



RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CABINET

29th NOVEMBER 2022

WASTE SERVICES – REVISED WASTE MANAGEMENT STRATEGY

REPORT OF THE DIRECTOR – FRONTLINE SERVICES, IN DISCUSSIONS WITH THE RELEVANT PORTFOLIO HOLDER, THE CABINET MEMBER FOR ENVIRONMENT AND LEISURE, (CLLR A CRIMMINGS), AND THE LEADER OF THE COUNCIL (CLLR A MORGAN)

Author: Roger Waters, Director – Frontline Services

1. PURPOSE OF THE REPORT

- 1.1 The purpose of the report is to:
- (i) Outline proposals for revisions to the Council's operational waste management processes with a view to considering future arrangements for the collection of refuse and recycling designed to aid an increase in the rate of recycling across RCT which will also deliver financial efficiencies; and
 - (ii) seek Cabinet's approval to initiate a consultation exercise in respect of the options for change as presented in the report.

2. RECOMMENDATIONS

- 2.1 It is recommended that Cabinet notes the content of the report and duly resolves to initiate a public consultation and engagement exercise on the option for change, namely:
- (i) The collection of residual household waste on a 3-weekly basis for all domestic waste collections.
 - (ii) Presentation of waste on a 3-weekly basis will be as follows; strict volume control measures will apply to all domestic waste, namely:
 - (a) a maximum of 3 black bags per household, (for those properties with existing black bag waste collections),
 - (b) no side waste rule continues for those households with large wheelie bin collections; and

- 2.2 Initiate a trial of the use of reusable recycling sacks for the collection of dry mixed recycling, (DMR).
- 2.3 That, subject to 2.1 and 2.2 above, feedback from the consultation/ engagement activity and the trial are each reported back to Cabinet in order for Cabinet to determine whether, and if so how, they would wish to proceed with the option for change.

3. REASONS FOR RECOMMENDATIONS

- 3.1 The Council's Corporate Plan, ***Making A Difference (2020- 2024)*** sets out the Council's commitments to Keeping RCT clean through efficient street cleaning services, minimising the amount of waste we send to landfill, achieving our recycling targets through weekly recycling and regular refuse collections, and reducing our carbon footprint.
- 3.2 Additionally, the Welsh Government's strategy to make the circular economy in Wales a reality, **Beyond Recycling**, stipulates the next minimum target for the recycling of household waste is 70% by 2025, as we look to maintain our trajectory towards zero waste nation by 2050.
- 3.3 Further, Council strategy; **Making Rhondda Cynon Taf Carbon Neutral by 2030**, commits the Council to ensuring it recycles or reuses 80% of all municipal waste by 2025 by supporting residents and businesses on initiatives that promote waste minimisation and reuse of materials, as well as investing in technology to increase the amount of waste we recycle and reuse locally.
- 3.4 All Welsh Local Authorities work towards recycling targets set by Welsh Government and, as noted above, the next milestone target is for 2025 where 70% of waste collected must be recyclable. (Failure to reach these targets will result in the Council being issued with heavy financial penalties).

4. BACKGROUND

- 4.1 RCT currently collects residual household waste fortnightly, (with Commercial waste collections taking place weekly apart from customers from RCT Primary Schools, who have fortnightly collections). Recent analysis of the Council's recycling rate showed that it is currently at 67.48%.
- 4.2 The current situation sees domestic waste in the Rhondda collected via black bags with the Cynon and Taf having collections via wheelie bins.
- 4.3 There are currently 13 Councils which collect household waste on a fortnightly basis, with an average recycling rate of 66.27%.

- 4.4 Additionally, there are currently 6 Councils which collect waste on a 3-weekly basis, with an average recycling rate of 66.79%.
- 4.5. Finally, 1 Council collects waste on a weekly basis, with a recycling rate of 63.02% and 1 Council collects waste on a 4-weekly basis with a recycling rate of 70.51%.
- 4.6 Of all 22 Councils in Wales, those with the highest recycling rates, (i.e. those with current rates in excess of 70%, namely: Bridgend CBC, Pembrokeshire CC, The Vale of Glamorgan CBC, Conwy CBC and Monmouthshire CC), all have strict volume controls on the amount of waste they collect, regardless of collection frequency. (Please see Appendix 1 for further information).

