Nuneaton & Bedworth
United to Achieve

AGENDA ITEM NO.

NUNEATON AND BEDWORTH BOROUGH COUNCIL

Report to: Environment and Leisure Overview and Scrutiny Panel

Date of Meeting: 16th October 2025

Subject: Domestic Food Waste Collections

Portfolio: Communities and Public Services

Responsible Officer: Neighbourhood Services Manager

Corporate Plan – Theme: Green Spaces and Environment

Corporate Plan – Aim: Support our residents to recycle more of their household waste

Ward Relevance: All

Public or Private: Public

Forward Plan:

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1. Purpose of report

1.1. This report evaluates and makes recommendations for the methods and mechanisms for the introduction of free (to residents) weekly domestic food waste collections across the Borough.

1.2. Food waste currently accounts for a significant proportion of household refuse (over 50%). Establishing the domestic food waste collection across the borough will ensure legislative compliance as the proposal meets the requirements for separate food waste collections as set out in the Environment Bill 2021.The recommendations made in this report set out the proposed service plan. This means a weekly kerbside collection of food waste from all

domestic properties. New collection vehicles, containers and staff recruitment and public engagement campaigns.

1.3. Agreeing the recommendations in this report will now allow the procurement to be undertaken and a full implementation programme to be established and a timely borough-wide rollout of the services in 2026.

2. What is the panel being asked to consider?

2.1. To review and agree the recommendations made in section 3 to allow the implementation of domestic food waste collections to residents across the borough in line with statutory requirements

3. Recommendations

3.1 The table below sets out the recommendations being made.

Recommendation	Rationale	Expected Impact
Adopt a driver and 2 loaders model for the collection of domestic food waste	Reduces significantly the number of vehicles needed for the collection of food waste	Reduced upfront purchase costs Lower CO2 impact to operate
Implement 6 collection rounds (requires 7 vehicles)	6 collection rounds provide capacity to complete all scheduled work and leaves some capacity for on round issues and population growth	Reduced procurement costs Operationally efficient
Procure 7 (6 rounds and 1 spare) 7.5 tone bespoke food waste collection trucks.	Pay load of 7.5 tonne is easily capable of managing the food waste yields whilst. Lower purchase and running costs of 12.5 tonne version	Efficient operation reducing fuel use and CO2 emissions
Procure 5 litre kitchen caddies and 23 litre kerbside caddies	This is the commonly used operation model for food waste, and using a kitchen caddy should help ensure participation rates in the service are good	Allow NBBC to operate the most efficient collection model possible good participation in the service
Operate a companion bin system for emptying the caddies	Maximum operator efficiency and therefore round efficiency	Quicker and simpler collection model

Recommendation	Rationale	Expected Impact
Provide a roll of (circa) 50 caddy liners at roll out and provide a resupply option for residents to collect from public points such as town hall, libraries etc.	Increases participation in the service, no additional delivery costs at roll out	Improved customer take up of service Improved customer satisfaction with service
Develop specific policies for the provision and supply of food waste collections	Ensure service is backed up by robust formal policies to enable reliable service delivery	Improved service delivery
Provide replacement kerbside caddies where they become damaged in line with existing container charging policies. Allow residents to supply their own kitchen caddies should they need replacing	Align bin replacement process to fit with existing services. Undertake a review of exiting bin charging policies prior to food waste services implementation	Equal provision in line with existing policies and services
Develop an extensive communication and education plan for pre and post service roll out	Ensure residents buy into the service, understand the benefits and participate with the food waste collection service	Increased participation and customer engagement

4. Background

4.1. All local Authorities will from April 2026 be required to provide domestic premises with a separate, free to residents, weekly food waste collection.

4.2. In June 25 NBBC Cabinet approved a report to begin procurement processes for the provision of these new food waste collection services and a working group from the Environment and Leisure OSP was set up to oversee the decision process and service parameter being set.

4.3. Nuneaton and Bedworth Borough Council has been allocated in total allocated £ 1,345,000.00 by Central Government for the

procurement and roll out of the domestic food waste collections services.

