

**COMMUNITIES AND LOCAL SERVICES SCRUTINY COMMITTEE
24 OCTOBER 2024**

ENVIRONMENT ACT 2021 – HOUSEHOLD WASTE MANAGEMENT ARRANGEMENTS

SUMMARY REPORT

Purpose of the Report

1. The purpose of the report is to outline to scrutiny Members the requirements of the Environment Act 2021 and to provide details on the development of a new statutory weekly food waste collection service.

Summary

2. The Environment Act 2021 (hereinafter referred to as the 'Act') has a broad remit to improve air and water quality, protect wildlife and increase recycling and reduce plastic waste. This report provides an overview on the requirements of the Act in relation to waste management and focusses on the requirement to introduce a weekly food waste collection service by April 2026.
3. The main requirements of the Act are:
 - (a) **Food Waste Collection:** from March 2026, local authorities have to collect food waste weekly from all residential properties.
 - (b) **Simpler Recycling:** new Simpler Recycling collections will be introduced with the aim to produce standardisation. This will be applied to local authorities and businesses over the coming years.
 - (c) **Extended Producer Responsibility (EPR):** this element of the Act places the responsibility onto packaging producers to cover the full net cost of dealing with the packaging they place on the market.
 - (d) **Deposit Return Scheme:** will be operational from October 2027 where individuals can return polyethylene terephthalate (PET) bottles, steel, and aluminium cans from 150ml to 3L in size and will receive a refund on the deposit paid. Supermarkets and convenience stores to act as return points.
4. The main report provides more information on the above requirements of the Act.

Food Waste Collection

5. The Council will have to provide residents with the facility to recycle food waste and have it collected weekly from their property.

6. The report outlines the current household waste management arrangements and what actions the Council needs to consider to introduce the weekly food waste collection service.
7. To assist in developing a service the waste composition from refuse has been analysed to understand the volumes and food types that are disposed of currently. There has also been a review of best practice and performance undertaken on authorities already operating a food waste collection and we have engaged the Waste and Resources Action Programme (WRAP) to inform options for the service.
8. Best practice from Authorities that have been operating food waste collection for a number of years suggests providing a 5-litre or 7-litre internal kitchen caddy and a 23-litre external bin for food waste provides the best arrangement and yield performance.
9. Given the nature of food waste, the provision of compostable caddy liners to manage the food waste within Caddies is also shown to yield better uptake of recycling.
10. There are a number of options on how the food waste could be collected from the properties by the Council and these are presented in the main report. The options compare the cost and performance in terms of recycling activity.
11. The final report to Cabinet and potentially Council will need to recommend an option depending on a range of factors including affordability. Officers are not able to recommend an option at this stage as Government have not provided an indication of how much funding will be provided to develop and deliver the service. The cost of introducing the new requirements was anticipated to be from New Burdens funding from Government, which would mean a cost neutral impact on the Council Medium Term Financial Plan (MTFP). However, indications are that the funding allocation may not be sufficient to cover costs and, as such, the implications of options need to be considered carefully as they have the potential to add pressure into the MTFP.
12. Officers are progressing preparations where possible but procurement exercises will need to be progressed for equipment and vehicles and there will be additional requirements to manage vehicles and waste management services.
13. There will also need to be a procurement exercise for a provider to treat the waste. Collaborative procurements with other Authorities will be undertaken where practical and possible.
14. The new service will require additional staff as outlined in the main report and a staff recruitment process and training programme will be put in place. There will also be a need to develop a communication and implementation strategy with residents to ensure they are aware of the new requirements to ensure recycling is maximised.
15. The Government have set a deadline of April 2026 for the scheme to be introduced, which is extremely challenging. The Council is preparing for the introduction of the service but cannot make final decisions on options and commit to procurements until final guidance and funding details are provided. Therefore, whilst every effort is being made to progress arrangements there is a risk that the scheme may not be operational by April 2026 given the procurements, lead-in times and processes that need to take place.

Recommendations

16. It is recommended that the Communities and Local Services Scrutiny Committee are asked to consider the content of this report and provide feedback to Cabinet to be considered in the development of final proposals.
17. The recommendations are supported by the following reasons:
 - (a) To provide information to Members on the requirements of a new food waste collection service as required by the Environment Act 2021 and the issues and risks currently being managed in the development of a weekly food waste collection service.

Dave Winstanley
Executive Director – Environment, Highways and Community Services

Background Papers

Composition Analysis of Darlington Kerbside Residual Waste report.

Waste and Resources Action Programme (WRAP) report - An Assessment of Alternative Household Waste Collection Services Design

Waste and Resources Action Programme (WRAP) - Darlington Borough Council Benchmarking Report

Ian Thompson: Extension 6628

Council Plan	A positive impact on the core principle of tackling climate change and the Local Environment priority is anticipated by managing waste more sustainably.
Addressing inequalities	There is no adverse impact on diversity as a result of this report. Assisted collections will still be available.
Tackling Climate Change	A high-level assessment of the impact on carbon emissions has been carried out on the different options within this report and presented for members to consider.
Efficient and effective use of resources	To be completed depending on option.
Health and Wellbeing	Collecting and disposing of waste more sustainably has a positive impact on residents' health and wellbeing.
S17 Crime and Disorder	There is no direct impact on crime and disorder resulting from the recommendations of this report. However, there is an indirect impact if refuse and recycling is not collected on regular basis.
Wards Affected	All wards
Groups Affected	There is no impact on any particular group as a result of this report.
Budget and Policy Framework	The impact on budget has yet to be determined. This will be confirmed when the transitional and revenue funding for the implementation of a weekly food waste collection service is provided by Government.
Key Decision	Yes – affects all wards.
Urgent Decision	No
Impact on Looked After Children and Care Leavers	This report has no impact on Looked After Children or Care Leavers.

