

Residual Waste Restriction Policy

Background

1. Carmarthenshire County Council provides waste services to approximately 89,000 households and offers a fortnightly residual black waste collection with a limit of four bags per household, a fortnightly co-mingled kerbside recycling service and a weekly food collection. Kerbside bulky and garden waste are also offered as separate chargeable services.
2. In 2017-18 Carmarthenshire County Council was exceeding the Welsh Government recycling target of 64%, with an overall recycling rate of 66%. However, our performance this year has dropped to just under 59%, meaning we have narrowly met the 2017-18 statutory target of 58%.
3. At present there is a significant risk of not meeting the statutory recycling target of 64% in this financial year (2019/20) and therefore being potentially exposed to significant financial penalties from Welsh Government.
4. In the absence of any other developments, in-year changes to the way the service operates will be required to meet the targets of 64% in 2019-20 and 70% by 2024-25, with officials from Welsh Government already proposing the introduction of more challenging targets beyond this timescale.
5. The Council have already implemented additional policies and controls at HWRC sites in March of this year to increase recycling performance, with residual waste sorting to commence on sites in October this year. However, due to the ambitious Welsh Government target of 64% which needs to be met this year, additional measures must be considered to increase our recycling performance to avoid a potential fine of £164,000 for every 1% miss of target.
6. It is the duty of Carmarthenshire County Council to arrange for the collection and disposal of household waste as stated in Section 45 and 48 of the Environmental Protection Act 1990 (EPA). The EPA (46(1)) permits Councils to require householders to place waste for collection in receptacles of a kind and number specified. At present Carmarthenshire County Council stipulates that no household is permitted to place more than 4 black bags out for collection in any given collection period (two weeks). In order to meet statutory targets a review of this policy is required to ensure an uplift in our recycling performance.
7. To support Carmarthenshire with our current service review programme WRAP Cymru have been engaged through the Welsh Government sponsored Collaborative Change Programme (CCP). The CCP programme for Wales offers strategic and technical support to aid local authorities develop and deliver detailed reviews and plans to achieve the outcomes of the Welsh Government's Waste Strategy - Towards Zero Waste. WRAP Cymru have provided specific support on behalf of the Welsh Government for our review into residual waste restrictions and wider collection methodology in future.

Policy Change Rationale

8. Following the submission and reporting of 2018/19 Local Authority recycling figures, upon request from WG, WRAP Cymru have been asked to engage all authorities that WG have identified as likely to fail, or at risk of failing the 2019/20 targets. WRAP's assessment of CCC projected performance is as follows:
 - Planned HWRC interventions (residency checks, van permits, bag sorting) will contribute towards 62% performance.
 - 6 months of Energy from Waste (EfW) treatment of CCC's residual waste will contribute 1.1% increase.

9. Combined performance estimated still falls under the required 64%. As a result further interventions are recommended to ensure target compliance and avoid financial penalties.
10. One area that is likely to improve performance is interventions regarding residual waste capacity. As people recycle more, they require less residual waste capacity. Where residual waste capacity is restricted, WRAP evidence indicates that recycling services perform better.
11. A number of Welsh local authorities (along with a smaller number in England and Scotland) have introduced some form of restriction to the amount of residual waste that can be collected from the kerbside. By examining data from Waste-Data-Flow, it is possible to assess what impact these restrictions have had on waste flows and recycling rates the results of these changes are shown in Table 1.

Table 1 – Residual Restriction Impact

Authority	% Change - Mass household waste collected following residual restriction							Overall Recycling Rate change (Percentage points) WMT010 & 009b
	Q10 Kerbside Dry	Q10 Kerbside Food	Q16 HWRC Dry*	Q10 & 16 Combined Kerbside & HWRC Dry	Q23 Kerbside Residual	Q23 HWRC Residual	Q23 Combined Kerbside & HWRC Residual	
Bridgend	11.90%	30.96%	4.82%	8.52%	-38.14%	-39.54%	-38.35%	11.22%
Cardiff	13.18%	20.83%	4.33%	10.75%	-13.88%	16.95%	-8.06%	0.02%
Merthyr Tydfil	-17.70%	-11.28%	12.75%	-3.45%	-12.55%	-3.72%	-11.34%	12.55%
Monmouthshire	18.40%		30.92%	22.13%	-50.87%	51.68%	-22.19%	8.40%
Swansea	11.02%	14.14%	15.31%	12.47%	-24.03%	18.77%	-14.76%	4.48%
Torfaen	18.45%	38.68%	25.80%	21.42%	-18.01%	55.38%	-10.21%	9.47%
Median	11.90%	17.49%	12.75%	10.75%	-24.03%	16.95%	-14.76%	8.40%