4.4. Ongoing new burdens funding is expected for the ongoing operational costs such as staff salaries, vehicle maintenance etc associated with running the food waste services but details of this are yet to be released by DEFRA.

5. Body of report

5.1. Key Assumptions Applied

5.1.1 Several assumptions have been used for the purposes of the modelling undertaken.

5.1.2 60,000 domestic properties used for the purposes of the models; this is slightly more than currently exist across the borough but allows for some initial growth modelling in the early years.

5.1.3 Using national guidance and case study reports and considering the demographics across the borough the models assume a 35% participation rate in the weekly food waste collections. This 35% participation is commonly used Mid-lower participation rate established by WRAP (Waste Recycling Action Programme) through their various samples of authorities operating food waste collections.

5.1.4 The assumed yield per participating household has been taken using the national average (from Local Authorities already operating food waste collections) of 1.47 kg

5.1.5 In the data modelling (appendix 1) average figures are used to determine the working times for crews. This includes an average of 30 seconds to empty a kerbside food caddy (collect, empty return), 20 seconds to pass a property that hasn't presented a food caddy and in accordance with our current contracts for collection teams a 37-hour working week.

5.2. Collection Crews

5.2.1 With the collection models the first consideration is whether to operate collection vehicles with a driver and one loader (driver +1) or a driver and 2 loaders (driver +2).

5.2.2 The modelling (appendix 1) shows that if operating with a driver +1 the first point that the crews would have enough time to complete the daily works would be with 11 collection vehicles if operating with a driver + 1 system.

5.2.3 By comparison with a driver +2 system the first point at which collections are completed within the basic working day is with 6 collection vehicles.

5.2.4 This significant reduction on vehicles has a significant cost reduction for the setup of the service, with grant funding allocated as per purchasing 13 collection vehicles for the driver +1 model (11 collection rounds would require 2 spare vehicles in the fleet) would place the procurement process significantly above the money provided by central government and place a funding requirement onto NBBC directly.

5.2.5 The operation of 11 collection rounds would have a high CO2 impact in comparison to collection models with less vehicles and would have higher fuel costs to operate with the additional vehicles being used.

5.2.6 An 11-round service of driver +1 would operate with 22 staff whereas the driver +2 model needing 6 crews would have a staff resource of 18 creating higher running costs as well as the higher set up costs (as shown in appendix 2).

5.3. Number of collection rounds

5.3.1 Appendix 1 shows that in the driver +2 models then only at 6 rounds do the crews have sufficient time to complete the collections rounds as per the assumed model data.

5.3.2 With 6 collection rounds there is some spare time within the rounds, circa 1 hr 40 minutes. This which would allow for issues such as local road conditions, minor breakdowns or other such daily operational issues to be managed in round without the need for additional sources or overtime working.

5.3.3 It is necessary to model rounds having some additional time in their daily work to allow for future services growth and the boroughs expected population/property growth as this spare capacity will allow us to manage any such growth.

5.4. Vehicles

5.4.1 To operate the food waste collections bespoke specialist collection vehicles are needed to meet the various requirements for collecting this waste. The waste must be collected in non-compaction vehicles which provide sealed containment of the waste once collected.

5.4.2 The standard options for collection vehicles for food waste are 7.5 tonne or 12.5 tonne collection vehicles.

5.4.3 Using the table in appendix 1 it shows using national average data for yields per household that the 2.5 tonne pay load capacity of the 7.5 tonne option would be plenty capable of ensuring we operate only tipping once a day.

5.4.4 The 7.5 tonne vehicles come with a lower purchase cost and slightly lower fuel consumption (and therefore emissions are also lower).

5.4.5 The proposal is to use diesel vehicles. Electric alternatives have been looked at but should be noted that where a diesel 7.5 tonne food collection truck costs around £110k to purchase an electric equivalent would cost over £350k in the current market.

5.5. Caddies

5.5.1 The most common operational model for domestic food waste collections is to provide properties with a 5-litre kitchen caddy and a 23-litre kerbside caddy. Residents use the kitchen caddy to place items in, then empty this into the larger caddy for collection.

