

## Report of the Portfolio Holder for Environment and Climate Change

**WASTE STRATEGY UPDATE – IMPLEMENTATION OF FOOD WASTE COLLECTIONS**1. Purpose of Report

To update Members on the progress of Broxtowe's Interim Waste Strategy and to inform on the potential impacts of kerbside food waste collections.

2. Recommendation

**Cabinet is asked to NOTE the potential costs for the implementation of kerbside food waste collections and RESOLVE that the increase in the refuse freighter fleet at a cost of £84,150, whilst waiting for a round review to be undertaken, be approved.**

3. Detail

In September 2021 the Council approved an Interim Waste Strategy which was to be reviewed and an action plan compiled once the Environment Bill had received Royal Assent. The Environment Act was mandated in November 2021; however, the exact requirements and timeframes are yet to be announced.

One of the key outcomes anticipated from the Environment Act was the introduction of consistent waste and recycling collections and a mandate for local authorities to collect food waste from the kerbside on a weekly schedule.

In September 2023, the Government announced that the 'Consistency in Recycling' programme had been changed to 'Simpler Recycling'. The detail regarding this policy name change is still to be released but it would appear that the new scheme favours a comingled rather than source separated approach to recycling collections.

Mandated weekly food collections looks likely to continue and will need to be implemented by October 2027. These collections will be a positive step change towards increasing recycling rates and reducing carbon emissions. It is not yet known what level and type of funding support is available from the Government 'New Burdens Fund' but the costs associated with the implementation of these household kerbside collections are significant and are detailed in appendix 1.

Under the new requirements, all non-household premises (such as businesses and schools), must also make arrangements to have food waste collected. As with domestic waste, there is a duty for the Council to have arrangements in place for the collection of commercial waste, which it does via a chargeable trade waste service. However, businesses and schools have the option of choosing another service provider for their waste collections.

The Council may need to offer food waste collections to businesses and schools. A separate report evaluating the possible cost implementations will be prepared once further details on funding have been received.

Uncertainty over the details of consistent recycling collections and the implementation of food waste has meant that a much needed round review for the Borough's waste collection rounds is currently on hold.

Delaying the round review has meant that there is a need to maintain a holding pattern over current waste and recycling rounds, many of which are at capacity due to new housing developments. An increase in garden waste subscribers has also meant that additional resource to support collections is now required. A business case for the additional resource is detailed in appendix 2.

#### 4. Financial Implications

The comments from the Head of Finance Services were as follows:

The costs associated with the implementing mandated weekly kerbside food waste collections will be considerable. Without significant financial support from central government by way of 'New Burdens Fund, the resources required both in terms of capital outlay and ongoing revenue costs would be a huge commitment and additional budget pressure for the Council. Progress will be carefully monitored and any capital and revenue budget implications will be factored into the Council's Medium Term Financial Strategy and budget plans.

In terms of the proposal regarding an additional refuse vehicle to the fleet, the annual operating cost of the freighter and its crew (agency) is estimated at £84,150. If Members were to approve the proposal, it is anticipated that any part-year costs in the current financial year would be absorbed in existing budgets. The additional revenue costs of running the vehicle and team in 2024/25 would be factored into the budget setting process.

#### 5. Legal Implications

The comments from the Head of Legal comments were as follows:

The Environment Act 2021 ('the Act') supports the Government's 25-year environmental plan. Its purpose is to cover 'the gap' created by the UK's departure from the EU and subsequent leaving behind of environmental protections put in place by the EU. The Act intends to ensure there are effective environmental protections in place and make sure accountability is embedded within UK environmental law going forward. Section 57 of the Act replaces the whole of Section 45A of the Environmental Protection Act 1990. It now requires recycling streams to be collected separately unless it is not technically or economically practicable to do so or there is no significant environmental benefit.

6. Human Resources Implications

The comments from the Human Resources Manager were as follows:

Not applicable

7. Union Comments

The comments from the Union were as follows:

Not applicable

8. Climate Change Implications

Comments are contained within the report.