MAIN REPORT

Information and Analysis

18. The main requirements of the Act with regards to waste management introduce the following aspects:

- (a) Statutory Food Waste Collection
- (b) Simpler Recycling
- (c) Extended Producer Responsibility (EPR)
- (d) A Deposit Return Scheme

Food Waste Collections

19. From the end of March 2026, local authorities must collect food waste weekly from all residential properties, unless transitional arrangements have previously been agreed. The analysis and options for providing this new service are detailed later in the report. The date for Darlington to implement this service is 31 March 2026.

Simpler Recycling

20. New 'Simpler Recycling' collections will be introduced with the aim to produce standardisation with the same materials: plastic, metal, glass, paper, card, food waste and garden waste (a charge can be applied for collection of garden waste) collected from homes, workplaces and schools.
21. These changes were introduced in the government's response on 21 October 2023, which also included the following key proposals:
- (a) Subject to consultation, Waste Collection Authorities can co-collect dry recyclables without the need to submit a written assessment.
 - (b) Subject to consultation, a requirement that Waste Collection Authorities collect residual waste at least fortnightly, if not more frequently, to protect local amenities and prevent unintended consequences of cutting residual waste frequency.
22. The above proposals were subsequently included in a private consultation with local authorities earlier this year. The new government is expected to either confirm or amend the above proposals in the form of Statutory Guidance which local authorities are required to have regard to. At the time of writing this report, the above proposals have not been confirmed or set out in regulations.
23. The Environment Act 2021 also places requirements on businesses as well as local authorities. Timescales for implementing the various requirements are as follows.
- (a) By 31 March 2025, businesses, and non-domestic premises (except micro-firms - businesses and non-domestic premises with less than 10 full-time equivalent employees), will be required to recycle all recyclable waste streams: metal, glass, plastic, paper, card, and food waste (excluding garden waste and plastic film).

- (b) By 31 March 2026, local authorities will be required to collect all six recyclable waste streams (excluding plastic film), from all households. Local authorities must collect food waste weekly (except where a transitional arrangement applies, affected local authorities will have a later implementation date set in regulations). The date for Darlington is 31 March 2026.
- (c) By 31 March 2027, micro-firms (businesses and non-domestic premises with less than 10 full-time equivalent employees) will be required to recycle all recyclable waste streams (excluding garden waste). Plastic film collections from all households, businesses and non-domestic premises will also begin.

Extended Producer Responsibility (EPR)

- 24. This element of the Act places the responsibility onto packaging producers to cover the full net cost of dealing with the packaging they place on the market.
- 25. Local authorities will receive payments from 2025/26 and will be notified in spring 2025 what that payment will be for any packaging they collect; whilst it has not been confirmed, this is unlikely to be new money.
- 26. There will be a scheme regulator appointed to manage the scheme who will also carry out an assessment of a local authority's recycling service based on the efficiency and effectiveness of the service. The criteria for the assessing efficiency and effectiveness have not been agreed to date. However, from 2027/28 a deduction of the payment to local authorities can be imposed if falling below the required benchmark. The maximum deduction will be 20%.

Deposit Return Scheme

- 27. The scheme will be operational from October 2027 where individuals can return polyethylene terephthalate (PET) bottles, steel, and aluminum cans from 150ml to 3L in size and will receive a refund on the deposit paid. Supermarkets and convenience stores will act as return points.

Review of existing Waste Management Services to meet the requirements of the Act

- 28. The requirements of the Act and the provision of a food waste collection service for residents will have implications for the Borough's local waste management. The following section of the report outlines the current arrangements and what will be necessary to meet the requirements of the Act.

Existing Services

29. As background information, the following provides Members with an overview of the current waste management services.
 - (a) There are five fortnightly residual waste collection service rounds across the Borough using a 240L wheeled bin (larger 360L bin for larger households).
 - (b) There are six fortnightly dry recycling collection service rounds across the Borough collecting paper, card, glass, plastics and tins. Most properties use a 240L wheeled bin for plastic and tins and internal caddy for paper and card as well as 40L box for glass.
 - (c) Approximately 7,000 properties (mainly terraced properties) use a reusable sack for paper and card, a 40L box for plastic and tins and a 40L box for glass. Families of five or more people can request a larger 360L wheeled refuse bin, which can be swapped for their 240L bin free of charge.
 - (d) The Council operates an optional fortnightly garden waste collection service operating from April to December using a 240L wheeled bin. There are two rounds covering the Borough and there is an annual charge of £45 with 11,000 subscribing to the service in 2024.
30. Residual waste is delivered to the treatment plant where it is bio-dried and any remaining recycling material that can be extracted from dried waste is removed through a mechanical process. The remaining waste is either then used as a refuse derived fuel (RDF) and sent to a suitable facility or waste is landfilled in accordance with the waste management hierarchy.
31. Recycling material is delivered to the transfer station where it is bulked up and then sent onto reprocess.
32. Garden waste is composted through the treatment plant to PAS 100 standard, which can then be spread onto farm fields. PAS 100 is the compost association accreditation scheme and certified by the British Standards Institute.
33. Our existing collection arrangements meet the requirements of the Act, except for the requirement to provide a food waste collection service.
34. Whilst not part of this report, the Council provides a commercial residual waste collection service to 449 businesses within the Borough, including DBC facilities. All businesses have been contacted to inform them of the changes within the Act that affect them. In addition, information has been requested from businesses to enable us to understand how many of our customers meet the requirements and what services they will require from March 2025. We have also included information in One Darlington, on our web site and through the team to try and inform businesses that are not currently DBC customers.