5. THE MOVE TO 3-WEEKLY REFUSE COLLECTIONS ACROSS RCT

- 5.1 When undertaking a study to model the potential impact of changing collection frequency, food waste yield data was used to create a baseline; it is seen as a good indicator for other streams of recycling.
- 5.2 Based on recent data, and noting comparisons with other Welsh Council's, there would appear to be no substantial evidence to suggest that there would be a significant increase in food waste yield per household resulting from a move to 3-weekly waste collections on their own in isolation. However, there is good evidence to suggest that accompanied with strong volume control measures such as limiting the amount of general waste that can be presented, (i.e. a maximum of 3 black bags per household, per collection or no side waste for those with large wheelie bin collections), then a move to 3-weekly collections would be beneficial.
- 5.3 It is estimated that by adopting this approach across RCT, it could lead to as much as a 20% increase, which would result in an additional food waste yield per household generating around 2,600 Tonnes per annum additional recycling.
- 5.4 Achieving additional food waste recycling of circa 2,600T per year, would enable estimated processing cost savings of up to £350k in a full year.
- 5.5 When applying these assumptions to 2021 data, the projected additional 2,600 Tonne increase would have equated a 1.9% increase in the Council's overall recycling rate, (increasing from 67.48% to 69.38%). Furthermore, it is anticipated that there will also be an uplift in the dry recycling to add to this, but this is difficult to reliably quantify at this time.
- 5.6 Moving to 3-weekly collections will also lead to a reduction in refuse collection rounds, which is likely to have an impact on the current staffing model of Waste Services. However, any reductions to the staffing model will be managed through our agreed employment procedures, which will include the use of the Council's Redeployment and Voluntary Early Retirement / Voluntary Redundancy Schemes.

- 5.7 Further, it is envisaged that a move to 3-weekly collections will also result in a reduction in the Council's carbon footprint. The Service currently utilises 60 Refuse Collection Vehicles, (RCVs), to undertake waste and recycling collection rounds and it is estimated that as many as 4 of these vehicles could be saved, (and removed from the Council's Fleet).
- 5.8 Based on removing two 26t vehicles and two 22t vehicles, estimated vehicle running cost savings would be £80k in a full year, (noting that a reduction in vehicle replacement capital expenditure will also be realised over the medium term).
- 5.9 A recent report from the Carbon Trust identified the Council's fleet contributing 7% of the Council's baseline carbon footprint. As part of the proposed service change, the removal of four RCVs, with annual journeys totalling more than 32k miles, would equate to saving of approximately 100TCO₂e per year. This can be seen as part of a phased approach to give the Council options and flexibility going forward to help ensure its Carbon Footprint is lowered and zero emissions targets are met in line with wider strategies and local plans.

6. THE TRIAL OF REUSEABLE RECYCLING SACKS

- 6.1 The Council currently issues single-use clear plastic bags to residents for the purpose of presenting their dry mixed recycling at the kerbside.
- 6.2 Records show that the Council purchased 30.2 million single use bags during 2021/22, at a cost of £877k (£867k full year estimated cost for 2022/23).
- 6.3 In November 2021 the Council issued reusable sacks for green waste collection as a replacement for the single use plastic bags. Implemented successfully, it also led to saving on the use of 3 million single-use recycling bags and it is considered that a switch to reusable bags for the collection of dry mixed recycling would result in an even higher number of single-use bags no longer being required.
- 6.4 An initial assessment of the potential to move to using reusable sacks has been undertaken and is summarised below, with further detail on technical, operational considerations and observations from initial trials included at Appendix 2.
- 6.5 Officers have carried out an initial technical assessment of the potential switch to reusable bags for kerbside recycling. Trials have taken place at Bryn Pica using the Council's existing reusable bags, as well as other sample bags provided by the same supplier, (many of which are in use by other Council's for the collection of domestic tin and plastic waste). The trials were limited to general observations regarding volume, weight, contamination and manual handling.

