

## WASTE AND RECYCLING STRATEGY

### 1 PURPOSE OF REPORT

- 1.1 To agree to recommend to Council that the attached waste and recycling strategy (Appendix A) be adopted.

### 2 INTRODUCTION

- 2.1 On 3 September 2019 the Review Committee resolved to form a Member Working Group to consider the requirements for the new waste and recycling contract and to bring forward recommendations for the procurement process to Council.

### 3 DEVELOPMENT OF A DRAFT WASTE AND RECYCLING STRATEGY

- 3.1 Typically, waste contracts are up to 20 years in length. Therefore it is important that a longer term strategic view is undertaken to determine how the Council may wish the new collection service to operate and identify potential changes over the period of the contract that may be required to address longer term strategic goals.
- 3.2 To help develop the strategy the following approach was taken:
- Strategic drivers and key principles, likely to shape the strategy, were discussed and identified;
  - A range of contrasting waste collection options were modelled, providing estimate costs and recycling rates for each option;
  - The previously identified key principles were applied to the modelled collection options to 'test' whether any could satisfy the outlined principles of a new collection system; and
  - A draft strategy was drawn up based on the outcomes of the modelling and testing.

### 4 STRATEGIC DRIVERS AND KEY PRINCIPLES

- 4.1 The Member Working Group looked at the potential key strategic drivers that would potentially influence any decision on the nature of the collection service. The key drivers identified were:
- **Financial considerations**
  - **Changing legislative/strategic requirements**
  - **Ease of collection**
  - **The recycling market**
  - **Achieving carbon neutrality**

These are discussed in more detail below.

### Financial Considerations

- 4.2 Currently the waste and recycling contract has an expenditure of £2.6 million and generates an income of £1.1 million which leaves a net cost to the Council of £1.5 million. Of the Council's net budget for 2020/21, waste collection makes up approximately 16% of the costs. If the income generated for the waste collection service was removed, then this proportion of costs would be larger.
- 4.3 There are four key areas that could result in additional financial pressures arising from the new contract when it is procured:
- 1) **Age of Existing Vehicle Fleet** – currently the fleet consists of 12 refuse collection vehicles, 10 purchased in 2015 and 2 purchased in 2014 - all 12 vehicles are owned by the Council. The life of the vehicles is expected to be around 7-8 years. A new fleet will be required for the new contract, which can either be purchased by the contractor or by the Council. The former is likely to result in an increase on the annual contract cost of approximately £250,000 and the latter will require a capital outlay to purchase a new fleet costing an estimated £2.1million. It was noted that, at present, neither option has yet been modelled within the current Medium Term Financial Strategy for the Council and is therefore likely to cause additional pressures on the budget position.
  - 2) **Anticipated increase in demand for service** - over the next 15 years, it is estimated that demand for the service will increase by around 8,000 houses (based on current National Planning Policy housing requirements for the district). At present, the average round size for residual/recycling is approximately 1,200 houses per day, which is estimated to increase to 1,520 houses over 15 years. For green/garden waste, the average round size is 1,500 houses per day, which will increase to 1,900 houses. Under the current contract there is spare capacity in residual/recycling collection which should accommodate this growth in demand. However, the existing green/garden waste collection is already at capacity, so in order to be able to cope there will need to be either an increase in size of fleet (approximately £150,000 cost per year), or a decrease in demand (home composting/charging/reduce number of collections), or a combination of both increases in fleet and reduced demand.
  - 3) **Sale of recyclable commodities** - The cost of collecting the recyclable waste stream and sorting into marketable materials for sale is partially offset by the income received for these commodities. At present there is nationwide uncertainty in the recycle value due to prevailing market conditions. In 2010, the sale of recycle achieved an income of approximately £10 per tonne – representing an income total of £50,000 per year for the Council. However, at the present time instead of receiving an income, the Council has to pay a handling cost of £45 per tonne – representing a cost to the Council of £450,000 per year. Industry analysts believe that the market may have bottomed out, but this is not certain;

indeed, further fluctuation could result in even greater handling costs. Volatility in the wider market means that this is a cost impact which is very hard for the Council to mitigate.

- 4) **Changes in Legislation** – 60% of the waste contract cost is comprised of staffing costs, of which the majority are on, or close to, the National Minimum Wage rate. The anticipated year on year increase for National Minimum Wage is currently anticipated to be 6.5%, which equates to £80,000 per year of the current contract price. The MTFS historically budgets for a 2% inflationary increase in contract price which equates to £25,000. Therefore, there is a year on year squeeze on the viability of the contract, which will need to be addressed in the new contract.