35. The costs associated with the existing household waste collection treatment and disposal services are set out in **Table 1**, below:

Table 1

Description of Expenditure	Cost / £
Vehicle Costs	1,242,000
Employee cover costs including PPE, Training and consumables	2,097,156
Collection containers – replacements and new require	103,034
Waste disposal costs	2,175,306
Income from recycled material and garden waste service	-577,813
Total Costs	5,039,683

36. The annual tonnage from each of the waste streams from the current collection arrangements based on 2022/23 data is as follows:
- (a) Residual waste 22,338 tonnes, an annual household yield of 427kg.
 - (b) Dry recycling 6226 tonnes (including 15% contamination) an annual household yield of 119kg
 - (c) Garden waste 2390 tonnes, an annual household yield of 228kg.
37. This generates an annual total of 30,954 tonnes of waste collected from all households with an annual yield per household of 773kg.
38. From kerbside collection, this equates to a recycling and composting rate of 24.8%.

Performance and Benchmarking

39. The Waste and Resources Action Programme charity (WRAP) have been engaged by DBC officers to support the development of options. WRAP is a government-funded charity that works with and supports local authorities, business and communities, helping them to reduce and manage waste in a sustainable way. They have extensive knowledge of the waste industry and have developed a range of products and tools to support local authorities.
40. A detailed benchmarking exercise of the existing services against local authorities with a similar profile to DBC has been carried out. The comparator groups used were other North East Authorities and WRAP's Rurality Groups 4 and 5 (mixed urban/rural high/medium deprivations). While benchmarking provides an opportunity to compare with others, WRAP provides an objective assessment and understanding of DBC performance and where improvements are required. When compared with the other North East authorities the amount of waste generated by each household annually from the three waste streams (residual, dry recycling and garden waste) the key findings for the borough are:

- (a) The yield per household (annual tonnage) of residual waste from each property is the second lowest of all authorities;
 - (b) The yield per household from recycling and garden waste from each property is low which leads to lower recycling rates;
 - (c) Overall, the total waste yield from the three waste streams is the lowest in the North East and in bottom quartile of local authorities in the UK.
 - (d) For the overall recycling rate (kerbside collected material and HWRC material) for the North East authorities, DBC are slightly above average with a rate of 31.7% with the average being 30.2%. DBC is the fifth highest out of the 12 local authorities.
 - (e) When comparing the overall recycling rate (material collected at kerbside and from the HWRC), DBC performance against rurality group 4 and 5 is bottom quartile at 31.7% as opposed to the average of 42.2% (which for some authorities in the comparator group will include food waste). If performance is compared to dry recycling only collected at kerbside, then DBC's recycling rate of 20.1% is just below the average of 23.2%.
 - (f) Comparing authorities that have similar collection arrangements as DBC in rurality group 4 and 5, DBC have the lowest kerbside recycling rate.
41. The benchmarking data shows that Darlington has a low yield of household waste but overall, below average recycling performance. A completed Waste Composition Analysis, summarised later in the report, has identified a significant amount of dry recycling in the residual waste stream. Using this analysis alongside the benchmarking information highlights the need and capacity to improve performance by maximising kerbside recycling.

Implications of the Act on existing Waste Management Services

42. We have assessed our current services against the requirements of the Act.
- (a) We do not have a food waste collection service. Therefore, a service will need to be designed and implemented.
 - (b) Our current dry recycling and garden waste service does meet the requirements of the Act. However, with the introduction of food waste to collect there are options that need to be considered that could impact on the current arrangements.
 - (c) We will need to review our commercial collection service. From March 2025, we will be able to offer residual waste and dry recycling to customers who are required to separate their waste to meet the Act. However, we will not collect separate food waste from March 2025 and will have to direct customer to other providers.

Waste Composition Analysis

43. To establish how much food waste is within residual waste and help inform the design of a new service, DBC commissioned a specialist company to provide a compositional analysis of residual waste collected within Darlington.
44. The survey took place over a four-day period in November / December 2023 with a total of 200 households selected for the analysis. To ensure representative samples and an accurate reflection across the borough was obtained, samples were collected from a range of households and locations based on a range of socio-demographic groups. 1,592kg of waste was collected for analysis.
45. The key points from the report are as follows, which are shown as a percentage of the overall residual waste and kilograms per household per week (kg/hh/wk).

