

ARUN DISTRICT COUNCIL

REPORT TO ENVIRONMENT COMMITTEE ON 20th JANUARY 2022

SUBJECT: 1-2-3 Food Waste & Absorbent Hygiene Products (AHP) collection trial progress update

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DATE: November 2021
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EXECUTIVE SUMMARY: This report provides a progress update on the 1-2-3 Food Waste & Absorbent Hygiene Products (AHP) collections trial which was approved by Cabinet on 16th November 2020 and commenced in May 2021

RECOMMENDATIONS:

It is recommended that the Committee acknowledge:

- (1) The positive results to date of the 1-2-3 Food Waste and AHP collections trial.
- (2) The efforts of residents in the trial area who have sustained high participation and capture rates of food waste and AHP and delivered considerable reduction of these materials in the residual waste stream.
- (3) The effectiveness of the Arun and WSCC joint project team in ensuring smooth delivery of the trial.

1.0 BACKGROUND

1.1 On the 16th November 2020 Arun's Cabinet approved a proposal for a 1-2-3 Food Waste & AHP collections trial to be delivered in partnership with West Sussex County Council. Decision notice C/029/091219.

1.2 The decision to operate a trial was underpinned by the Council's declaration of a Climate Emergency and commitment to ensure that the impact and mitigation of climate change is considered and incorporated into all policy and key decision making. It was also agreed that the whole of our Council needs to take a lead in ensuring that each service is

part of the solution.

1.3 The Waste (England & Wales) Regulations 2011 requires all local authorities to meet recycling targets of 50% by 2020, 55% by 2025 and 65% by 2035.

1.4 Arun's current recycling performance is 42.34%. This consists of 25.58% of dry recycling (comingled recycling and street Sweepings) and 16.76% of kerbside garden waste.

1.5 Arun's current weekly collection of residual waste from sacks does not particularly encourage behaviours aligned with the Council's draft 'Vision' to tackle waste reduction and drive improved recycling and waste education amongst residents. Left unchanged, there are very low prospects for significant improvement on the current recycling rate.

1.5.1 The table below shows the kg of residual waste per household per week amongst West Sussex District & Borough Councils from a waste composition analysis exercise carried out in November. NB this is initial data subject to final verification.

Arising of residual waste (kg/household/week)							
	Waste Collection Authority						
	Adur	Arun	Chichester	Crawley	Horsham	Mid Sussex	Worthing
Total kg	6.28	10.88	5.92	7.88	5.81	5.53	5.99
Residual Collection Frequency	Fortnightly	Weekly	Fortnightly	Weekly	Fortnightly	Fortnightly	Fortnightly

1.6 Mindful of the high carbon impact of managing waste and with the costs of waste collection and waste treatment/disposal increasing, the West Sussex Waste Partnership (WSWP) have been exploring opportunities to move waste up the waste hierarchy, reducing, reusing, and recycling as much waste as possible, improving recycling quality and diverting material from disposal.

1.7 From a 2018 modelling exercise completed on behalf of the WSWP by Eunomia, a 1-2-3 collection system is considered the optimal collection model in terms of maximising recycling rates. This exercise suggested that Arun's recycling rate would increase to around 50-55% if the system was applied to the whole of the district together with an overall cost saving compared to current collection and disposal costs

1.8 Waste and Resources Action Programme (WRAP) research shows that through the introduction of food waste collections residents become more aware of wastage and subsequently choose to waste less food, this will have the most positive financial benefit to those residents. It will deliver environmental benefits and overall reduction in carbon footprint. This supports the principles of the waste hierarchy which is '**reduce, reuse, recycle**'.

1.9 A residual waste composition analysis carried out ahead of trial showed that food waste is by far the biggest single element in the residual waste, accounting for an average of **42.6%** of the contents by weight at 12,123 tonnes. Of this food waste 8,244 tonnes or 29% of the total residual tonnage was identified to be edible food and 3,865 tonnes or 13.6% inedible food such as peelings/bones etc. It was identified that 6,110 tonnes of the food waste disposed of, could have been composted, representing 21.47% of the total residual waste tonnage

2.0 INTRODUCTION

2.1 The trial was set up to operate within two specific areas. Area 1 – 1,142 properties including flats within the 'Birds' estate in Courtwick and Toddington Ward and Area 2 - a further 235 households consisting of HMO (Houses of Multiple Occupancy)/Flatted properties in Bayford Road, River Ward. This was done to ensure all property types were represented in the trial.