12. Taken as a whole, authorities that have introduced residual restrictions either through 3 weekly collections, or by limiting volume collected at the kerbside typically see:
- **Increased Food waste capture** – Median increase 17.5%
 - **Increased kerbside dry recycle capture** – Median increase 12%
 - **Reduction to kerbside collected residual waste** – Median Reduction -24%
13. And for the ten Welsh local authorities sampled in total:
- **Overall reduction in household residual waste** (including HWRC) – Median reduction 18%
14. CCC's recycling rate for the 2018/19 scheme year was 58.9%. An intervention that restricts residual waste at kerbside is likely to divert residual waste into the recycling streams. Using the information from other local authorities that have undergone similar changes WRAP has estimated the potential impact of the scenarios listed above; these are shown in Table 2.
15. The changes are as follows:
- **Scenario 1:** Residual restriction from four bags to three bags per fortnight – blue bag recycling remaining fortnightly and food waste weekly.
 - **Scenario 2:** Residual restriction from four bags to two bags per fortnight – blue bag recycling remaining fortnightly and food waste weekly.

16. The results are shown below – it should be noted that these are only indicative figures at present.

Table 2 – Change in material yield at the kerbside (KS)

	Scenario 1	Scenario 2
Change in KS Food	+20%	+30%
Change in KS Commingled	+6%	+8%
Change in KS Residual	-20%	-30%
Change in HWRC Recycling	+5%	+8%
Change in HWRC Residual	0%	0%

17. The interventions will likely increase Food and Commingled waste yields at the kerbside and decrease Residual waste yields. Allied with the recent HWRC changes plus further restrictions (bag sorting) due in October it is predicted that a further increase recycling yields at HWRC will be experienced.

18. Table 2 shows the expected impact on our overall recycling rate of each Scenario.

Table 3 – Change in recycling rate

	Baseline	Scenario 1	Scenario 2
Recycling Rate Increase	-	3.3%	5%
Total Recycling rate	58.9%	62.2%	63.9%

19. The table shows that Scenario 1 is estimated to increase the recycling rate by 3.3 percentage points and Scenario 2 is estimated to increase the recycling rate by 5 percentage points.

20. In 2017 Carmarthenshire County Council commissioned a waste analysis survey which would focus on identifying the recyclable element of residual waste disposed of through the kerbside residual waste collections. The overall recyclability of the residual waste relates to all the items present that could have been accepted into the kerbside recycling schemes currently running in Carmarthenshire. Results from this study are presented in Table 4 below.

Table 4 – Recyclables in Residual Waste

Service	% Recyclables in Residual Waste
Blue Bag Recyclable	14.5%
Food Waste Recyclable	25.8%
Garden Waste Recyclable	5.8%
Total	46.1%

21. Results from the survey showed that the overall recyclable content of the residual waste was 46.1%. Meaning that almost half of all residual waste being disposed of is recyclable at the kerbside. The large content of recyclables within the residual waste further evidences the need reduce the capacity of the residual waste to householders. As a large proportion of waste can easily be diverted to other kerbside schemes, the impact on households should be negligible.

22. We have been provided with information as to the limits that other Authorities adopt for household residual waste so that we can compare our current limits and future proposed limits. This information can be seen in Table 5 below;

Table 5 – Welsh Council’s Residual Waste Restrictions

Local Authority	Collection Frequency / Containment	Residual Restriction Capacity
Anglesey	3 weekly – Wheeled bin	80L per week
Blaenau Gwent	3 weekly – Wheeled bin	80L per week
Bridgend	Fortnightly – sacks	60L per week (one sack)
Conwy	Monthly – Wheeled bin	60L per week
Denbighshire	Fortnightly – Wheeled bin	90L per week
Gwynedd	3 weekly – Wheeled bin	80L per week
Merthyr	Fortnightly – Wheeled bin	70L per week
Monmouthshire	Fortnightly – sacks	60L per week (one sack)
Powys	3 weekly – Wheeled bin	60L per week
Swansea	3 weekly – sacks	90L per week
Torfaen	Fortnightly - Wheeled bin	70L per week

23. As can be seen from the above 11 authorities that provided information all have restrictions which are equivalent of 3 residual sacks per fortnight. With 5 of the Authorities restricting households to one black sack per week. At present Carmarthenshire have a limit of 120l per week, double the capacity of some Authorities. The proposed restrictions would put us in line with many other Welsh Authorities.