5.5.2 Studies have shown that using a kitchen caddy increases participation in the collection service by between 8% & 15%. There are several other factors that can contribute hence the variation in this number such as an area's demographics, existing waste services and frequency of collections. But if the use of a kitchen food caddy can bring somewhere around a 10% improvement in participation numbers, then it seems a clear indicator that the use of a kitchen caddy is a necessary step to running an effective, efficient and well used service.

5.5.3 Kerbside caddies are an essential element to provide secure disposal point for the food waste in a receptacle that collection

crews can easily lift and handle without causing injury to themselves or damage to the item. 23 litre caddies provide a good capacity for the average household and have the design features needed for safe handling by collection teams handling numerous such movements each day.

5.5.4 Several caddies have been sampled, and the current preferred models are 5l and 23l caddy from 'Compost Kings'. Both caddies appear to be durable and good quality whilst representing the best value for money.

5.6. Collection Methodology

5.6.1 There are two main operational models we could use for the emptying of the caddies. The first is the collection crews collect and directly tip each presented kerbside caddy into the back of the collection vehicle. The other option is for the crew to use a 'companion bin' that they pull along the road with them (a normal wheelie bin) and tip each presented kerbside caddy into the bin, emptying the bin at the vehicle when necessary.

5.6.2 Tipping each kerbside caddy into the vehicle brings with it a slightly slower collection rate as the crews are bringing each container to the vehicle, whilst our models (shown in appendix 1) suggest that some spare time is available using this for future service growth and in round delays seems more prudent than operating a system we now to not be as efficient as another.

5.6.3 By using a companion bin the collection teams should be able to work with maximum efficiency and cover more collections/properties before having to empty the bin at a vehicle.

5.6.4 Careful consideration for how the companion bins are secured on the vehicles during transit need to be given to ensure compliance with road haulage regulations.

5.7. Caddy Liners

5.7.1 Studies have shown that the use of bin liners in kitchen caddies can increase participation levels by around 20% from areas not using them. The London Borough of Bromley saw increases of near 25% after introducing caddy liners.

5.7.2 The type of liner used is not important and does not impact on disposal routes or costs. Residents can be free to use their own liners of choice without it having any impact on the service or collection of their food waste.

5.7.3 Approximate costs for providing all properties with a roll of 50 caddy liners during the bin delivery period is £0.80 per property.

5.7.4 Annual re-supply of container liners would be expensive due to the delivery process (already delivering caddies during roll out so not an issue then). Whilst residents can provide their own liners budgets allowing public points (Town Hall, libraries, community centres) could stock liners for us to supply free of charge to people on request at those locations.

5.8. Communications

5.8.1 Significant communication and educational programmes should be developed in accordance with recognised food waste campaign materials and tailored to suit our residents and services needs.

5.8.2 Full communication and education plans will be drawn up by the project team during the project start period but will involve extensive programmes to ensure residents understand the service and how to use it.

5.8.3 A budget of £2 per household is identified as being able to provide an extensive communications campaign for pre roll out, rollout and post roll out to ensure residents understand and engage with the service.

5.9. Communal properties

5.9.1 Communal properties where the properties already share bins will each receive Kitchen caddies for the individual flats but will have a single communal bin for emptying the caddies into.

5.9.2 A 240 litre wheeled bin clearly marked for food waste will be provided to all communal properties and will allow communal properties to use the service without the need for kerbside caddies.

5.9.3 There is no operational impact of these communal works, and they will be factored into the general rounds rather than running a bespoke flats round. The numbers of these properties do not alter the modelling of the service parameters. For the purposes of the modelling all properties were considered as being on kerbside caddies.

5.10. Service Policies

5.10.1 A complete set of policies will be developed and ratified to ensure the service is delivered efficiently and fairly to all residents throughout the Borough.

5.10.2 The policies will be specific to the food waste collection service but will align to match existing waste and recycling collections as appropriate.

