

<b>SUBJECT:</b>	<b>MARCH ON FOR WASTE CHANGES – RECYCLING RECEPTACLES</b>
<b>MEETING:</b>	<b>STRONG COMMUNITIES SELECT</b>
<b>DATE:</b>	<b>6<sup>th</sup> DECEMBER 2018</b>
<b>DIVISION/WARDS AFFECTED:</b>	<b>ALL</b>

## **PURPOSE:**

**This report seeks to update members on savings, reduction in costs and potential for increased income generation as a result of changes to the types of bag we use to collect recycling.**

## **1. RECOMMENDATIONS:**

1.1) To recommend to the Cabinet Member for Operations to approve the move to reusable bags for dry recycling to improve the quality of recycle, achieve savings and maximise income generation

1.2) To recommend to the Cabinet Member for Operations to approve the use of recycled plastic bags for food waste collections to improve the quantity of food waste being reprocessed and achieve savings in support of budget pressures

## **2. KEY ISSUES:**

### **2.1 REUSABLE BAGS FOR DRY RECYCLATES (plastic, cans, paper, card)**

Council budgets are under increasing pressure and services must look to innovative and new ways to achieve savings or deliver services with reduced funding.

Monmouthshire has an excellent recycling record but we must be aware of changes in markets, public perception and the national political priorities as well as innovation and legislative context when considering service changes.

As a result of the Recycling Review service changes already approved (implementation in March'19), a number of additional options for service change have been considered that could be implemented to reduce costs further.

Whilst the outcome of Brexit negotiations are unknown, and the precise impact may be unknown for some time, it is certain there will be an impact upon the recycling market. Early indications are that low grade recyclates (i.e. those contaminated with other products) will be even less desirable to the market and so will suffer a greater variance in values in the near future. It should be noted that contaminated recyclates already generate a lower price than high quality and are sometimes rejected if contamination is unacceptable (although MCC recycle is rarely rejected). Welsh Government has long

called for greater separation of waste at the kerbside and do not support the comingling of domestic recycling collections.

MCC is moving towards greater separation of recycling through the recycling review meaning glass will be collected separately and the red and purple bags will no longer be collected into a single compartment on the refuse freighter (comingled). A change to reusable bags (similar to those used for garden waste but with a flap to act as a lid) gives us an opportunity to reduce our reliance upon and costs associated with single use plastic bags and increase income from those materials as the materials being collected in separate compartments on the lorry thereby reducing the risk of contamination. As part of a public survey, residents were asked if they would be happy to use reusable recycling bags (Polyprop bags similar to garden waste bags but fully weighted and Velcro-lock lids) or plastic boxes for recycling Appendix 1.

A public consultation exercise indicated that the public are not averse to such a change. Of the 1700 respondents canvassed the majority (10% more) supported the Council making the change to reusable bags. Additional results from the survey indicated that over 90% of households put 2 or less bags out a week of dry recycling and so we can include this modelling when purchasing reusable bags.

Single use plastic bags for recycling collections have benefits for residents ie. clear streetscape after collection, easy to collect from hubs, easy to use and store, acceptable to residents. Moving towards reusable bags for recyclates would reduce costs and also increase the income we are able to generate (better quality recyclate) but may impact on some of the benefits of single use plastic bags.

It is noted that such an approach may not suit all households eg. flats, elderly complexes and mixed hereditaments but we already have bespoke operational services for many of these property types. We would continue to support households with bespoke solutions regardless of changes to containers and in line with our waste collections policies. The single use plastic bags offer greater flexibility because residents put out as many as are needed. A reusable bag holds approximately the same volume as two single use bags so for the vast majority will be quite adequate but for households where volume is a problem we will work with them to accommodate their needs.

## **2.2 HANDLING FOOD WASTE IN THE FUTURE (recycled plastic v starch bags)**

The Council signed a new contract for the treatment of Food Waste with Agrivert in April 2018. The contract stipulates that Agrivert must accept food contained in compostable (starch) bags. Whilst the company is obliged to receive food in compostable bags the compostable bags are not composted as part of this process; they are removed from the food and are sent to Energy from Waste (EfW) for treatment (incineration). Agrivert have indicated that they would prefer food waste collected in plastic bags as this increases the food capture yield and allow for the authorities to save money with no diminution in service.

## Recycled plastic food waste bags

Providing bags for food waste collections have been proven to increase participation in schemes by at least 25%. Monmouthshire have provided food waste collections in corn starch bags for over 10 years. These bags are usually produced overseas and shipped into the UK and begin to biodegrade naturally within 6 to 12 months.