Food Waste

46. Food waste is classed into the following two categories:
 - (a) Avoidable waste, i.e. food and drink thrown away that was, at some point prior to disposal, edible (e.g., slice of bread, apples, meat).
 - (b) Unavoidable waste, i.e. waste arising from food or drink preparation that is not, and has not been, edible under normal circumstances (e.g., meat bones, eggshells, pineapple skin, tea bags).
47. 34% of the waste collected for analysis was food waste, therefore applying the 34% to 2023/24 residual waste tonnage means there is approximately 7,595 tonnes of food waste in the residual waste stream.
 - (a) 88.1% of food waste was classed as avoidable. This equates to around 6,691 tonnes per year.
 - (b) 11.9% of food waste was classed as unavoidable. This equates to around 904 tonnes per year.
 - (c) Of all avoidable food waste being disposed of, an average of 52.3% was disposed of in its packaging. This equates to around 3,499 tonnes per year.

Existing Recyclable Materials within Residual Waste

48. In terms of the recyclable material found within residual waste:
 - (a) Paper made up 7.5% of residual waste, of which 38% could have been recycled at kerbside using the current service.
 - (b) Card and cardboard items made up 7.6% of residual waste, of which 77% could have been recycled at kerbside using the current service.

- (c) Plastic items made up 14.7% of residual waste, of which 23% could have been recycled at kerbside using the current service.
- (d) Metallic items made up 3.3% of residual waste, of which 73% could have been recycled at kerbside using the current service.
- (e) Glass items made up 2.9% of the residual waste, of which 83% could have been recycled at kerbside using the current service.

49. Therefore, 7,595 tonnes of recyclable material is currently disposed of in the residual waste stream.

Garden Waste

50. 9.7% of residual waste was found to be garden vegetation, which could have been recycled through the garden waste collection service. This represents approximately 2,166 tonnes which will be significantly higher in the growing season as the sample was carried out November/December 2023.

Developing a New Food Waste Collection Service

51. The approach taken to develop options for a new food waste collection service has been as follows.

- (a) A waste composition analysis has been undertaken to understand the composition of our residual waste in a range of socio-economic groups and to understand the volumes that will need to be collected and treated.
- (b) Engaged the services of the Waste and Resources Action Programme (WRAP) to ensure best practice and experience is built into the design process, including benchmarking and performance assessment of existing DBC arrangements.
- (c) Developed a proposal based on best practice and evidence, for a system to be rolled out to residents for collection of food waste within their property.
- (d) Considered numerous options for the collection and transfer of the food waste from the property to the treatment facility, taking into account our requirement to collect residual waste, recycling and green waste.
- (e) Considered the use of the food waste product once collected.

52. The project is complex and there are multiple aspects that must be progressed if the Council are to meet the statutory deadline. Some of the major elements of the project involve:

- (a) Establishing the funding levels to be provided by Government. All Authorities are seeking urgent clarification from the responsible Government Department.
- (b) Agreeing the in-property collection option so that procurement exercises can be designed and undertaken to establish costs and place orders for supply.

- (c) Agreeing the collection and transfer option so that procurement exercises can be designed for vehicles and orders placed for their supply.
- (d) Consideration of adapting or procuring new facilities for the additional fleet.
- (e) Recruitment of staff to collect waste, maintain vehicles and manage new regulated systems.
- (f) Staff training.
- (g) Procurement exercise to manage and treat the food waste collected.
- (h) Communications exercise and roll-out plan to improve recycling rates.

Proposals for the collection of food waste within residential properties

53. The Act requires food waste to be collected weekly and as such there must be a system for residents to collect and store food waste in the property. The food waste that will be collected from households will include:
- (a) All uneaten food and plate scrapings
 - (b) Dairy products
 - (c) Bread, cake, pastries
 - (d) Raw meat, cooked meat, bones
 - (e) Tea bags, ground coffee
 - (f) Raw and cooked vegetables, fruit and peelings
 - (g) Raw and cooked fish, fish bones
 - (h) Rice, pasta, beans
54. There are a significant number of local authorities that already collect food waste and WRAP have experience of best practice. From the evidence gained from long-standing schemes, the system that produces the greatest yield of food waste provides each property with the following:
- (a) An internal kitchen caddie, 5L / 7L
 - (b) An external 23L bin to store waste once the internal caddie is full.
 - (c) The 23L external bin is then placed out to kerbside within curtilage of the property weekly for collection.
55. Food waste can be placed directly into the internal caddie then transferred to the external food waste bin when full. However, there is evidence that if a compostable liner is also provided for the internal caddie, then the amount of food waste generated increases. If liners are issued, we are advised there will be a higher yield of food waste and will be more convenient for residents to adopt food waste recycling.
56. It is anticipated that the internal and external caddie arrangements as detailed above will be the recommended solution.

However, the issue of an initial supply of compostable internal caddy liners is still to be decided.