- 6.6 There are many examples of Waste Collection Authorities within the UK using reusable sacks for the collection of recyclable materials. Reusable bags can be considered to be a more sustainable option than single-use plastic bags, although further investigations into their service life would need to be undertaken to more accurately quantify annual cost savings, as it is envisaged that replacement reusable sacks would be required after a few years.
- 6.7 However, there is no evidence to suggest that a change to reusable sacks will increase the Council's overall recycling performance or act as a barrier to further improvements. Hence the need for piloting this initiative to fully understand the potential impacts.
- 6.8 Based on a scenario of re-useable sacks for recycling being implemented, this would also enable budget savings to be realised as part of the current bag distribution arrangements.
- 6.9 It is proposed that the results of an ongoing consultation event, (see Section 9 below), be considered alongside a trial of reusable recycling sacks in designated areas. Trials would allow the service to assess the operational impact, recycling volumes and quality of recycling produced. It would also enable further public engagement to obtain feedback and observations from service users which would be used to inform the potential for wider roll-out incorporating any amendments arising from lessons learned in the trials. Baseline data will be gathered for the selected trial sites so that the changes can be accurately captured with the outcomes reported back to Cabinet for further consideration.

7. EQUALITY & DIVERSITY IMPLICATIONS / SOCIO-ECONOMIC DUTY

- 7.1 An Equality and Socio-Economic Impact Assessment has been prepared for the purpose of this report. It has been found that a full report is not required. There are limited negative or adverse equality or diversity implications associated with this report, which can be easily mitigated.
- 7.2 Under the Public Sector Equality Duty as set out in the Equality Act 2010, Local Authorities are required to have due regard to the need to:
1. Eliminate unlawful discrimination.
 2. Advance equality of opportunity.
 3. Foster good relations between people who share a protected characteristic and those who do not.
- 7.3 The Council is committed to meeting the requirements of the Equality Act and in doing so contributing to the national Well-being goal of a more equal Wales, required by the Well-Being of Future Generations (Wales) Act 2015.

8. WELSH LANGUAGE IMPLICATIONS

- 8.1 There are no Welsh language implications as a result of the recommendations in this report. However, although the recommendations to initiate a public consultation with regards to potential service changes in relation to the collection of waste do not have any direct impact on the Welsh language, opportunities for the service to maintain, grow or upskill Welsh speaking staff will remain a priority.

9. CONSULTATION / INVOLVEMENT

- 9.1 As an extension to National Recycle Week that took place in mid-October, Waste Services launched a “Let’s Talk” consultation campaign.
- 9.2 The campaign centres around the recycling and waste activities of RCT residents and aims to gather views and opinions on how residents are currently disposing their waste and recycling, how often they are using the kerbside services and how they think recycling could be made easier.
- 9.3 With specific regard to the option for change set out in Section 5, it is recommended that Cabinet initiates a public consultation exercise with residents in relation to this proposal. Subject to Cabinet’s agreement to initiate a consultation, feedback from that exercise would be reported back to Cabinet in order for it to determine whether, and if so how, it would wish to proceed with the recommended option for change.
- 9.4 As the current collection schedules are very long-standing, residents are well informed and have embedded routines regarding when general waste is to be put out. Therefore, any changes, either the move to 3-weekly refuse collections or trials of reusable sacks for DMR collections, would require clear communication campaigns to address any concerns or confusion, and minimise any disruption.
- 9.5 Furthermore, service management would strive to ensure any changes are reflected online, as 89% of all waste service queries reach the department digitally.
- 9.6 In addition to the above, it is also recommended that a trial is undertaken of reusable recycling sacks, as set out in Section 6 of the report, the results of which will be reported back to Cabinet separately for consideration.

10. FINANCIAL IMPLICATION(S)

- 10.1 Moving forward, the programme of work to introduce a new operational refuse collection strategy, subject to agreement by Cabinet, would be incorporated into Medium Term Financial Planning arrangements to ensure resource requirements are reviewed, challenged and planned for.