9. Data Protection Compliance Implications

Not Applicable

10. Equality Impact Assessment

Not Applicable

11. Background Papers

Options Appraisal Report WRAP

## APPENDIX 1

**KERBSIDE COLLECTION OF FOOD WASTE AND CONSISTENT COLLECTIONS**Consistent Collections

Local authorities continue to wait for detail on the consistent recycling reforms, which has meant that planning for the new kerbside recycling collections has been difficult. In September, the Government announced that it had renamed the 'Consistency in Recycling' programme to 'Simpler Recycling'. The detail regarding this policy name change is still to be released but it would appear that the new scheme favours a comingled approach.

Due to a lack of information available at the present time the Council has based analysis on what is currently known in order to make appropriate provision within the medium term financial plan (MTFS).

The concept of having a core set of materials collected from every household and business was introduced in the 'Our Waste Our Resources: A Strategy for England', published in December 2018. Part of this Strategy was to create a mandate to collect a consistent set of recyclables across all local authorities, along with the introduction of a weekly collection of food waste.

To assist with the preparation, Nottinghamshire County Council applied for funding from Waste Resources Action Programme (WRAP), to employ a specialist waste consultant to appraise the most appropriate, effective and consistent options for each district and the County.

As an output, Broxtowe Borough Council received its own individual appraisal report, considering seven potential modelling options for recycling and food waste collections. Each of the options were scored on the following three criteria:

- Impact on recycling performance
- Financial Impact
- Carbon emission savings

The report from WRAP combined both the 'Consistency in Recycling' changes and the food waste collections. Given that there is uncertainty over the 'Consistency in Recycling' collections, it has been necessary to separate and update the financial impacts of both changes so that planning for their introduction can begin.

Report recommendation

The requirements detailed in the WRAP recommendation may have changed under the new policy direction 'Simpler Recycling', as this seems to favour a co-mingled approach to collections. Details regarding this are yet to be received.

The information provided in this report, comes from analysis undertaken before the potential policy change and may therefore need to change following additional guidance.

The WRAP report highlighted option five as the preferable delivery model for consistent recycling. This would entail the delivery to all households of an additional 240 litre wheeled bin for the collection of paper and card. Glass would no longer be collected separately and would be collected co-mingled with other dry recycling materials. This, along with an introduction of kerbside food waste collections, could potentially lead to the Borough having a recycling rate of 45.1% (The Council currently has a recycling rate of 37%)

The programme of collections over a four-week period are detailed in table 1 and would be as follows:

Week	Kerbside Material Collected
1	Black-lidded bin and Food waste
2	Co-mingled recycling (Green Bin) Plastic/Cans/Glass and Food waste
3	Black-lidded bin and Food Waste
4	Bin for Paper and Card and Food Waste

Table 1: Option five collection detail

Garden waste would continue to be collected as a subscription service, fortnightly (April to November) and then monthly (December to February).

Not considering the implementation of food waste at this point, the consistent recycling collections would:

- Utilise the current collection pattern and infrastructure for recycling collections.
- Require the delivery an additional 240 litre bin for paper and card to each householder.
- Separate glass collections will cease and this material will be collected with other dry recycling material.

Indicative costs for the additional 240 litre bin would be in the region of **£1,331,000** (this does not include delivery and distribution). On-going replacement and new development costs are estimated at around **£60,500** per annum.

#### How will the schemes be funded?

In October 2021, the government declared the availability of a £295 million 'New Burdens Fund' for local authorities to implement food waste collection programmes.

These funds will be allocated on a formula based system rather than individual local authorities submitting applications to bid for the money. However, due to recent inflationary rate rises, the likely cost for vehicles and containers is expected to exceed those projected in 2022. It remains unclear whether the Government's funding has kept pace with inflation, and the Treasury has yet to disclose the amount each local authority will receive or if the local authority will need to bridge any funding shortfalls for these new initiatives.

It has been made clear that the 'New Burdens Fund' is intended to cover capital costs, which includes the procurement of vehicles and containers. What is not clear

is whether the Council will need to shoulder any ongoing revenue or transitional costs.

The Government plans to finance these new services and collection modifications through the planned introduction of the Extended Producer Responsibility scheme. Extended Producer Responsibility for packaging will see producers pay for the cost of recycling their products supporting the polluter pays principle. This scheme will require all packaging material producers to contribute to the costs of collection, disposal, and recycling. However, the specifics of how the funds generated by this scheme will be distributed to collection and disposal authorities remain unconfirmed and the scheme has now been delayed until October 2025.