- 4.4 Overall it was highlighted to the Member Working Group that there is an increased pressure on contract costs due to: increased demand; the need to provide a new fleet of waste vehicles for the service; and the widening budget gap within the Council. It was recognised that a key aim of any future waste strategy would be to reduce/contain the costs of the waste collection service, recognising that the contract represents one of the most financially significant areas of spend for the Council.

#### **WASTE & RECYCLING LEGISLATION AND STRATEGIES**

- 4.5 The Member Working Group heard from officers about what is viewed as the significant legislation and government policy that affects waste and recycling. These are set out below.

#### **Environmental Protection Act 1990**

- 4.6 It was noted by the Member Working Group that the major aspect of waste legislation that the Council must adhere to is the Environmental Protection Act 1990. This sets out the basic duty to collect and dispose of waste. It was also highlighted that the Council is the Waste Collection Authority (WCA), while Essex County Council is the Waste Disposal Authority (WDA).
- 4.7 The duties of the WCA are:
- To collect household waste in its area, except where it is on a place so isolated or inaccessible that the cost of collecting it would be unreasonably high and where the authority is satisfied that adequate arrangements for its disposal have been or can reasonably be expected to be made by a person who controls the waste.
- 4.8 A waste collection authority may also:
- Be responsible for the recycling waste it collects (buy or otherwise acquire waste with a view to recycling it); and
  - Sell waste (profit from recyclables), use or dispose of (by way of sale or otherwise to another person) waste belonging to the authority or anything produced from such waste.

- 4.9 It was further noted by the Member Working Group that there is no statutory duty for the Council to collect garden waste, and indeed, there are still a handful of local authorities nationally who do not offer a garden waste collection service at all.

**Inter Authority Agreement (IAA) – Joint Waste Management Strategy for Essex 2007-2032**

- 4.10 This is a 25-year plan for collection and disposal authorities in Essex with the following objectives:

- Prevent and minimise the amount of waste produced;
- Reuse more of waste that is produced;
- Co-ordinated promotion and education work; and
- Joint investment to achieve high levels of recycling and composting.

- 4.11 Payments received under this agreement total c£1.1m broken down as follows:

- IAA Revenue Payment – this is a non-statutory payment but is integral to the IAA. Payment is made by ECC to all WCA's. Payments will continue so long as the WCA delivers according to its Service Development Plan (defined within the IAA) as provided to ECC. Payments are varied via “*ad hoc* review” mechanism.  
The value to the Council of these payments in 2019/20 was £471,558.
- Recycling Credits – this is a statutory payment under the Environmental Protection Act 1990, designed to stimulate recycling and divert waste from landfill. These are tonnage based payments payable against a monthly invoice (requires submission of evidence for audit purposes).  
Current value to the Council: 2019/20, £70.36 per tonne, totalling £600,000 pa.  
Estimated figure for 2020/21, £74 per tonne.
- Avoided Disposal Payments – these are discretionary annual payments made by ECC, which will be phased out, as per the IAA. These payments are additional to recycling credits for exceeding targets set within the local area agreement.  
Current value to the Council: 2019/20, £60,548.

**The Environment Bill 2019-21**

- 4.12 The Bill covers a wide range of environmental issues, with headlines under resource efficiency and waste reduction:
- Consistency of collections – improving recycling rates by introducing a consistent set of recyclable materials collected from all households and businesses and consistent labelling on packaging so consumers know



what they can recycle, to drive up recycling rates. This does not include the collection method;

- Separate weekly food waste collections;
- Garden collections – the proposed Government consultation will also explore whether households should have access to free garden waste collections; and
- Clearer labelling on products which should make them easier to recycle.

4.13 The Government has stated that these schemes will be fully funded. With the timing of the contract renewal, the Council has an opportunity to be at the forefront of these changes and incorporate these before they become law.

4.14 Although not yet law, the Environment Bill is an indication that the next few years will see significant change for local authorities in terms of waste. Mandatory collection scheme changes are likely to be introduced; separate food waste collected weekly; possibly free garden waste collections; and more focus on recycling (quality and separation).

4.15 The Council's scheme will have to change when the anticipated legislation regarding separate food waste collections comes into force in (anticipated) 2023. The Council may consider that it is better to wait until the Bill is law when it is possible that Government funding could be available to support the changes. However, in doing so, there is a significant likelihood that demand for appropriate collection vehicles and waste containers will be such that it will outstrip availability, resulting in rising costs and logistic demands that could otherwise have been avoided.

4.16 The Member Working Group concluded that any future development of the waste strategy would need to comply with legislation and continue to collect a separate recyclable stream. It was also noted that the requirement to operate a separate food collection was highly likely to happen, and therefore a future waste collection provision should factor this within any waste collection contract.