Options for Food Waste Collection from the kerbside

57. The Council has operated waste collection services the same way with no major changes since 2015, when alternate weekly collections were introduced.
58. The Council must introduce a weekly food waste collection service. Therefore, a review of the collection arrangements has been undertaken to examine how food waste can be introduced to the collection system.
59. Several options have been modelled to comply with the changes that are being implemented nationally in terms of both food waste and recycling. The options range from simply adding a separate food waste collection service to existing arrangements to taking the opportunity to consider a weekly dry recycling collection alongside weekly food waste. Changing the frequency of dry recycling to weekly is anticipated to increase the yield of material collected improving overall performance. The options presented vary by frequency and the way the vehicle is configured to collect the various waste streams.
 - (a) **Option 1:** Same as existing collection arrangements, with the addition of a separate food waste collection service. A series of new rounds and vehicles that only collect food waste.
 - (b) **Option 2:** Residual waste collection fortnightly, dry recycling and food waste weekly utilising a kerbside manual sort vehicle that operatives will hand load from containers/bags, placing materials in separate compartments on the vehicle. This will require new containers and bags at properties. The process of collection is slower as there is more manual intervention at the kerbside and an increased risk of spills from containers during the sorting process.
 - (c) **Option 3:** reduced residual waste capacity by replacing existing 240L bins with a 180L wheeled bin, which will be collected fortnightly. This will mean collecting and recycling the current bins and providing a new smaller bin. Dry recycling and food waste weekly in a similar vehicle to existing recycling vehicle. Food waste in the front pod, split body back with glass collected on one side and co-mingled paper, card, plastic and tins in the other side.
 - (d) **Option 4:** residual waste collection fortnightly as existing, dry recycling and food waste weekly in a similar vehicle to existing recycling vehicle. Food waste in the front pod, the vehicle would have a split body back with glass collected one-side and co-mingled paper card, plastic and tins the other side.
60. The Council's garden waste service would be unaffected by the proposal, and it should be noted that residents would still be able to recycle or dispose of waste at the Household Waste Recycling Centre (HWRC).
61. Further detailed information and analysis for each option is provided later in this report.

62. The national changes set out in the Act do not have an impact on the procurement process or required capacity of the Tees Valley Energy Recovery Facility (TV-ERF), where DBC will be sending its residual waste once the facility is built and operational - expected to be 2028/29. Detailed waste modelling was carried out as part of the business case process to ensure there was adequate capacity and that the plant was not oversized. That detailed modelling included the assumption that all seven councils would be doing all they could to maximise dry recycling and introducing a separate food waste collection service, thereby reducing the amount of residual waste needing to be treated.

Option Analysis and Financial Implications

63. **Table 2** compares the four modelled collection options against the existing collection service. The table shows the operational requirements and arrangements for each option including number of vehicles, staff, frequency and types of containers used.

Table 2

OPERATIONAL OPTIONS			
Option	Residual	Recycling	Food
Existing baseline Refuse collection 5 RCVs, plus 2 spare Recycling 6 vehicles, plus 2 spare 45 FTE, plus 1 team leader	Fortnightly	Fortnightly	N/A
Option 1 <i>Additional food collection service only</i> 9 extra vehicles required: 7 rounds plus 2 spares. Additional 21x FTE Plus 1 additional team leader	Fortnightly As existing service	Fortnightly As existing service	New weekly service. Specific food waste vehicles and rounds. Containers 5-7L internal kitchen caddie and 23L external food waste bin.
Option 2 <i>Weekly dry recycling service including food waste in a kerbside sort vehicle</i> 9 extra vehicles required over the existing fleet. Total of 15 rounds plus 2 spare: 17 vehicles. Additional 21x FTE Plus 1 additional team leader	Fortnightly As existing service	Weekly Recycling & Food Waste Kerbside sort vehicle for dry recycling & food waste at same time. Kerbside manual sort by operative to put waste into correct compartment. Containers: Dry recycling resident has existing box for glass, weighted sack paper and card and second weighted sack for tins and plastic. Existing 240L recycling wheeled bin and caddie to be collected and disposed of. Food Waste 5-7L internal kitchen caddie and 23L external food waste bin.	

Option	Residual	Recycling Food
<p>Option 3 <i>Reduces residual waste capacity smaller bin weekly dry recycling including food waste in similar recycling vehicle as current</i></p> <p>6 extra vehicles required. Total of 12 rounds plus 2 spares: 14 vehicles 24 extra FTE Plus 1 additional team leader</p>	<p>Fortnightly</p> <p>As existing service with a smaller 180L wheeled bin.</p>	<p>Weekly Recycling & Food Waste Similar vehicle to existing recycling vehicles: front pod for food waste, split back body glass on one side and co-mingled paper, card, plastics and tins in the other side</p> <p>Containers: Dry Recycling Existing 240L recycling wheeled bin for co-mingled paper, card, plastics and tins and existing box for glass. For approximately 7,000 terraced properties: bag for paper and card and existing boxes for tins, plastics and glass.</p> <p>Food Waste 5-7L internal kitchen caddie and 23L external food waste bin.</p>
<p>Option 4 <i>Weekly dry recycling, including food waste in similar recycling vehicle as current</i></p> <p>6 extra vehicles required. Total of 12 rounds, plus 2 spares: 14 vehicles 24 extra FTE Plus 1 additional team leader</p>	<p>Fortnightly</p> <p>As existing service</p>	<p>Weekly Recycling & Food Waste Similar vehicle to existing recycling vehicles: front pod for food waste, split back body glass on one side and co-mingled paper, card, plastics and tins in the other side</p> <p>Containers Dry Recycling Existing 240L recycling wheeled bin for co-mingled paper, card, plastics and tins and existing box for glass. For approximately 7000 terraced properties bag for paper and card and existing boxes for tins, plastics and glass.</p> <p>Food Waste 5-7L internal kitchen caddie and 23L external food waste bin.</p>

64. The funding position for delivering this new requirement is complex. The government have stated that new burdens funding will be provided to cover the capital cost, transitional costs and ongoing revenue costs associated with the legislation.