### Food Waste Collections

Whilst there is uncertainty over the consistent recycling element of kerbside collections, there has been confirmation that weekly food waste collections will commence in **October 2027**. This was delayed from the initial April 2025 commencement date, due to contractual issues with Veolia. The County Council applied to DEFRA for a transitional agreement to delay the start date of collections and this was carried out in consultation with the Districts and Boroughs.

### How will food waste be collected?

### Vehicles

Since the WRAP report was written, resources have increased in price since the initial capital estimates. WRAP estimated the Council would require eight, 7.5 tonne food waste vehicles including one spare. Each vehicle is currently priced at £100,000, depending on specification, giving a total indicative spend of **£800,000** on food waste vehicles.

This spend will need to be captured in the up-coming capital programme, as the vehicles will need to be ordered at least a year in advance. This is because other Councils will have a similar implementation date so will be competing for similar resources. It is also anticipated that vehicle prices will have increased by the time of ordering.

The operational running costs for these vehicles is estimated at **£165,000** per year (not including employee costs).

The purchase of additional food waste vehicles will also need to be added to future capital programmes to support new housing development activities across the Borough.

### Food Waste Caddies

Residents will be issued with two containers for their food waste.

- 7 litre kitchen caddy that would be kept inside the home.

- 23 litre out door caddy. This would be presented for collection outside of the property.

#### Costs for the containers

Prices were obtained recently from a caddy supplier. Indicative prices for 57,000 caddies are shown in table 2:

Caddy Type	Cost per unit with a logo
23 litre external caddy	£5.20
7 litre internal caddy	£2.00

Table 2: Unit cost for 57,000 caddies

Indicative costs for caddies during the initial roll out of the scheme are shown in the table 3 below.

Factor	Caddy with a logo
Households in the Borough	51,480
Additional 10% for new developments/broken caddies	5,148
<b>Total caddies required</b>	<b>56,628</b>
Estimated 7 litre Kitchen Caddy cost	£113,250
Estimated 23 litre outdoor caddy cost	£294,450
<b>Total cost of caddies</b>	<b>£407,700</b>

Table 3: Indicative cost for indoor and outdoor food caddies

Year 2 on-going revenue costs are based on the following:

- 2.5% new developments
- 2.5% general replacement through wear and tear.

Pricing for the for caddies are shown in table 4 below.

Factor	With a logo
5% new development and replacement stock (based on 51,480 households)	2,574
Estimated 7 litre Kitchen Caddy cost	£5,150
Estimated 23 litre outdoor caddy cost	£13,400
<b>Total cost</b>	<b>£18,550</b>

Table 4: Replacement costs

If caddies were purchased not only for the initial roll out but for on-going replacements as part of a countywide procurement process, economies of scale could be achieved.

### Caddy Liners

Research by WRAP has shown that there is a strong link between food waste participation rates and the provision of free caddy liners.

Factor	Metrics
Households in the Borough	51,480
Additional 10%	5,148
Total caddy liners rolls required for Year 1	56,628
Cost per roll (52 bags)	£0.90
<b>Estimated total cost of caddy liners for Year 1</b>	<b>£50,950</b>

Table 5: Caddy liner costs

The anticipated cost for caddy liners in year 1 is **£50,950**. There will also be the on-going revenue costs if liners are to be provided free of charge. A decision would be required from Members on continued free liner provision, although it is recommended that for the first year liners are provided free of charge. Indications are that liners will not be covered by the 'New Burdens Fund'.

Distribution costs to all households for the caddies and liners also need to be considered; however, these are difficult to estimate at this stage.

### Additional employee costs

Each of the food waste vehicles will operate with a driver and one loader.

To ensure that all seven round plus the spare round have adequate cover for annual leave, training and sickness days, 20 employees will be required at an estimated cost of **£635,000** per annum.

At least one additional mechanic (or equivalent resource) will be required in the garage to support with the extra vehicles. This would be at a cost of **£41,300** per annum.

To help to support with the role out of additional food waste collections an additional back office employee will be required to help with engagement and promotion. This would be a permanent position at an estimated cost of **£38,150** per annum.

Indicative **additional** employee costs after **year 1**, would be in the region of **£714,450**.