### **Types Of Collection Service and Containers**

4.17 The Member Working Group received a presentation from the Principal Street Scene Officer on the various possible kerbside collection methods relating to the waste and recycling contract. It was stressed that whilst some collection methods would not be practically feasible due to their cost it was nonetheless felt that Members should be aware of the various options.

4.18 Dry Recycling Schemes - These can be broken up into how many streams are collected at the same time and can be summed up as follows:

- Single stream co-mingled – i.e. all materials collected together require sorting at the Material Recycling Facility ((MRF) – a waste facility where

co-mingled materials are separated through manual and automated processing into separate saleable raw materials for re-use).

- Twin stream partially co-mingled – i.e. material collected as two material streams, typically fibres (paper & card); and containers (plastics and glass). The latter would still need sorting at the MRF.
- Twin stream with separate food using the same vehicle with a separate 'pod' compartment that is designed for collecting food.
- Multi stream – i.e. materials separated by householder, or on collection at kerbside.

- 4.19 The presentation had been put together to show the pros and cons of a range of collection methods available. This has been summarised in the two appended tables. Appendix 2 – outlines the different type of collection vehicles available to collect the waste streams. Appendix 3 – outlines the different types of containers available to assist in the collection of waste at the kerbside.
- 4.20 The Member Working Group noted that the biggest downside on the split-bodied vehicles (a single refuse truck with two separate chambers for collecting waste that can also be deposited separately), is if you have different tipping locations for your recyclates. In addition, the sides of the vehicle fill up at different rates and if the vehicle has to go to different places to unload this can mean higher operating costs and routes taking longer to collect.
- 4.21 This discrepancy in collection rates can be even more problematic if a number of different waste streams are collected separately on a single vehicle, as they will also require separate disposal. Therefore, if the tipping points for different waste streams are at significantly different locations, the operational impact can be high, with a greater proportion of time and fuel spent travelling to multiple tipping points rather than upon the collection round.
- 4.22 The modelling undertaken presumes a single location for the tipping off of all waste streams collected. Therefore, where options are proposing to collect separate waste streams on a single vehicle, i.e. a split-bodied vehicle or a kerb-sort vehicle (long wheel-base truck with up to 7 separate compartment to collect different waste streams) further caution must be applied to the projected costs. In addition further work would be required to secure a transfer station that could handle separate waste streams within the one site. At present the Council does not have access to any such transfer station and so there is a risk that the collection of multiple waste streams upon a single vehicle could have a disproportionate impact on operational costs.
- 4.23 The Member Working Group expressed concern regarding the more complex kerbside collection options available and felt that the introduction of such schemes could be too significant a shift in the collection service, particularly if other aspects of the waste collection service were to be changed.

- 4.24 The Member Working Group favoured keeping the kerbside collection as simple as possible and as close to the existing system as possible, recognising that it was established and has worked very well to date.

### **The Collection and Resale of Recycled Materials**

- 4.25 The Member Working Group invited a representative of Viridor to present to the group, setting out the challenges facing the recycled materials market.
- 4.26 Viridor is one of the largest recycling companies in the UK and has been used by the Council to send recycling to their Crayford plant for the past 5 years.
- 4.27 The Member Working Group heard from Viridor how the mixed materials are separated using a range of automated and manual procedures. Those separated are either further processed by Viridor or sold on to a third party to process into a usable end-material. The cost of separating and processing, is partly offset by the income received for the sale of materials. However, there is still a net cost to processing the materials – this cost is passed onto the Council.
- 4.28 The Member Working Group heard from Viridor a summary of the challenges facing different recycling markets:
- Composition, i.e. proportions of paper, cardboard, household plastics, metals, glass;
  - Quality, i.e. lack of residual waste elements, e.g. food waste, garden waste, hygiene products; and
  - Value of the composition of commodities.
- 4.29 The fibre market which deals with the various grades of paper and cardboard had been increasing in price when the contract was first signed, but this has since decreased in value, even dipping into negative values.
- 4.30 The market for paper and pamphlets has fallen. There are 8 million tonnes of paper and card collected across the UK each year, but there is only the national capacity to deal with 3 million tonnes, so export is a major part of this market. In the past this was sent to China, but this has been reduced as a number of countries were using them to get rid of their waste, badged as paper.
- 4.31 The prices of plastics track each other and are also linked to oil prices. These have shown a slightly upward trend in the past year or so due to the forthcoming government tax to encourage the use of recyclable materials. The most valuable ones to Viridor are Natural HDPE and then Clear PET. In recent months, the demand for plastic has reduced due to COVID-19 and the reduction in the global price of oil.
- 4.32 In the case of glass, there are two different grades; mixed glass, which is collected separately at kerbside and is cleaner, therefore attracting a high

value; and MRF glass, which is material that has been through the MRF process, tends to be dirtier and is therefore less valuable. The value obtained for both types does not cover the financial costs to the Council for collecting it.