Traditionally the food was composted 'in-vessel' and the compostable bags broke down in the process. From December 2018 Monmouthshire's food waste will be sent to the Agrivert Anaerobic Digestion (AD) plant in Bridgend where it will be processed to generate electricity for the national grid.

AD differs significantly from in-vessel composting as follows:

- decomposing at temperatures of 40 degrees
- In the dark and
- In the absence of oxygen

These conditions do not allow the current compostable bags that Monmouthshire uses to breakdown as part of the process as they require higher temperatures, light and oxygen.

The first step of the AD process is therefore to debag the food and send the bags for processing via the Energy from Waste Plant at Cardiff. Over the years of operating AD plants Agrivert have found that thin plastic liners offer a more cost effective solution for Authorities and are easier to process and remove in a pre-treatment stage.

Agrivert have proposed that a thin plastic liner is a more suitable and cost effective solution for all parties involved. Supplying food waste liners increases participation but the new AD contract would mean households can also use every day plastic bags to dispose of their food waste such as frozen pea or bread bags.

There is an increased scrutiny and public awareness of single use plastic waste in the environment and information conveyed to the public should be open and transparent on the rationale for plastic bags. The other authorities within Heads of the Valleys Food Waste Contract are also considering such a change. Aligning the change at the same time would allow greater promotion and awareness scheme collaboration. Other authorities using AD have already changed to plastic bags for food waste. There is funding available for the promotion and education of AD and this could support the purchase of bags if we decide to make the change along with the other "Hub" Authorities.

Locally produced (Hereford) recycled plastic food waste liners are available. They have a 90% recycled plastic content that is sourced within the UK. They are approximately 43% cheaper than corn starch bags and this cost may reduce further if the 3 authorities and Agrivert procure collaboratively.

Lower grade 100% virgin material plastic food waste bags are cheaper again but this doesn't support the wider recycling message. Using recycled bags would create an opportunity to reduce costs and support local recycling reprocessors.

### 3. EQUALITY AND FUTURE GENERATIONS EVALUATION (INCLUDES SOCIAL JUSTICE, SAFEGUARDING AND CORPORATE PARENTING):

The move to reusable bags for dry recyclables will significantly reduce costs and is a positive step towards the Welsh Governments Collection Blueprint. We currently use 50 tonnes of single use plastic bags to collect the recyclables and at present the red and purple bags are not recycled but sent to energy from waste. A move to reusable bags should also increase the quality of the recyclate meaning more can be used in the UK without sending abroad for secondary reprocessing. In the future there may be further opportunities to separate the waste streams further at sites within MCC to increase income generation.

The move to plastic bags for food will also reduce costs significantly and give residents the opportunity to use other single use plastic bags (eg. Bread bags, vegetable bags, freezer bags) for their kitchen food waste. Although this would seem a retrograde step in light of the Plastic Free movement whether the bags are starch or plastic they will be disposed of in the same way through EfW. We have been unable to find conclusive Life Cycle Analysis data on the use of single use plastics versus starch bags for this purpose, nevertheless it should be emphasised that the proposed bags use recycled plastic and bags that might otherwise go into the residual waste stream may be used to process food waste. Starch bags are produced from arable land that may be better used for food crops, plastic bags are available that are manufactured locally from 90% recycled polymers.

### 4. OPTIONS APPRAISAL

#### Reusable bags

Option	Benefit	Risk	Comments
Do Nothing – continue to supply single use plastic bags	No change for the public or collection crews.	No budget saving. Recyclate quality affects value and increases costs in the future. Reliance on single use plastic bags with limited recycled content that are likely to increase in cost with plastic tax.	The changes to glass box and separation of other materials is already in progress. Introducing additional changes at this point may cause greater uncertainty for the public.
Move to reusable bags for recycling as of March 4 <sup>th</sup> 2019	Many residents have raised concerns over single use plastics. Substantial costs savings. Closer to Welsh	Public backlash to changes Streetscape issues with bags left after collections.	The food waste caddy and glass box will be left on the street. Given procurement and manufacturing times it's

	Government Collections Blueprint. Maximises benefit of new fleet capacity. Big bang approach to waste changes.		unlikely to be achievable for March 2019 recycling review implementation.
Phased approach by issuing reusable bags through hubs over several months to residents keen to reduce plastic. Allow us to monitor usage and quantify results.	As above. Allows for a slower less expensive roll out of bags.	Potentially increases workload at Hubs having to store both types of bags. Will receive lowest rebate as majority of material will be in plastic bags.	More palatable to residents but limited income opportunity and cost savings in first year.