### Communications

To ensure effective community engagement and participation, WRAP recommends a communications package expenditure of **£75,000** over the course of the first year which covers both the 'Consistency in Recycling' and kerbside food waste changes. It is anticipated that the communication budget would remain unchanged if only food waste collections were rolled out, this is because the 'Consistency in Recycling' and food waste collection information and messaging would have been bundled together.



Cost summary associated with the initial roll out of kerbside food collections

Table 8 below highlights the initial indicative implementation costs for food waste. Given that that the collections will not be in place for a further four years, it is expected that prices will be subject to inflationary rises.

The costs below do not include an initial delivery to households. This is because the methodology for undertaking this has not yet been agreed, so is difficult to estimate.

Item	Cost
8 x 7.5 food waste vehicles	£800,000
Vehicle running costs for 8 food waste vehicles	£165,000
Food caddies (7 litre and 23 litre)	£407,750
Food caddy liners	£50,950
Employee Costs (additional)	£714,450
Communications	£75,000
Route optimisation software/route planning support	£50,000
Installation of an additional fuel tank in the Depot	£50,000
<b>Total</b>	<b>£2,313,150</b>

Table 6: Initial kerbside food waste capital and revenue costs

Capital Costs

Item	Cost
Eight 7.5 tonnes food waste vehicles	£800,000
Food caddies (7 litre and 23 litre)	£407,750
Installation of an additional fuel tank in the Depot	£50,000
<b>Total</b>	<b>£1,257,750</b>

Table 7: One off capital costs.

Although not confirmed, it is expected that the capital funding available through 'New Burdens Fund' will be not be adequate to cover all the kerbside food waste costs.

As such, no capital borrowing costs have been included at this stage. It has been assumed that all capital outlay on new vehicles and other equipment will be fully funded by capital grant from the 'New Burdens Fund'. Any shortfall in grants may require the Council to undertake prudential borrowing to fund the purchases. This would incur capital financing costs (Minimum Revenue Provision and interest on borrowing) and impact upon ongoing revenue costs.

Revenue Costs

Item	Cost
Employee costs (additional)	£714,450
Vehicle running costs for 8 food waste vehicles	£165,000
Communications	£75,000
Food caddy liners	£50,950
Route optimisation software/support for route planning	£50,000
<b>Total</b>	<b>£1,055,400</b>

Table 8: One off revenue costs

Indicative on-going revenue costs

Table 9 below, highlights the indicative on-going revenue costs for kerbside food waste collections. The Extended Producer Responsibility scheme may cover some of these costs going forward but any detail on the scheme is still to be released and the scheme itself has been delayed until 2025.

Item	Cost
Employee Costs	£714,450
Vehicle running costs for 8 food waste vehicles	£165,000
Food caddies (7 litre and 23 litre)	£18,550
Food caddy liners*	£50,950*
Communications	£10,000
Maintain Route optimisation software	£15,000
<b>Total</b>	<b>£973,950</b>

Table 9: Indicative on-going revenue cost

\*A decision will need to be taken regards the continued provision of free caddy liners.

It should be noted that all costs that have been highlighted in the report are indicative and will be subject to inflation. A replacement programme for the food waste vehicles will also need to be considered and captured at an appropriate time within the vehicle capital replacement programme.

Other points for considerationDepot Capacity

Kimberley Depot currently has the capacity to accommodate the eight additional food waste vehicles required for the food waste collections. However, the site would need reconfiguring to accommodate these vehicles and the necessary supporting infrastructure, (including that for the additional employees).

In line with the Council's Climate Change and Green Futures Strategy, the new food waste vehicles would ideally be electric. This would necessitate an upgrade to the Depot's electrical infrastructure to support the charging needs of these vehicles.

Given the question mark over the long term viability of the Kimberley Depot site, due to its identification as potential housing development land within the Local Plan, an evaluation of the site is necessary. The feasibility study would need to consider the logistical implications of increased traffic to the site, not only for the Council's own fleet but for the additional employees that would be required to deliver the service.

#### 10-day Contingency for Fuel

The Civil Contingencies Act, also known as the CCA, was introduced in 2004 following a review of emergency planning arrangements, as a result of the fuel crisis and severe flooding in 2000. The Act establishes a framework for civil protection in the UK. It imposes a clear set of roles and responsibilities on those organisations preparing for and responding to emergencies.