65. At the time of writing, the government have calculated what they believe authorities will need in terms of capital and have announced Darlington will receive £1,182,778 to cover the cost of caddies, bins and vehicles. Based on the options analysis, this will not be sufficient to cover the cost of the vehicles, caddies and bins. This money is provided as a one-off grant and it is highly unlikely that there will be further funding when the vehicles and caddies need replacing. This will add costs into the Council's MTFP. This has been raised with the relevant government Departments and a response to the Council's concerns has not been received at the time of writing this report.

66. The transitional funding to develop and implement the schemes and the ongoing revenue funding has yet to be announced. To meet the statutory deadlines set, councils have had to progress at their own cost and decide whether to commit to procurement. This leaves councils in the wholly unsatisfactory position that they are developing a scheme at cost and committing to it before they know whether the scheme is affordable within what government provide in terms of new burdens or whether it will result in a pressure to council finances. This has been raised with the relevant government departments and again at the time of writing this report a response has not been received.
67. **Table 3** shows the estimated annual revenue collection costs of each option including costs for vehicles, employees and associated costs, containers disposal and income from recycling and garden waste. The lower section of the table sets out a number of one-off project transitional costs. Capital budget shortfalls are detailed in paragraph 72.
68. Financial models for each option have been built from estimated costs associated with vehicles, staffing, containers disposal and income. These will need to be confirmed through procurement processes and as such a contingency will be considered as part of the project costs. All councils are progressing on the same timescale, and this will put pressure on the market and supply chains. This may drive up prices and the availability of products and resources and has been highlighted as a significant risk to government departments. A phased introduction was suggested to government rather than a 'big bang' on the same date for everyone and we are seeking clarification from the new UK government that this remains the case.
69. All options require a significant increase in the waste fleet and staffing. There is not enough space to park the additional fleet vehicles at the depot. Therefore, the project will need to investigate options to extend if possible, reconfiguring the parking arrangements, reducing staff parking significantly or look to acquire additional parking at an alternative site. The increased fleet will also require the creation of an additional pit within the fitting shop with an indicative budget estimated one-off cost of £100,000.
70. As part of the roll out of the changes to waste collection, there is a need to have a communication and engagement programme to maximise the take up of the new services regardless of which option members agree to implement. This will include employment of temporary staff to engage with residents as well as other communication and marketing activities, for which an indicative budget of £120,000 is estimated. In addition, there will be project management and administration costs associated with the roll out at an indicative estimated budget of £50,000. Therefore, there will be a one-off cost of £170,000 to implement the changes. As part of the new burdens transitional funding, an allocation will be provided. However, at the time of writing the report, the level and timing for release of this funding is unknown.
71. In addition to the above, there is the potential of a final payment to make on the existing eight recycling vehicles of £421k in 2026/27 depending on which option is finally chosen. Only Option 1 uses the existing recycling fleet, therefore if any of the other options are taken forward the existing recycling vehicles would not be required, and the final payment would still be due. The vehicles would be sold but it is highly unlikely they would generate anywhere near the £421k. Any deficit in income received from the sale of the vehicles will be a one-off cost.

72. Through New Burdens funding, the government have already allocated DBC £1,182,778 to cover the cost of caddies, bins and vehicles as a one-off Grant and does not account for future replacements. The costing undertaken identifies that the funding is not enough for any option. If the vehicles and containers were to be purchased as a one-off through the capital new burdens grant issued by Government (rather than annualising), then there would be a shortfall of £218k for Option 1, £1.664M for Option 2, £1.978M for Option 3 and £983k for Option 4 that would have to be funded from the MTFP.
73. The funding model is being developed on how this will be funded, i.e the costs below are annualised to ensure there is funding built into the MTFP for ongoing financing costs of vehicles. The detail of this will be developed with finance officers, once the funding and option to be progressed is decided.

Table 3

Project Cost Overview					
Option 1 - Additional food collection service only					
Option 2 - Weekly dry recycling service including food waste in a kerbside sort vehicle					
Option 3 - Reduces residual waste capacity (smaller residual bin) weekly dry recycling including food waste in similar recycling vehicle as current					
Option 4 - weekly dry recycling (uses current residual bin) including food waste in similar recycling vehicle as current					
Projected Operational Costs (Annual)					
Description of Expenditure	Existing	Option 1	Option 2	Option 3	Option 4
Vehicle Costs	1,242,000	1,478,625	1,785,000	1,740,000	1,740,000
Employee costs including cover PPE, Training and consumables.	2,097,156	3,081,707	3,060,855	3,173,214	3,173,214
Collection containers – replacements and new requirements	103,034	154,335	215,059	225,175	128,161
Waste disposal costs	2,175,306	1,907,835	1,874,138	1,735,595	1,852,176
Income from recycled material and garden waste service	-577,813	-577,813	-671,223	-669,112	-587,611
Total Costs	5,039,683	6,044,689	6,263,829	6,204,872	6,305,940
Difference		+1,005,006	+1,224,146	+1,165,189	+1,253,170
NEW BURDENS FUNDING		Unknown	Unknown	Unknown	Unknown
Potential increased annual cost to MTFP		TBD	TBD	TBD	TBD
Project Transition Costs (One-Off. Transitional Costs)					
	Existing	Option 1	Option 2	Option 3	Option 4
Contingency		TBD	TBD	TBD	TBD
Project Management		50,000	50,000	50,000	50,000
Communication and Engagement Plan		120,000	120,000	120,000	120,000
Additional Pit within fitting shop		100,000	100,000	100,000	100,000
Depot Space costs		TBD	TBD	TBD	TBD
Collection and disposal of existing bins option 2 recycling bin option 3 waste bin		Nil	TBD	TBD	Nil
Fleet costs (Final payment of 8 recycling vehicles option 2,3,4)		Nil	421,000 (Max.)	421,000 (Max.)	421,000 (Max.)
Transitional FUNDING from Govt.		Unknown	Unknown	Unknown	Unknown
Potential Cost to MTFP		TBD	TBD	TBD	TBD