5.11. Container Replacements

5.11.1 It can be expected that a container replacement rate from participating households of 10% (based on the mid-point in national guidance reports) could be seen each year after the service is rolled out.

5.11.2 This could see around 2,000 kerbside caddies needing to be replaced each year. This would create a replacement cost of around £8000 for the containers to be replaced. Given that households have to have the kerbside caddies the replacement of them where they are damaged or lost is essential for allowing households to continue participating in the service.

5.11.3 There is already has a policy at NBBC for charging for replacement containers and therefore its considered appropriate to align the replacement of the kerbside food caddy to the recycling bin recharge policy.

5.11.4 Whilst the replacement of the kerbside caddies is essential to allow households to continue to participate in the service households can chose whether they use or need the kitchen caddy and therefore it is recommended that replacement of these is not necessary.

5.12. Finance

5.12.1 The following table shows the recommended spend against the grant funding provided by central government.

Service Requirement	Unit Cost	Total
Vehicles (6 + 1 spare)	£ 110,000	£ 770,000
23l kerbside caddies	£ 4.14	£ 248,400
5l kitchen caddy	£ 1.37	£82,200
Liners (roll of 50)	£ 0.80	£ 48,000
Communications per house	£ 2.00	£ 120,000
Rollout/Delivery Per property	£ 0.80	£ 48,000
Total Costs		**£ 1,323,600**
Grant available		**£ 1,345,000**
Margin		**£ 21,400 (positive)**

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6. Appendices

6.1. Please note the following appendices:

Appendix 1 -Collection models and round viability

	Number of Rounds	Available Collection Minutes Per Round Per day	Time to Empty Containers	Time to Pass None Presents	Round Total Time	Able To Complete Round	Tonnage Per Vehicle (2500 kg payload)
Driver +1	5	444	420	520.00	940.00	No	1260
	6	444	350.00	433.33	783.33	No	1050
	7	444	300.00	371.43	671.43	No	900
	8	444	262.50	325.00	587.50	No	788
	9	444	233.33	288.89	522.22	No	700
	10	444	210.00	260.00	470.00	No	630
	11	**444**	**190.91**	**236.36**	**427.27**	**Yes**	**573**
Driver +2	5	888	420.00	520.00	940.00	No	1260
	6	**888**	**350.00**	**433.33**	**783.33**	**Yes**	**1050**

Appendix 2 -staff numbers and net salary costs

	Number of Rounds	Drivers	Collection Operatives	Total Staff Number	Total Annual Salary Costs
Driver +1	5	5	5	10	£ 268,655
	6	6	6	12	£ 322,386
	7	7	7	14	£ 376,117
	8	8	8	16	£ 429,848
	9	9	9	18	£ 483,579
	10	10	10	20	£ 537,310
	11	11	11	22	£ 591,041
Driver +2	5	5	10	15	£ 396,600
	6	6	12	18	£ 475,920

Appendix 3 –example implementation plan

Task	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16
Phase 1																	
1.1	Project Team Formation																
1.2	Service Design																
	Set Service Parameters																
	Establish Policies For Service																
	Optimise routes																
1.3	Establish Data Management Systems																
	Missed bin reporting system																
1.4	Treatment Facility Agreement																

Phase 2																	
2.1	Comms Strategy																
	Identify target audiences																
	Define Key Messages																
2.2	Create Information Materials																
2.3	Launch Comms Campaign																
Phase 3																	
3.1	Finalise container distribution process																
	Identify storage area																
	Route delivery rounds																
3.2	Staff recruitment																
	Vehicle Delivery																
	Vehicle Livery																
3.3	Staff Training																
3.4	Container Distribution																
Phase 4																	
4.1	Final Comms Blitz																
	Social Media																
	Printed media																
4.2	Service Launch																
4.3	Post Launch Monitoring																
	Resolve roll out issues																
4.4	Project Review																

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7. Background papers

1- https://www.nuneatonandbedworth.gov.uk/download/meetings/id/1219/Download%2520the%2520Agenda%252C%2520reports%2520and%2520appendicesAppendix B – [insert title]

8. Report Writer Details:

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