Local authorities are a category one responder and as such the Council need to ensure that it has ten days' worth of fuel for its fleet at all times.

Currently, the fuel tank on site at Kimberley Depot holds 27,000 litres of fuel. The fleet currently uses 1,000 litres of fuel per day and with an additional nine vehicles (eight food waste and one refuse freighter) stock is likely to require at least weekly ordering and delivery to meet the ten-day contingency requirement.

The installation of an additional fuel tank will need to be explored. It is anticipated that the cost of the tank, plus all the infrastructure works required will be in the region of **£50,000**.

#### Operating licence implications

The Council currently has an operating licence that covers up to 28 vehicles (over 3.5 tonnes). At this point in time, there are 20 vehicles on the licence (21 if the additional freighter resource is agreed). This covers 18 refuse freighters, one cage vehicle and a Grounds Maintenance van. The additional food waste vehicles will mean that the licence is taken over its maximum. The Council will therefore need to apply to the Traffic Commissioner to vary the operating licence. A process that will cost **£400** and take six to eight weeks to process.

#### Waste disposal

The disposal point for food waste is currently unknown. Discussions have highlighted the possibility of utilising Kimberley Depot as a drop off point. Further discussions with the County Council and Veolia will be required if this is to be a viable option. The Environment Agency will also need to be consulted, as this may require a variation on the Depot's site licence.

Any other sites identified for disposal may have an impact on vehicle running costs.

### Round Review

In 2018, Broxtowe's waste and recycling routes underwent a full review, which was a paper based exercise utilising existing Environment administration employees. Routes were optimised making them more efficient and balanced but they also included additional capacity to allow for the inclusion of new developments. This covered a three to five-year period.

Since the review in 2018, no further adjustments have been made to the routes. It is now evident that these routes need to be reviewed once more. This is as a result of:

- A number of new housing developments.
- More people working from home.
- Imbalance between the waste and recycling rounds.
- Increase in the number of garden waste subscribers.

Whilst undertaking a round review now could potentially increase the productivity of each route and in doing so may identify opportunities to stand down one or more vehicles on each collection day. The uncertainty over the details of consistent recycling collections and the implementation of food waste has delayed the round review from taking place. From a work programme perspective, it is both economical and prudent to undertake these changes at the same time.

Undertaking an effective and efficient review of round planning would require additional employee resource and the possible use of route optimisation software. It is anticipated that this would cost in the region of **£50,000**. A business case will be formalised and presented to Cabinet once details are released on the new recycling rounds.

Delaying the round review, has meant that there is a need to maintain a holding pattern over current rounds, many of which are at capacity. Paired with an increase in new developments and garden waste subscribers a request to have an additional refuse vehicle and team to operate it has now become necessary.

This is to ensure that all households continue to receive their collection services without disruption. The business case for this additional resource is detailed in Appendix 2.

### Carbon savings

"The Carbon Waste and Resources Metric (Carbon WARM) has been developed by WRAP and provides a relative measure quantifying net carbon emissions (CO<sub>2</sub>e) relative to a default (landfill). The assessment compares the carbon associated with the treatment routes of the materials collected and the carbon impacts of the vehicle fleet relative to the baseline" (WRAP Options Appraisal Report - Report presenting the results from an options appraisal of waste and recycling collections for Broxtowe Borough Council – December 2022).

Based on the introduction of kerbside food waste, WRAP calculated that there would be a 2,661 CO<sub>2</sub>e saving across the collection and disposal elements of collection, the

majority of which are attributed to the treatment of residual waste while the reprocessing of recyclable materials provides a net benefit, helping to offset this emission. For the Council though there would be an increase in our own operational footprint, as there would be an increase in the fuel used for the fleet and an increase in employees coming to site to undertake collections.

### Summary

If the Government does decide to continue with consistent recycling collections (excluding food waste), then the indicative costs for the additional 240 litre bin would be in the region of **£1,331,000** (this does not include delivery and distribution). On-going replacement and new development costs for the bins would be estimated at around **£60,500** per annum.