2.2 Trial collection in Area 1 commenced on 19th May 2021 and Area 2 commenced on 21st Sept 2021 **(see appendix 1 for maps showing properties within each trial area)**.

2.3 Results of a pre-trial waste composition analysis showed that waste within Area 1 was almost identical to results of previous waste composition analysis undertaken for the district. Specifically, food waste made up approx. 43% of the residual waste stream for both analyses, confirming that Area 1 was an ideal representative area for the trial.

The Food Waste & AHP trial consists of a '1-2-3' collection system comprising

- a) Weekly food waste & opt-in AHP
- b) Fortnightly (comingled) dry recycling and small electrical items (WEEE)
- c) Opt-in subscription garden waste
- d) Three-weekly residual.

2.4 Extensive planning was undertaken by the Project Team to ensure a smooth roll out of operations. Communications were targeted at properties within the trial areas prior to commencement of the trial and further bespoke information was provided through the Council's website

2.5 All residents received an introduction letter, information booklets and service calendar alongside a 5-litre food waste caddy and one roll of biodegradable liners. Residents who opted in for AHP Collections also received AHP bags. FAQ's, detailed information in different languages, dedicated web page, social media and contact centre support was also provided.

(see appendix 2 for examples of communications materials)

2.6 Collection logistics

Households further received:

- A green 23-litre food waste bin designed for outdoor use
- A new 240 Litre wheelie bin for residual waste (if required)
- A new 360 Litre wheelie bin for residual waste (large families/additional needs)
- Extra Recycling wheelie bin where requested

Flats with Bin stores received:

- A 140-litre wheelie bin in the bin store for communal food waste
- A 140-litre wheelie bin in the bin store for communal AHP
- New bin store signage

HMO's were provided a bespoke solution:

- A new 240 or 360 Litre wheelie bin for residual waste where needed
- Extra Recycling wheelie bin where needed

(see appendix 3 for visual representation of the trial)

2.7 Food waste collected by Biffa Arun as part of this trial is taken to Grundon's in Ford where it is bulked and transported to Biogen in Basingstoke for Anaerobic Digestion.

2.8 AHP is collected by Medisort and taken to their Energy Recovery facility in Littlehampton.

3.0 DATA & RESULTS SO FAR

3.1 The trial has provided a range of both qualitative and quantitative data so far, the headlines of which are as set out below. **(See appendix 4 of this report for a full summary).**

3.2 Participation

- Participation with food waste collections within Area 1 is very high. It started at 86% and now stands at 94% This is way in excess of the pre-trial objective of 50% participation*
- Participation with food waste collections within Area 2 was 57% at the start and has increased on average every week to 86% participation. This is way in excess of the pre-trial objective of 20%*
- Zero contamination of food waste i.e., no rejected loads which demonstrates residents are using the service correctly.

*based on WRAP guidance of 50% expected participation for households and 20% for flatted/HMO properties

3.3 Data tonnages for collections

Area 1 from 16th May to 3rd November 2021

- 148 tonnes of residual waste collected.
- 133 tonnes of recycling collected.
- 86.4 tonnes of food waste collected.
- 12.7 tonnes of AHP collected.
- Reviewing collection data over 6 months of collections, it can be noted that residual waste has reduced significantly from 592.28 kg/hh/pa recorded at the start of the trial to 226.47kg/hh. That's a potential 365.81 kg/hh/pa diversion from the residual waste stream.
- Food waste collected from all households in area 1 is on average 3.03 kg. Halloween and half term week saw the kg of food waste per household rise to 4.43kg. This is believed to be due to pumpkins and children being at home.
- Dry Mixed recycling also rose to 11.47 kg/hh from an average of 8.8 kg/hh.
- During the trial, 152 households signed up for AHP collections.

Area 2 From 21st September to 3rd November 2021

- 7.6 tonnes of residual waste collected.

- 2.6 tonnes of recycling collected.
- 2.1 tonnes of food waste collected.
- 1.3 tonnes of AHP collected.