### Recycled plastic bags for food

Do nothing.	No changes for the public	No savings	Bags are being separated from waste and going to EfW
Continue to supply starch bags but allow residents to use plastic bags	No change to public from MCC but wider choice for residents and allows them to reuse other single use plastic bags	No savings – mixed message on what the process is	Bags are being separated from waste and going to EfW
Supply recycled plastic bags	Reduces costs, increase capture of food waste, easy for residents	Public perception of single use plastics causes backlash.	Ensure the message is clear and concise on the rationale that bags are being separated from waste and going to EfW

## 5. EVALUATION CRITERIA

We continually monitor the collections and tonnages recycled and will carry out a further customer satisfaction survey in early 2020.

## 6. REASONS:

The decision is to improve the quality of the recycle further and reduce costs in purchasing receptacles for recycling and food waste.

## 7. RESOURCE IMPLICATIONS:

### Reusable bags

- The Council currently spends £180,000 on single use bags for dry recycling per year, (£540,000 over 3 years).
- The cost of issuing households with 1 red and 1 purple reusable bag would be approx. £170,000 to £250,000 in year 1. With a 25-30% replacement rate or £50,000 in years 2 and 3. Total cost for 3 years £270,000 (£270,000 saving over 3 years). Reusable bags are guaranteed lifespan of 3 years but may last much longer if the higher quality bags are purchased.
- The use of reusable bags allows the operator greater vision of materials prior to emptying which will enable us to tackle the quality of the materials (non-target waste streams).

Current estimations put non-target waste collected in purple bags at 25% of the overall weight in the existing pilot area.

- Residents are less likely to contaminate a reusable bag and contamination issues can be easily relayed back to resident using informational stickers or tags. Feedback from public consultation supports the introduction of reusable bags rather than pink and purple single use bags.
- Such an approach would be in line with Welsh Government preferred 'blueprint' for recycling collections and may attract grant funding from WG for the initial purchase of reusable bags.
- Increased efficiency and improved H&S for operatives at reprocessing sites who currently have to manually remove single use plastic bags from the machinery.
- Soft market testing indicates an increase of £10 per tonne for materials that do not require "bag splitting". This would equate to an additional £70,000 of cost avoidance for reprocessing costs over and above the income assumptions included in the recycling review and MTFP forecast.
- Approximately 50 tonnes of red and purple single use plastic bags per year are used. At present this material is sent for Energy from Waste as there is limited reprocessors for dirty plastic film.
- The new rounds were designed with sufficient operational capacity to allow for the additional time that would be required to collect and return caddies and glass boxes.

#### **Recycled plastic food bags**

- The saving on moving to plastic bags from corn starch bags is £33,000 per annum. (if bags were purchased collaboratively with HoV funding there would be a one off saving of £70,000 in 2019).
- Allows residents to use other single use plastic bags that may reduce costs further
- Plastic bags can be stored for in the house indefinitely so can be issued on rolls of 200 reducing visits to the hubs for residents, less cost delivering bags to the hubs.
- 100% virgin plastic bags offer savings of approximately £44,000 per year.
- Implementing this from January 1<sup>st</sup> will also offer in year saving in 2018/19.

#### **8. CONSULTEES:**

Members Waste workshop 2018  
Public consultation 2018  
Agrivert and Heads of Valley Food Partnership

#### **9. BACKGROUND PAPERS:**

Public consultation papers (appendix 1)  
Agrivert advice (appendix 2)

#### **10. AUTHOR: Carl Touhig**

**Tel: 07580 362121**

E-mail: [carltouhig@monmouthshire.gov.uk](mailto:carltouhig@monmouthshire.gov.uk)

## Well-being and Future Generations Assessment

<b>Name of the Officer</b> Carl Touhig, (Interim) Head of Waste & Street Services  <b>Phone no:</b> 07580362121/ 01633 644135  <b>E-mail:</b> <a href="mailto:carltouhig@monmouthshire.gov.uk">carltouhig@monmouthshire.gov.uk</a>	<b>Please give a brief description of the aims of the proposal</b>  Change the receptacles used for collection of recycle and food waste to improve quality and reduce costs.
<b>Name of Service</b>  Waste & Street Services	<b>Date Future Generations Evaluation</b> October 2020





**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.


<b>Well Being Goal</b>	<b>How does the proposal contribute to this goal? (positive and negative)</b>	<b>What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?</b>
<b>A prosperous Wales</b>  Efficient use of resources, skilled, educated people, generates wealth, provides jobs	Improving the quality of recycled material will increase the quantity of material that is reprocessed locally.  Buying recycled plastic food bags from local manufacturer creates local employment.	Working with local reprocessors wherever possible.
<b>A resilient Wales</b>  Maintain and enhance biodiversity and ecosystems that support resilience and can adapt to change (e.g. climate change)	Higher quality recycling reduces reprocessing costs and energy used in creating an end product.	