The indicative cost for the rollout of kerbside food waste has been estimated at **£2,313,150**. This includes supporting costs including route optimisation software and an additional fuel tank installed at Kimberley Depot.

Although not confirmed, it is expected that the capital funding available through 'New Burdens Fund' may be inadequate to cover all the kerbside food waste costs.

The indicative on-going revenue costs for kerbside food waste are currently estimated at **£973,950** (although a decision would need to be made with regards the continuation of caddy liners after year one). Some of these costs may be covered by the new Extended Producer Responsibility scheme, however details are still to be released.

### Conclusion.

The indicative costs associated with the roll out of kerbside food waste are considerable. Currently there is no visibility on how 'New Burdens Fund' will be allocated, although it is anticipated that it will be on a modelled formula rather than actual costs. The likelihood is that the Council will not achieve full cost recovery for the infrastructure service.

### References

WRAP Options Appraisal Report, report presenting the results from an options appraisal of waste and recycling collections for Broxtowe Borough Council (December 2022)

Chartered Institution of Wastes Management (CIWM), Position Statement - Consistent Collections in England (July 2023) <https://www.ciwm.co.uk/ciwm/news-and-insight/member-news/2023/ciwm-position-statement-consistent-collections-in-england.aspx> referenced 28 September 2023

## APPENDIX 2

**ADDITIONAL VEHICLE RESOURCE**Background

Broxtowe Borough Council, currently has a fleet of eighteen refuse freighters undertaking a variety of waste and recycling collections across fourteen permanent collection rounds. The four remaining freighters are deployed on missed bin collections, provide support for general and garden waste collections and are used as spares to cover any vehicle breakdowns.

New housing developments and the increase in garden waste subscriptions are placing additional pressures on the fleet, which has meant that the spare vehicles are almost permanently deployed. Ideally a round review would now be undertaken to balance the waste and recycling routes but due to the uncertainty over consistent recycling collections, the implementation of kerbside food waste, and the costs of a review, the review needs to be delayed. From an economical and work programme perspective these changes need to be undertaken together.

In delaying the round review, there is now a need to maintain a holding pattern over current collection rounds. Many of these are at capacity and the increase in garden waste subscribers has meant that on some days a third team is required to support the garden collection rounds (currently rounds are covered by two teams in the summer). In addition to an increase in new developments across the Borough, it is now necessary to request an additional refuse vehicle and a team to operate it.

In the short term, the additional freighter would be sourced from our existing fleet, specifically by retaining one of the older freighters that would have been disposed of when the Council takes delivery of three new freighters at the end of this year. This approach allows us to quickly respond to the immediate need without incurring extra capital expenditure.

In the longer term, the cost of an additional freighter may need to be captured in the capital programme to ensure the sustainability and efficiency of operations. This would be determined by the round review, which may also highlight that additional fleet vehicles are not required as efficiencies can be made from rebalancing the rounds.

Financial Implications – Vehicle and Employee's

The cost of running the additional freighter for a year is detailed in table 1.

Item	Cost
Repair and Maintenance (incl. tyres, MOT, Road Tax)	£7,350
Fuel	£11,050
Insurance	£2,250
<b>Total</b>	<b>£20,650</b>

Table 1: Indicative costs for running an additional freighter for one year.

The additional freighter will require a dedicated team to operate it. In the short term, this team could be covered by agency posts, as a team may not initially be required every day.

Table 2 below details the indicative employee costs associated with running the additional freighter. These are based on a full year. It is anticipated that a team may not be required initially every day, so the actual employee costs may be lower.

Item	Cost
Driver/Team Leader	£35,150
Loader	£28,350
<b>Total</b>	<b>£63,500</b>

Table 2: Employee costs for running an additional freighter.

The maximum potential cost to run an additional freighter and crew for one year is **£84,150**.

The costs for operating an additional freighter and crew in the current financial year 2023/24 will be absorbed in the current budget. If the proposal is approved, the additional revenue costs of running the vehicle and team in 2024/25 will be included in the budget setting process.

### Conclusion

Having an additional vehicle and resource in place until the round review can take place will help optimise routes and collection schedules. This will ensure that we can efficiently serve all areas of the Borough, including future developments. This approach will enable the Council to effectively manage the increasing pressure on our refuse rounds and continue providing a high quality service to its garden waste subscribers.