3.4 Waste composition analysis results

- Resource Futures have undertaken two set of sample analysis (Baseline vs second sample) to provide robust and representative monitoring and evaluation of the 1-2-3 trial in Arun. A further sample analysis will be taken towards the end of the trial for complete evaluation.
- The samples include three different groups:
- A representative sample of 90 kerbside households will be designed to represent the profile of the trial area. This sample area will be referred to as 'Area 1' Kerbside.
- A sample of 69 communal properties that are part of the trial area. This sample area will be referred to as 'Area 1' Communal.
- Additionally, 209 dwellings in Bayford Rd 'Area 2', Littlehampton, comprising of 74 kerbside and 135 HMO properties/flats.

- **Area 1**

- Appendix 4 slide 3 highlights the significant reduction in AHP, total recyclable material, WEEE, food, and garden waste from the residual stream, as well as an overall reduction in remaining residual waste. There still remains a small level of food waste that could be placed in caddies.
- Slide 4 – This graph shows the move from food waste within the residual bin (baseline) into the food waste caddy and a reduction in kg/hh/wk. of food waste being collected baseline (October 2020) – 6 Months (November 2021). It also highlights a decrease in recyclable items within the residual waste.
- Total collected residual waste reduced from 10.80 kg/hh/wk. to 5.98 kg/hh/wk. reducing the residual collection by almost half. It is shown that all households within trial area 1 had an average diversion of 4.82 kg/hh/wk. from residual into the comingled and food waste recycling stream. For trial area 1 this could equate to just under 5 tonnes a week or 250 tonnes a year into recycling instead of residual waste.
- Slide 5 Table 1 – This table highlights the reduction of both the food waste and recyclables in the residual stream. It does highlight that there is still a small amount of recyclable and food waste within the residual stream, Table 4 – The total amount of food waste collected via both residual and food waste collection has dropped slightly from 4.95 kg/hh/wk. to 4.91kg/hh/wk. with 3.64 kg/hh/wk. being collected as food waste and a 74% capture rate. This is an exceptionally high capture rate with the highest being recorded at 80% based on Resource Futures case studies.

- **Area 2**

- Slide 6 shows the total kg collected per household for kerbside and per HMO property and highlights the reduction in various materials predominantly both food

waste and recyclable items in the residual waste for both house types. There appears to be a rise of the Non – recyclable material in residual waste stream in area 2, reviewing further analysis this increase is due to ‘All other material’ at 1.86 kg and ‘other organic matter’ at 0.81 kg. In the baseline data ‘All other material’ was recorded at 0.84 and no other organic matter. All other material is Combustible and non-combustible including DIY waste, wood and cork, carpet and underlay, pet waste and cat litter dead animals, crockery, plaster boards. Other organic matter is dog poo, rabbit/guinea pig etc. bedding, organic cat litter.

Baseline vs second sample – Recycling

- The same properties were sampled in the baseline for Area 1 in October 2021 and six months into the trial, November 2021. Three out of five of the sample’s gradings improved in November 2021 compared to October 2020.
- The improved kerbside samples upgraded from a D to a C grading, and a C to a B grading. A communal sample improved from a D to a C grading. The remaining kerbside and communal samples showed a minimal increase in contamination but remained within the same grading (kerbside B and communal C).
- The same properties were sampled in the baseline for Area 2 in June 2021 and six weeks into the trial, November 2021. Both sample’s gradings remained the same, all grade D.
- Area 2, HMO recycling increased from 19.460% contamination to 20.872%. Kerbside increased from 25.346% contamination to 30.136%. This predominately consisted of food contaminants at 12%, wet paper and card at 5% and household waste at 5%
- November (end of half term and Halloween) is noted for high contamination and is a trend that is noted across the County.

3.5 Door steppers survey results summary (see appendix 5 for full breakdown)

- 500 residents surveyed.
- 95% of residents saying that they were using the food waste bins.
- 85% stating they were “very satisfied” or” satisfied” with food waste collection service.
- 74% of residents saying the 240ltr general waste bin provided was large enough and 73% responded that they were “very satisfied” or” satisfied” when asked about the general waste collection, with only 5% being “very unsatisfied”.
- 96% of residents reported receiving a leaflet, booklet, and calendar prior to the commencement of the trial, all of whom found them helpful.
- 16% of residents had needed to visit the ADC website, of whom 70% found it “helpful” or “very helpful”, and of the 10% who needed to call the ADC contact centre with regards to the trial, 60% reporting this service to be “helpful” or “very helpful”.