- 10.2 High level initial estimates of revising residual collection frequency, (including volume control): 3-weekly collections based on current service arrangements, (bin collection in Cynon and Taf and black bag collection in Rhondda) – estimated annual saving of £0.8M, (additional costs built in for 1 additional recycling round of £127k).
- 10.3 Following on should black bag waste be reduced in favour of DMR or food waste, then this will result in a reduction in processing charges, this being incorporated into the estimated saving at 10.2, as it is significantly more expensive to dispose of residual waste than recycling or food waste. Currently it is £23.20 cheaper to process a tonne of recycling and £70.21 cheaper to process a tonne of food waste than it is to process residual waste through our energy from waste contracts. It will therefore be important for the Council to continue to promote and where appropriate, enforce, the requirement to recycle waste and in doing so support the Council's climate change commitments and ensure best use of resources.
- 10.4 Expenditure associated with the supply of single use plastic sacks during 2022/23 is projected to be £867k for an estimated usage of 27 million units.
- 10.5 To move to re-usable sacks, the estimated one-off cost of purchasing of reusable sacks is £842k and on-going, (base budget), requirement of approximately £220k per year (for replacement sacks).
- 10.6 The estimated net base budget saving, (assuming the one-off purchase costs are funded), is £647k, (i.e. £867k current base budget for single use recycling bags less on-going base budget requirement for re-usable sacks).
- 10.7 However, it is important to state that such analysis does not take into consideration any increase in costs resulting from additional or amended kerbside collection resources, plus any impact on loading times and resources, and would require a more detailed analysis to be undertaken.
- 10.8 Moreover, further work is required to work through, in detail, the estimated operational impact (round review) and update the estimated savings.

11. LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED

- 11.1 The Council, as a designated Waste Collection Authority, has a duty to collect household waste, under section 45 of the Environmental Protection Act 1990, as amended (EPA 1990).

12. LINKS TO CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT

- 12.1 The Council has committed to minimising the amount of waste we send to landfill, achieving our recycling targets through weekly recycling and regular refuse collections, and reducing our carbon footprint. This

supports the priorities of the Council's Corporate Plan 'Making a Difference' – 2020-24.

- 12.2 This report reflects the Sustainable Development principles of the Well-being of Future Generations Act, and its work contributes to all seven national goals.

13. CONCLUSION

- 13.1 A change in refuse collection strategy, moving to 3-weekly collections, is crucial if the Council is going to achieve the Welsh Government recycling target of 70% by 2025 and move towards the RCT 80% target.
- 13.2 Investigation and analysis undertaken by the Waste Services section using food waste yield data as a baseline indicator for other recycling streams suggests that an increase in the Council's recycling rate could be achieved by adopting a new approach to collections of residual household waste.
- 13.3 In moving toward 3-weekly collections, with a strict volume control of a maximum of 3 black bags, (or no side waste for households with large wheelie bin collections), then there is potential to achieve the twin benefits of a reduction in general waste, as well as financial savings.
- 13.4 Whilst there is less evidence that extending to 3, or indeed 4-weekly waste collections in isolation has a strong influence on recycling rates, it is clear that they do offer the potential for financial savings.
- 13.5 Organic waste also has a high carbon footprint and as nearly 39% of the black bag waste sampled as part of the Council's investigations to inform the new collection strategy was organic waste, the proposed change in policy would have positive implications towards the Council's net zero climate change commitments.
- 13.6 It is proposed that a public consultation exercise is undertaken on the proposal to move to 3-weekly refuse collections, (as set out in Section 5 of the report), and separately, a pilot is undertaken on reusable recycling sacks, as set out in Section 6 of the report.
- 13.7 Increasing engagement with residents to maximise their rates of recycling will be imperative to improving the Council's recycling performance and avoiding potential fines for missing Welsh Government recycling targets of 70% recycling for 2024/25. Recycling rates will be monitored and evaluated to inform the ongoing strategy for waste and recycling collections across RCTCBC as we strive to achieve the Council's recycling target of 80% by 2025 as part of our commitment to the *Tackling Climate Change Strategy*.