74. **Table 4** compares the projected kerbside recycling rate from the material collected at kerbside dry recycling, garden waste and food waste for the various options. All options demonstrate a projected increased recycling performance compared to the existing arrangements.
75. Carbon performance is also compared in **Table 4**, this is a very high-level comparator carried out by WRAP based on their carbon waste and recycling metric (Carbon WARM). Carbon WARM applies a set of conversion factors to enable users to express waste management tonnage data in terms of its greenhouse gas emissions measure as carbon dioxide equivalent. This is a high-level assessment and assumes the treatment of residual waste is through the new TV-ERF.

Table 4

Option	Kerbside Recycling rates	Carbon Impact of Operations / tonnes of CO ₂ per annum
Baseline	24.8%	2197
Option 1	35.2%	2067
Option 2	40.3%	730
Option 3	40.7%	1134
Option 4	37.9%	1346
<u>Description of Options</u>		
Option 1 - Additional food collection service only		
Option 2 - Weekly dry recycling service including food waste in a kerbside sort vehicle		
Option 3 - Reduces residual waste capacity (smaller residual bin), weekly dry recycling including food waste in similar recycling vehicle as current		
Option 4 - weekly dry recycling (uses current residual bin) including food waste in similar recycling vehicle as current		

76. **Table 5** sets out the “pros and cons” of the four options, considering the costs, performance and operation for both residents and staff.

Table 5	Pros	Cons
<p>Option 1</p> <p>Additional food collection service only</p>	<ul style="list-style-type: none"> • No change to refuse collection (collection points) • No need to change existing recycling vehicles. • New vehicles, purpose-built for food waste. • Simplest to implement and manage • Operators can focus on one collection - food waste only • Minimal change for residents • Greater flexibility to maximise efficiency of food waste collection service as independent of other services. • No impact on dry recycling and residual waste collection services • Lowest financial impact 	<ul style="list-style-type: none"> • Need to buy a separate fleet of food waste-only vehicles • Not maximising the opportunity to re-model the service and improve recycling • Dry recycling remains fortnightly, whilst food waste weekly • Less incentive for residents to change behaviour and recycle more • Lowest recycling rate of the four options • Highest carbon impact on the environment of the four options • Potentially an additional, different day for food waste collection for residents to existing collection day
<p>Option 2</p> <p>Weekly dry recycling service including food waste in a kerbside sort vehicle</p>	<ul style="list-style-type: none"> • One vehicle collects all recycling & food waste in one pass • No change to refuse collection (collection points) • Weekly recycling service - step change in waste collection and encourages behavioural change increase recycling • Materials are kerbside sorted and put into individual stillages on vehicle; better-quality recycling material and higher value • Less contamination due to hand sorting and visibility of material for operative obtained • Second highest recycling rate of all 4 options • Lowest carbon impact on the environment of the 4 options due to increased recycling less residual waste and reduced cost for waste treatment • Reduced collection days for residents as all recycling and food waste collected together • May help with OFLOG monitoring as recycling performance a metric about general Council performance 	<ul style="list-style-type: none"> • More demands on residents for additional containers • Will need to issue new containers / reuseable bags to majority of properties • Need to collect and dispose of all existing recycling wheeled bins from residents which may lead to adverse publicity • Will need to replace existing recycling vehicles one year early at significant cost • Increased manual handling at kerbside by operators to sort material into individual compartments which cannot be designed out and will lead to increased muscular skeletal injuries. • Slower operation due to hand sorting of materials by operative at kerbside therefore more rounds required • Residents require more bags and boxes at property to store for separate waste streams • Third highest cost option