Cost implications

24. It is difficult to model the cost savings accurately through the implementation of this policy. However based upon the indicative figures presented by WRAP there is the potential to realise the following. Table 6 below presents the possible cost implications to the treatment/disposal services in the proposed scenarios.

Table 6 – Potential Costs Differential

Treatment/Disposal Service	Scenario 1 Cost (+/-)	Scenario 2 Cost (+/-)
Blue Bag - Recyclable	£209,024	£313, 536
Food Waste - Recyclable	£26,134	£34,845
Residual Waste - Disposal	-£459,936	-£689,904
Total	-£224,778	-£341,523

It needs to be noted that the proposed cost differential is not necessarily a saving to the service as additional plant and resources will be required to respond to the increased demands upon the recycling service collection. A full service cost will be incorporated into the 2020/21 budget setting process in the autumn.

25. Due to increased demand upon the food and recycling services as a result of these proposed changes it is likely to affect the resources required to deliver these services. Full costings are again difficult to predict but investment will be required to address this increased demand.

HWRC Residual Waste Engagement and Sorting

26. Carmarthenshire HWRCs are provided for the recycling and disposal of waste for the benefit of Carmarthenshire residents. Changes to neighbouring Authority’s HWRC policies of late combined with increased commercial usage has resulted in a negative impacts to residual waste tonnages, recycling rates, site access and at significant increased service cost in our HWRC network.

27. The amount of commercial and out of county activity that was arising at our sites had to be addressed in order to provide a positive experience for Carmarthenshire residents to use the site to dispose of their household waste and importantly to meet our statutory recycling target this year of 64%.
28. To address these issues from the 1st April 2019 the Authority implemented a new Household Waste Recycling Centre (HWRC) policy; which includes residency checks, prohibition of commercial type vehicles and changes to opening times.
29. As can be seen in table 6 below controls on commercial use and non-resident use has resulted in a reduction to overall waste through the HWRC network when compared to the first two months of last year. However, the net overall contribution to our overall recycling rate is marginal.

Table 7 – HWRC Performance – policy implementation

Description of waste	2018 April/May	2019 April/May	Variance
Residual Material	2113.72	1412.02	-701.7
Recycling Material	6784.86	4762.54	-2022.32
Total Throughput	8898.58	6174.56	-2724.02
% HWRC Site Recycling	76.25%	77.13%	0.89%

30. The above result was the outcome from the first phase of the HWRC policy in order to eliminate the commercial and non-Carmarthenshire resident usage of the four HWRCs. As a result further action to address the amount of residual waste onsite is necessary to increase our overall recycling performance. The remaining phase of the HWRC policy (residual bag sorting) will upon implementation result in a recyclable material increase and will enhance and contribute to the County's overall recycling performance.
31. As earlier referenced upon request from WG, WRAP Cymru have been asked to engage all authorities that WG have identified as likely to fail, or at risk of failing the 2019/20 targets in order to develop an action plan to meet this target. WRAP have informed Carmarthenshire and Welsh Government that they strongly advise we implement the proposal of bag sorting at HWRC following results from policies across other Welsh Authorities which experienced increases in recycling performance. Implementing the policy will allow Carmarthenshire to be in a stronger position and reduce the risk of failing the 64% target.
32. As a result of this work WRAP Cymru have strongly recommended that the sorting of black bags is delivered in tandem with the restriction of residual waste at kerbside. For Carmarthenshire, the WRAP work assessing and advising on compliance with the 64% Statutory Recycling Target for 2019/20 recognised that black bag sorting was essential for CCC to achieve its target and avoid associated fines.
33. All of the highest performing HWRC's in Wales now have a policy of splitting residual waste sacks. Those that do require mixed black bag wastes to be separated see recycling rates up nearly as high as 90%. Sorting of bags is especially important where residual waste capacity and/or collection frequency is restricted at kerbside – evidence suggests that without HWRC controls kerbside residual waste has been displaced into the HWRC's following kerbside restrictions, limiting the overall impact of the policy objective.
34. In most cases in Wales, the implementation of bag splitting has happened alongside other interventions and it is therefore impossible to isolate the benefits of splitting alone. However, in March, Torfaen County Borough Council introduced bag splitting at their HWRC network and the following has been observed:
 - A reduction of residual waste by 65%. Interestingly, this is not just black bags – the increased scrutiny of what enters the residual bin has diverted amounts of bulkier materials away from

the residual skips (such as wood, for example). This reduction has been sustained over the first 3 months of the project and has resulted in a daily reduction of residual waste of ~3.5 tonnes per day. For Carmarthenshire, such a drop would result in further reduced disposal costs.