Appendix 1 (All Wales Refuse and Recycling Collection Models) (2021/22)

Local Authority	Bag or Bin	Frequency	Cost	Bag or Bin	Collection Method	Recycling Rate
Blaenau Gwent CBC	Bin & Bags	3-weekly	No cost, no additional waste allowance. 1 wheelie bin or 4 bags	Box Stack of 3 Top: Paper Middle: Plastic & Cans Bottom: Glass. Separate white sack for card	Kerbside Sort	65.75%
Bridgend CBC	Bags	Fortnightly	No cost, 2 bag limit (bags provided)	Orange bag: Card. Blue bag: Plastic, Cans & Foil. White bag: Paper. Black caddy for glass	Kerbside Sort	73.75%
Caerphilly CBC	Wheelie Bin	Fortnightly	No cost, no additional waste allowance	Brown wheelie bin with mixed recycling	Comingled	60.16%
Cardiff County Council	Bin & Bags	Fortnightly	No cost, 1 wheelie bin or 3 bag limit (bags provided twice a year)	Green recycling bags. Blue bin for glass	Comingled - separate glass	58.11%
Carmarthenshire County Council	Bags	Fortnightly	No cost, 3 bag limit	Bags	Comingled - separate glass	62.20%
Ceredigion County Council	Bags	3-weekly	No cost, 3 bag limit	Clear recycling bags. Separate box for glass	Comingled - separate glass	68.57%

City and County of Swansea	Bags	Fortnightly	No cost, 3 bag limit	Green bag: Cans, Glass, Paper & Card. Pink Bag: Plastic	Hybrid	63.94%
Conwy CBC	Wheelie Bin	4-weekly	No cost, no additional waste	Box Stack of 3	Kerbside Sort	70.51%
Denbighshire County Council	Bin & Bags	Fortnightly	No cost, no additional waste allowance	Bin & Bags	Comingled	65.53%
Flintshire County Council	Bin & Bags	Weekly	No cost, wheelie bin for HMO's no side waste, 1 bag limit	Blue bag: Paper & Card White/Grey bag: Cans White/Grey bag: Plastic and glass is collected separately in a blue box	Kerbside Sort	63.02%
Gwynedd Council	Bin & Bags	3-weekly	No cost, 1 bin or 3 bag limit. No additional waste	Box Stack of 3 Top: Paper Middle: Plastic & Cans Bottom: Glass. If residents have additional recyclable waste it can be placed in a blue box but not mixed	Kerbside Sort	63.82%
Isle of Anglesey CC	Wheelie Bin	3-weekly	No cost, no additional waste allowance	Box Stack of 3 Top: Paper Middle: Plastic & Cans Bottom: Glass & Card	Kerbside Sort	62.68%




Merthyr Tydfil CBC	Wheelie Bin	Fortnightly	No cost, no additional waste allowance	3 boxes: Box 1: Paper Box 2: Card Box 3: Glass. Plastic & cans collected in a blue reusable sack	Kerbside Sort	67.49%
Monmouthshire CC	Bags	Fortnightly	No cost, 2 bags limit	Box for glass fortnightly. Red bag: Paper/Card. Purple bag: Cans & Plastic	Kerbside Sort	70.41%
Neath Port Talbot CBC	Wheelie Bin	Fortnightly	No cost, 140L wheelie bin or 3 bag limit no additional waste	White Bag 1: Plastic & Cans, White Bag 2: Card, Black box with lid: Paper, Black Box without lid: Glass	Kerbside Sort	67.25%
Newport City Council	Wheelie Bin	Fortnightly	No cost, 180L bin (240L for porperties with 8+ people in household). No additional waste	Red reusable bag: Plastic & Cans, Green box: Card & Glass, Blue box: Paper, Textiles & small electrical items	Kerbside Sort	67.81%
Pembrokeshire County Council	Bags	3-weekly	No cost, 3 bag limit every 3 weeks. Households are provided with 52 grey bags each year	Residents have the option to purchase a Box Stack of 3 Top: Paper Middle: Plastic, Cans & Foil Bottom: Glass. Reusable blue sack: Card. If residents don't have a stack they can use bags Blue reusable sack: Card, Blue Box: Paper, Red reusable	Kerbside Sort	72.83%

				sack: Plastic, cans & Foil, Green Box: Glass		
Powys County Council	Wheelie Bin	3-weekly	3 bag limit every 3 weeks. Households will be assessed and if they can't accommodate a bin they will be provided with 52 purple sacks. Residents can purchase additional sacks for £59.90 per roll of 26 to cover additional collection costs	Red box: Plastic & Cans, Aqua Box: Glass, Blue Box with lid: Paper & Card	Kerbside Sort	67.07%
RCTCBC	Wheelie Bin (Cynon & Taf) 2 Black bags Rhondda	Fortnightly	No additional allowance Bags not provided	Clear single use bags for dry mixed recycling, separate food, nappies and re-usable green sack.	Comingled	67.48%