Table 5	Pros	Cons
<p>Option 3</p> <p>Reduces residual waste capacity (smaller residual bin) weekly dry recycling including food waste in similar recycling vehicle as current</p>	<ul style="list-style-type: none"> • No changes for the resident for dry recycling apart from food waste added to recycling service and available weekly • Dry recycling and food waste in one pass and one vehicle • No change to refuse collection (collection points) • Weekly recycling service - step change in waste collection and encourages behavioural change to recycle more • Highest recycling rate of all 4 options • Second-lowest option for carbon impact on the environment • Will increase garden waste service take up because of less residual waste capacity; increasing composting rate • May help with OFLOG monitoring as recycling performance is a metric about general Council performance • Reduced treatment costs as less residual waste to treat at more expensive gate fee 	<ul style="list-style-type: none"> • Recycling materials may be of poorer quality than Option 2 due to co-mingled and therefore less valuable • Resistance of residents to reduced residual waste capacity • Residents may use additional capacity in weekly recycling bin for residual waste therefore potentially higher levels of contamination than other weekly options • Cost of replacement wheeled bins • Will need to replace existing recycling vehicles a year early at significant cost • Costs to collect and dispose of existing 240L bins which may lead to adverse publicity
<p>Option 4</p> <p>Weekly dry recycling (uses current residual bin) including food waste in similar recycling vehicle as current</p>	<ul style="list-style-type: none"> • No changes for the resident for dry recycling, apart from food waste added to recycling service and available weekly • One vehicle collects dry recycling & food waste in one pass • Weekly recycling service demonstrates step change in waste collection and encourages behavioural change to recycle more • No change to refuse collection (collection points) • Increased recycling rate as from weekly collection service • May help with OFLOG monitoring as recycling performance a metric about general Council performance • Due to increased recycling less residual waste therefore reduced cost for treatment 	<ul style="list-style-type: none"> • Recycling materials may be of poorer quality than Option 2 due to co-mingled and therefore less valuable • Of the weekly collection options considered this option is the poorest performing in terms of recycling rate and carbon impact and the most expensive. • Will need to replace existing recycling vehicles a year early at significant cost • Residents may use additional capacity in weekly recycling bin for residual waste therefore higher levels of contamination than Option 2

Treatment and Use of Material

77. The final aspect of the project is how the collected material will be treated. The food waste will need to be delivered to a treatment facility.
78. 11 of the 12 North East local authorities carried out a feasibility study on availability of treatment facilities and the capacity in the North East in September 2022. The outcome of that study identified there was adequate treatment capacity in the North East and adequate land available to spread the digestate within acceptable distances from the treatment facilities.
79. Subject to approval, a procurement exercise will commence later this year either with the other Tees Valley Authorities or as standalone DBC contract. There are local facilities that will be able to receive the food waste directly from the collection vehicle without the need to drop off and bulk up at a transfer station, which would be required if there was significant traveling required from Darlington to the treatment plant. It is anticipated there will be a saving in the cost per tonne through the new food waste contract as opposed to the existing residual waste treatment costs. These savings have been factored into the financial model.
80. As part of the treatment process, gas will be produced that will go into the grid network. The waste output from the treatment process is a digestate that would be to the required standard PAS110, which can then be spread onto farmland.

Key Risks & Issues

81. There are a number of risks to implementing any of the options that members need to be aware of.
 - (a) The feasibility work to date suggests the capital allocation from government would appear not to be enough to cover the entire cost of any option presented. The transitional and operational funding may also be inadequate to cover all the costs. Therefore, to hit deadlines, Members are being asked to commit resources in the MTFP to a new statutory service that could create pressures. This is clearly not palatable and as such clarity is being sought, but this does impact and create a risk on being able to deliver the service by the previously set date.
 - (b) The timescale to implement a food waste service is extremely challenging and the delays in receiving clarification from Government on funding has put the deadline at risk. The 31 March 2026 deadline is unlikely to be achieved as the Council cannot progress without understanding the financial implications. However, it is unclear what (if any) penalty will be applied to local authorities if they miss their deadline date, clarity has been requested from Government.
 - (c) The availability of vehicle and containers may be limited due to the number of Councils implementing food waste at the same time and therefore could be significant lead-times that impact on the programme.
82. This is the policy of the previous government, and the new government may change direction, timetable and funding. The Council have written to DEFRA to seek clarity on the

issues above to try and de-risk some of the issues and are awaiting a response. At the time of writing this report a response has not been received.

Conclusion

83. The intention of the Environment Act 2021 is to improve recycling performance and the impact on the environment. The options modelled all have different projected outcomes and there are clear correlations between the cost of the service and what outcomes can be achieved in terms of recycling and environmental impact.
84. Option 1 has the least estimated cost increase on the current arrangements. In the current financial climate cost will have to be a significant factor in determining the option to be progressed, especially if the new burdens funding is not sufficient to cover the additional costs of this statutory service. Any unfunded cost increases will add further pressures into the Council's MTFP, which already has a sustainability gap.
85. Option 1 would not require any change to existing collection services, only the introduction of a stand-alone food waste collection. This has the smallest projected increase in recycling rate performance and highest carbon impact of the options modelled.
86. Options 2, 3 and 4 seek to improve recycling performance by introducing weekly recycling with weekly food waste collection. However, this increases costs. Within these options, Option 3 is the lowest cost option because this will reduce residual waste capacity. This will have an impact on residents' capacity in terms of non-recyclable waste but does drive the recycling performance by forcing more waste into recycling, garden and food waste streams and will reduce disposal costs.
87. There is only a small difference between Option 2 and Option 3 in terms of kerbside recycling rate. However, following further investigation of option 2, there are operational issues that should be considered. The process builds in increased manual handling by operators, which will lead to increased muscular skeletal injuries. Therefore, this option is being discounted by Officers.
88. Without knowledge of the transitional funding and the new burdens funding, it is not possible to provide a definitive financial forecast and recommendation.

Consultation

89. No public consultation has taken place around this report as there is a statutory duty to introduce food waste collection from March 2026. A detailed communications plan will be developed to inform residents of changes to waste collection services once agreed.
90. The Communities and Local Services Scrutiny Committee are asked to consider the content of this report and provide feedback to Cabinet to be considered in the development of final proposals.