- The HWRC recycling rate has increased from 76% this time last year to 89% this year, thereby increasing the authority's MSW recycling rate
- Footfall/throughput at sites has reduced, decreasing queueing times and allowing operatives more time to support customers.
- There has been a slight increase in recycle collected at kerbside, in particular for bulkier items such as plastics.

35. It is proposed that designated sorting areas within each of the HWRCs are provided. Residents will be supported through education on correct material segregation from within the mixed residual bag waste presented, into the appropriate receptacles for recyclable materials. Provision of recycling receptacle will also be available for those householders that do not have the required bags or food bins.

36. In order to develop the operational practices of undertaking sort procedures we are awaiting the imminent guidance advice that is being jointly issued by HSE, NRW and WRAP about how splitting operations should be undertaken. With implementation of this policy proposed for October we will ensure that our procedures reflect the guidance issued to ensure site operative and public safety.

Communications Strategy

37. A full detailed communication plan will be developed with the internal Media and Marketing division. It is proposed that a public engagement and information on these policy changes are prioritised to ensure public acceptance and minimise the risk of complaints.

38. A working group will be established to manage the communications process, taking into account customer service staff feedback and experiences in front-line resident engagement.

39. We will be seeking funding contribution to this communication strategy through the Collaborative Change Programme to support us with comprehensive delivery of the following:

- Leaflets/direct mail to all householders
- Posters and displays for use in public areas
- Media releases;
- Digital: website, social media channels (Facebook and Twitter), videos/animation
- External advertising e.g. outdoor advertising, radio, social media
- Interactions within the HWBs
- Full member engagement
- Town and Community Councils and collaborative partnership engagement

Summary & Recommendations

40. In summary without implementing in-year changes and not adopting an increasing restriction to the black bag system and HWRC residual sorting controls, it will be extremely challenging to achieve the statutory recycling target of 64% in 2019/20. With the potential of WG to levy fines of £164,000 for every 1% we miss this target there is a major risk of increased costs and reputational damage to Carmarthenshire in failing this target.

41. For cost comparison purposes for every 1% failure of the statutory target the £164,000 fine is the equivalent of 3.5 teachers or 6.6 domiciliary care workers. If as a Council we were not to improve on the 2018/19 recycling performance of 59% it could result in a fine of £820,000. This is the equivalent of 17 teachers or 33 domiciliary care workers.

42. It is therefore proposed that a reduction to the black bag household limit and a HWRC residual waste engagement and sorting process is implemented with the approval of a detailed residual restriction

policy to take effect in October 2019 (Attached in appendix). This policy proposes a reduction in the limit from 4 to 3 sacks per fortnight per household with current exemptions to the policy still accepted (e.g. large families). It is further proposed that we review this limit again in 12 months with a view to further reducing the limit on black bags if the recycling target is not being met. In addition to this, we will be reviewing the nappy and absorbent hygiene product collection service over the next 12 months to support households with any potential further restrictions in October 2020.

43. In order to further facilitate the transition of food waste from the residual stream into the food waste recycling scheme all households are to be provided with food waste liners alongside the annual delivery of blue recycling bags commencing in September 2019 and annually thereafter.
44. Projected summary of predicted performance to meet target of 64%:

- 2018/19 Baseline recycling result = 58.9%
- Proposed new intervention measures and predicted effects on recycling: HWRC Sorting and Controls = 3.1% (62% cumulative recycling figure).
- New residual waste treatment contract = 1.1% (63.1% cumulative recycling figure).
- Food Uplift only (through black bag restrictions and use of liners) - 1.29% (64.39% cumulative recycling figure).
- Black bag kerbside restriction (including food figure above) = 3.3% (cumulative = 66.4%).

Summary of Recommendations for approval:

45. The following policy recommendations for approval are:

- Approve the Carmarthenshire County Council Restricted Residual Policy – to include
 - Kerbside black bag restriction 4 sacks to 3 per fortnight
 - Implement HWRC controls for residual bags - engagement and sorting
- Review restricted residual policy in 12 months based on performance.