<b>Well Being Goal</b>	<b>How does the proposal contribute to this goal? (positive and negative)</b>	<b>What actions have been/will be taken to mitigate any negative impacts or better contribute to positive impacts?</b>
<p><b>A healthier Wales</b></p> <p>People's physical and mental wellbeing is maximized and health impacts are understood</p>	<p>Little impact on health and wellbeing for residents.</p>	
<p><b>A Wales of cohesive communities</b></p> <p>Communities are attractive, viable, safe and well connected</p>	<p>High quality collection services for recycling help keep communities clean and attractive.</p>	
<p><b>A globally responsible Wales</b></p> <p>Taking account of impact on global well-being when considering local social, economic and environmental wellbeing</p>	<p>Moving closer to the Welsh Government Collections Blueprint. Higher quality recycle that can be dealt with locally.</p>	<p>Continue to improve the quality of collected material</p>
<p><b>A Wales of vibrant culture and thriving Welsh language</b></p> <p>Culture, heritage and Welsh language are promoted and protected. People are encouraged to do sport, art and recreation</p>	<p>All promotion material will be bi-lingual.</p>	
<p><b>A more equal Wales</b></p> <p>People can fulfil their potential no matter what their background or circumstances</p>		

**8.1 How has your proposal embedded and prioritised the sustainable governance principles in its development?**



<b>Sustainable Development Principle</b>	<b>How does your proposal demonstrate you have met this principle?</b>	<b>What has been done to better to meet this principle?</b>
 <p><b>Long-term</b> Balancing short term need with long term and planning for the future</p>	<p>Immediate impact on costs savings for the budget process.</p> <p>Increasing the quality of recyclate meets the needs of future generations.</p>	<p>Promotions and advertising to further increase quality.</p>
 <p><b>Collaboration</b> Working together with other partners to deliver objectives</p>	<p>Working with Torfaen and Blaenau Gwent on food waste treatment.</p> <p>Higher quality recycling would allow us to work more closely with kerbside sort authorities to bulk material and market recyclate.</p>	<p>Contacted neighbouring authorities to discuss sharing facilities for bulking and marketing material.</p>
 <p><b>Involvement</b> Involving those with an interest and seeking their views</p>	<p>Discussed options with Members and senior managers at the Waste Workshop. Developed resident survey to gauge public opinion on this and list of other waste services options.</p>	<p>Continue to review services and engage with residents through bi-annual satisfaction surveys</p>
 <p><b>Prevention</b> Putting resources into preventing problems occurring or getting worse</p>	<p>Improving quality of recyclate will future proof services and ensure all material can be reprocessed locally.</p>	<p>Additional promotion and advertising will ensure high quality recyclate is produced.</p>

Sustainable Development Principle	How does your proposal demonstrate you have met this principle?	What has been done to better to meet this principle?
 <p data-bbox="180 367 320 398">Integration</p> <p data-bbox="145 400 395 640">Positively impacting on people, economy and environment and trying to benefit all three</p>	<p data-bbox="432 237 919 479">Improving quality of recyclate will ensure Wales moves towards a Circular Economy creating job opportunities from increased economic growth whilst improving the environment.</p>	<p data-bbox="986 237 1506 353">Working with local reprocessors to maximise income and reduce waste miles..</p>

**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.

<b>Protected Characteristics</b>	<b>Describe any positive impacts your proposal has on the protected characteristic</b>	<b>Describe any negative impacts your proposal has on the protected characteristic</b>	<b>What has been/will be done to mitigate any negative impacts or better contribute to positive impacts?</b>
Age	None	None	
Disability	None	None	
Gender reassignment	None	None	
Marriage or civil partnership	None	None	
Race	None	None	
Religion or Belief	None	None	
Sex	None	None	
Sexual Orientation	None	None	
Welsh Language	All signage will be bilingual Welsh/English	None	

**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 <http://hub/corporatedocs/Democratic%20Services/Equality%20impact%20assessment%20and%20safeguarding.docx> and for more on Monmouthshire's Corporate Parenting Strategy see <http://hub/corporatedocs/SitePages/Corporate%20Parenting%20Strategy.aspx>

	<b>Describe any positive impacts your proposal has on safeguarding and corporate parenting</b>	<b>Describe any negative impacts your proposal has on safeguarding and corporate parenting</b>	<b>What will you do/ have you done to mitigate any negative impacts or better contribute to positive impacts?</b>
Safeguarding	Not applicable	None	
Corporate Parenting	The proposals do not affect individuals and thereby do not affect or impact on the Council's corporate parenting and safeguarding duties.	None	