3.6 Progress Against Objectives

- 3.6.1 A number of pre-trial objectives were set based on and off the back of leading industry and best practice guidance.
- 3.6.2 As may be expected based on the data outlined thus far, performance of trial largely significantly exceeds the pre-trial objectives.
- 3.6.3 **Full details of the current performance against the set objectives are outlined in appendix 6.**

3.7 Additional challenges, successes and learning points

- Challenges include;
 - There have some participation and compliance issues in the communal bin store at one block of flats. The Project Team have spent time trying to resolve issues, and although there has been some improvement the design of the bin store is the main barrier to progress.
 - The staff resource requirement in respect of project management, including operations team, communications team and project team has been substantial, therefore this would be a significant consideration of any wider roll out.

- Successes include.
 - Low complaint levels and resident satisfaction with food waste collections.
 - The majority of residents are using containers in right ways, challenging misconceptions around too many containers/receptacles.
 - Timings were proven to be deliverable in respect of communications, timing of roll out and bin provision.
 - Size of containers are proven to be suitable for 1-2-3 Collections, only isolated excess waste incidents have been recorded.
 - Starter pack of liners was sufficient in order to promote behaviour change, no significant reduction in food waste collected as liners run out.

- Learning points
 - The need to work closely with and engage collection crews as the frontline face of the trial in respect of training, tool kits and briefings.
 - Residual bin roll out and whether opt in/opt out is the most effective.
 - The need for time consuming and detailed site audits in respect of area 2 due the variation in collection points.
 - Monitoring bin stores and working with doorsteppers/crews/managing agents is key in resolving barriers.
 - Elements of food waste and recycling remain in the residual bin, reminder communications to residents about using services available correctly.

4.0 Conclusions

- The data, results and observations thus far show an overwhelmingly positive picture which dispels many pre-trial misconceptions and concerns that were voiced on social media and elsewhere.
- Based on a review of the target performance data the project team are very confident that if a 1-2-3 collections scheme was rolled out district-wide we would meet the 2025 target recycling rate of 55% and 60% by 2030. Once a year's-worth of collections data is available it will then appropriate to provide an accurate estimation of likely district wide recycling performance percentage.
- The Environment Act 2021 received Royal Assent in November 2021 and contains a new duty for Waste Collection Authorities to collect food waste separately. More detailed guidance around implementation timeframes and the level of new burdens support is expected from Defra in "early 2022". The Arun trial provides excellent insight and learning to deliver this requirement.
- It would also be reasonable to suggest that, so far as many residents are concerned, Arun is pushing against an open door with proposals to provide separate food waste collections.
- The results so far support the assumption that a three weekly residual collection frequency drives the most significant diversion of recyclable materials (dry mixed recycling, food and AHP) from the residual stream. The scheme drives behavioural change, encouraging residents to take more responsibility for segregation of their waste.

5. PROPOSAL(S)

For members of the Environment Committee to agree the recommendations

6. OPTIONS:

To agree the recommendations as set out in the report

Not to agree the recommendations as set out in the report

7. CONSULTATION:

Has consultation been undertaken with:	YES	NO
Relevant Town/Parish Council		✓
Relevant District Ward Councillors		✓
Other groups/persons (please specify)		

8. ARE THERE ANY IMPLICATIONS IN RELATION TO THE FOLLOWING COUNCIL POLICIES: (Explain in more detail at 6 below)

	YES	NO
Financial		✓
Legal		✓
Human Rights/Equality Impact Assessment		✓

Community Safety including Section 17 of Crime & Disorder Act		✓
Sustainability	✓	
Asset Management/Property/Land		
Technology		✓
Other (please explain)		✓
9. IMPLICATIONS:		
Sustainability – Trial delivers on principles which would positively contribute to ADC target for 2030 carbon reduction and supports key principles of the waste hierarchy.		

10. REASON FOR THE DECISION:

To acknowledge the data contained within the report and the work of the respective Project Team comprising of officers from both Arun District Council and West Sussex County Council.

11. BACKGROUND PAPERS:

[Cabinet report decision paper C/029/091219.](#)

12. APPENDICES

1. Trial area maps
2. Communications
3. Collections, bin provision and the trial in progress
4. Trial data; collection tonnages & waste composition analysis
5. Residents survey results
6. Objectives – progress against pre-trial objectives