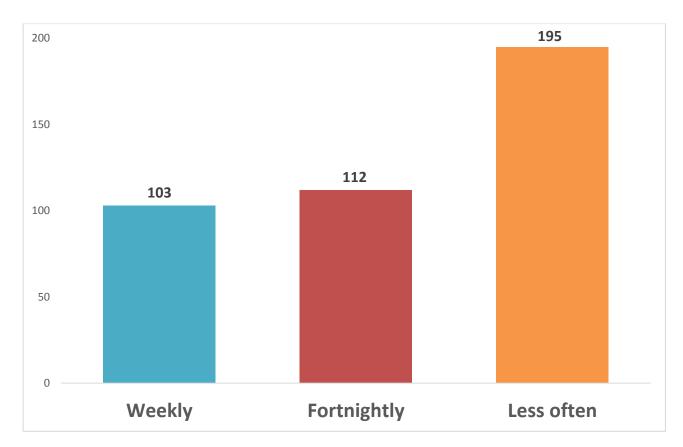
Q4. Do you use the glass recycling box?



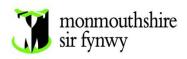


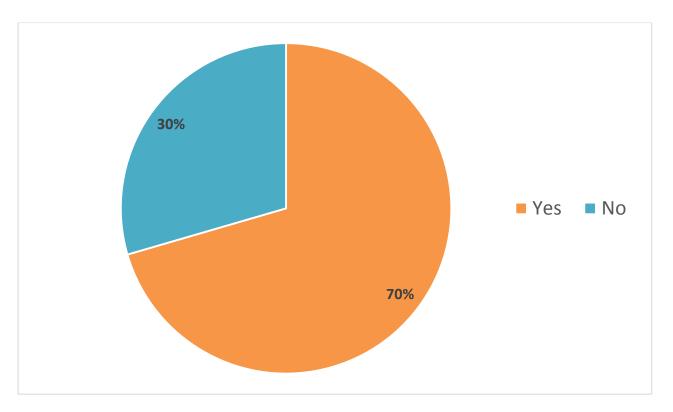
Q5. How often do you put the box out for collection?



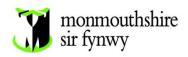


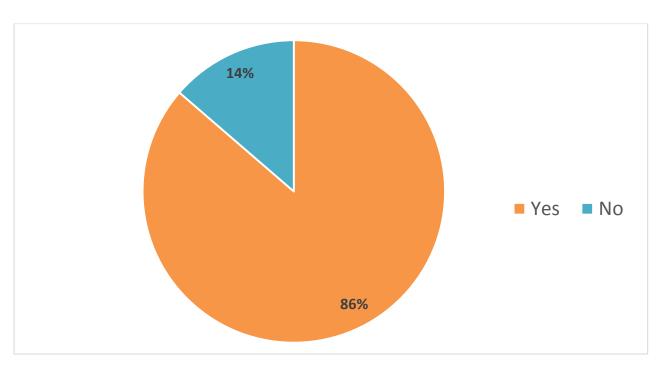
Q6. Are you happy with the container?

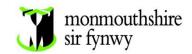




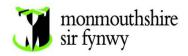
Q7. Are you happy with the new recycling service?







Appendix 2: Evaluation Matrix Level 1 Criteria ('Vision')	Weight	Level 2 Criteria	Weight	Level 3 Criteria	Weight
Economic	35.00	Value of resources is maximised.	17.92	Income is generated from valuable materials/resources.	9.54
benefit/value of				Cost of disposing of non-valuable materials/resources is minimised.	8.38
service is		Cost of service delivery is minimised.	17.08	An economically efficient service profile. Is adopted.	6.70
maximised				Contracts and partnerships are designed to offer best value for Monmouthshire.	10.38
		Material management is undertaken in a sustainable and environmentally efficient way*	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
				Ecological footprint is minimised (One Wales: One Planet by 2050).	2.17
The service is sustainable and	19 25			Resource security is ensured.	2.83
environmentally efficient*.		Waste operations do not endanger human health or the environment*	9.92	An environmentally efficient service profile is adopted.	3.17
erncient*.				No fly tipping resultant from waste operations.	2.08
				No litter caused by waste operations – ie keep streets clean.	2.17
				Service delivery method meets national health and safety standards	2.50
Communities,	of 20.08	Community schemes are supported and facilitated.	6.08	Community reduction is maximised.	1.50
businesses and				Community reuse is maximised.	1.67
members of				Community recycling is maximised.	1.67
public are				Community composting is maximised.	1.25
stimulated and			5.33	SMEs are supported to maximise reduction, reuse and recycling.	2.83



supported to do more for themselves.		Businesses are 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 encouraged to do 8.67 more in the home.		Home composting is maximised.	3.75
			Reduction and reuse of materials within the home environment is maximised.	4.92	
General public is	25.67 public	communicated to		Public understand how to get maximum use out of the services available.	6.25
informed and engaged with				Public understand reasons and benefits for sustainable resource management.	7.42
the service.		Positive public	12.00	High participation in services	5.83
		12.00	High recycling rates achieved	6.17	