Torfaen CBC	Wheelie Bin	Fortnightly	No cost, no additional waste allowance	Blue bag: Card, Black box: Paper, Plastic, Cans, Foil & Glass	Comingled - separate card	63.61%
Vale of Glamorgan Council	Bags	Fortnightly	No cost, no additional waste allowance	Orange bag: Card. Blue bag: Plastic, Cans & Foil. White bag: Paper. Grey caddy for glass. Blue Reusable bag: mixed recycling Paper, Glass. Card, Plastic, Foil, Cans & Cartons	Hybrid	71.07%
Wrexham CBC	Wheelie Bin	Fortnightly	No cost, no additional waste allowance	Green box: Plastic & Cans, Blue Sack : Card & Paper, Black box: Glass	Kerbside Sort	68.92%

Appendix 2: (Reusable Recycling Sacks)

Technical / Operational Considerations: the types of bags considered all consist of a durable woven plastic as follows:

	<p>RCTs current reusable bag for green waste</p>	<p>450mm x 450mm x450mm (WxDxH) Handle on base for tipping retrieval. Rubber insert within base for increased durability.</p>
	<p>Sample bags provided by supplier. Currently used by Merthyr Council for the collection of Cans and Plastic.</p>	<p>450mm x 450mm x450mm (WxDxH) Handle on base for tipping retrieval. Top cover / flap with Velcro fastener. (Preferred option to protect paper and card).</p>
	<p>Sample bags provided by supplier. Currently used by Medway Council for the collection of dry mixed recycling very similar to RCT's current methodology.</p>	<p>350mm x 350mm x450mm (WxDxH) Handle on base for tipping retrieval. Rubber insert within base for increased durability. Top cover / flap with Velcro fastener.</p>

Trials were undertaken at Bryn Pica using the Council's existing reusable bags. The trials were limited to general observations regarding volume, weight, contamination and manual handling. Observations are summarised below.



Observations	Officer Comment
Volume	<p>During the test the contents of 5 current (single use) recycling bags was easily distributed with 2 of the Councils reusable bags. There was sufficient spare volume to pinch closed the top of the bags.</p>
Weights	<p>A total of 10 test iterations were carried out filling 2 reusable sacks with the contents of 5 randomly chosen recycling bags delivered to Bryn Pica. Weights in the range of 2.7kg to 5.4 kg were recorded. The average weight of the filled reusable sack was 3.8kg.</p> <p>Officers acknowledge that weights experienced at the kerbside could be significantly high if residents were to overfill with a particular waste type, particularly glass.</p>
Contamination	<p>The reusable bags did begin to soil up after the 10 test iterations. Soiling level will be dependent on the performance of individual households.</p>
Moisture Levels	<p>The impact on the quality of paper and card due to moisture ingress was not tested as part of this trial. Discussions with Amgen Officer have indicated a degree of caution in</p>

	<p>relation to any potential reduction in fibre quality. This can impact on rebates for recycling.</p>
<p>Recycling Yield</p>	<p>There is no evidence to suggest that a change to reusable sacks will increase the Council's overall recycling performance. Officers could envisage a slight reduction in overall yield of recycling as a result of lost bags barriers to replacement. Current single use bags offers the easiest method of participation with minimal barriers.</p>
<p>Collection Round Impact</p>	<p>No work has been undertaken in relation to the impacts such a change may have on pick rates, manual handling implications for recycling operative. This would need further testing.</p> <p>Officers do suspect a reduced pick rate at the kerbside due to the time it takes to deposit the contents of the reusable bag and then return it to the kerbside. This has been shown to be the case in the recent change in green waste collection.</p>



Other Information:-

Relevant Scrutiny Committee
Climate Change, Frontline Services & Prosperity

Contact Officer