- 4.33 COVID-19 has caused some fluctuation in the price changes, mainly in aluminium and paper demand; however, plastics and glass remain relatively stable. It was noted that plastics will be heavily influenced by the crude oil price and the recent reductions in value have been felt in the recycled plastics market.
- 4.34 It was noted that there is not much benefit to removing the glass collection as it can prove difficult to take them out of the collection stream once it has become the established practice to mix glass in with the dry recyclable collection, as is the case in this district. Any dry recyclables collected would be taken through the same treatment process irrespective of whether glass was in, or out of the mix. It is unlikely that there would be any significant financial saving to be made by collecting glass separately, or by not collecting at all.
- 4.35 It was further noted that should the recycling market continue to be depressed, then an emphasis on collecting quality rather than quantity will require serious consideration. It was noted that most MRFs do not process paper and card, but are sold to a third party, usually a UK based papermill. Where paper and card are collected separately from other recyclables, the quality and hence value is considerably higher. Any future contract would need to have built in flexibility to accommodate such changes in market demand, but it would also need to be based on a sound business case.
- 4.36 The Member Working Group concluded that any future waste strategy needs to plan for improving the quality of recyclables collected, ensuring there is sufficient flexibility within the contract to allow change in collection systems should markets dictate a different business model in the future.

### **Carbon Neutral – 2030**

- 4.37 Whilst the Council does not have a large vehicle fleet compared to some authorities, the fuel these vehicles use does significantly contribute to the Council's carbon footprint. The Member Working Group heard that there are already equivalent electric vehicles for some of the fleet that could be purchased as and when the vehicles need replacing.
- 4.38 However, some of the more specialist waste collection vehicles do not have an electric equivalent. This is due to collection capacity being reduced due to accommodating the size of the battery storage required to power these larger vehicles. It was recognised that the technology for electric and hydrogen fleets is improving. There were concerns that as a Council, if we are too prescriptive in the type of fleet required at this stage, we may limit the ability to contractors to bid, or it may render the cost of the contract prohibitive.

- 4.39 At this stage, it was felt that the new contract should consider including an option within the tender process for the contractor to provide a cost for providing an electric fleet, so as to allow comparison. It would ensure that the onus is upon the contractor to identify a suitable fleet of vehicle to deliver the contract.

It is hoped that over the next 10 years more types of electric vehicles will be introduced and that the Council will be able to adopt these technologies as existing vehicles reach the end of their useful life.

## **5 MODELLING OF WASTE COLLECTION OPTIONS**

- 5.1 The Member Working Group firstly considered information gathered by the – consultants including the following:-

- A review of baseline data in order to benchmark the performance of the household waste collection services provided by the Council;
- A review of existing collection policies to provide an objective assessment of how the Council's services compare with that of their peers, industry standard and best practice; and
- An 'Options Appraisal' exercise to model and quantify: (i) the 'whole system' costs (i.e. collection and disposal costs); (ii) resources required for the delivery of; and (iii) performance of an agreed suite of potential future household waste and recycling service development options.

- 5.2 For this exercise, the Member Working Group agreed to a range of contrasting options for the waste collection service, as set out below:

- 1a)** The same approach as currently, but with food and garden waste being collected separately in different vehicles.
- 1b)** The same approach as currently, but with food waste being collected in a split-bodied vehicle at the same time as the garden waste vehicle.
- 1c)** A separate weekly food waste collection with separate vehicles and a garden waste collection with 240 litre bin. The rest of the collection would remain the same.
- 1d)** The same as 1c), with the exception that the garden waste collection is chargeable at £40 per bin for a year's collection service.
- 2a)** Residual as current, food and garden as current. Two stream fortnightly recyclables collected with separate paper into a crate or sack. Recycling vehicle would be split-bodied.
- 2b)** Alternate weekly recycling/residual with split-bodied vehicle with food waste pods at the front of the vehicle. Two stream recyclables with separate paper collection and separate weekly food waste collection. Weekly garden collection.

- 2c) Alternate weekly residual collection with alternate weekly garden waste, current vehicle type. Two stream weekly recycling. Weekly food waste with separate vehicle.
- 3a) Residual as current. Weekly multi-stream separated recyclables (kerbside sort), weekly garden, weekly food collected with recycling.
- 3b) Residual three weekly collections using a larger 240L bin from recycling. Recycling weekly, multi-stream sort using triple stacker crates or equivalent and kerbside sort vehicle also collecting food. Weekly garden as current, but no mixed food.
- 3c) Residual three weekly using current 180L bin. Recycling weekly using sack and crate, co-collected with food. fortnightly garden collection with 240L bin taken from recycling.

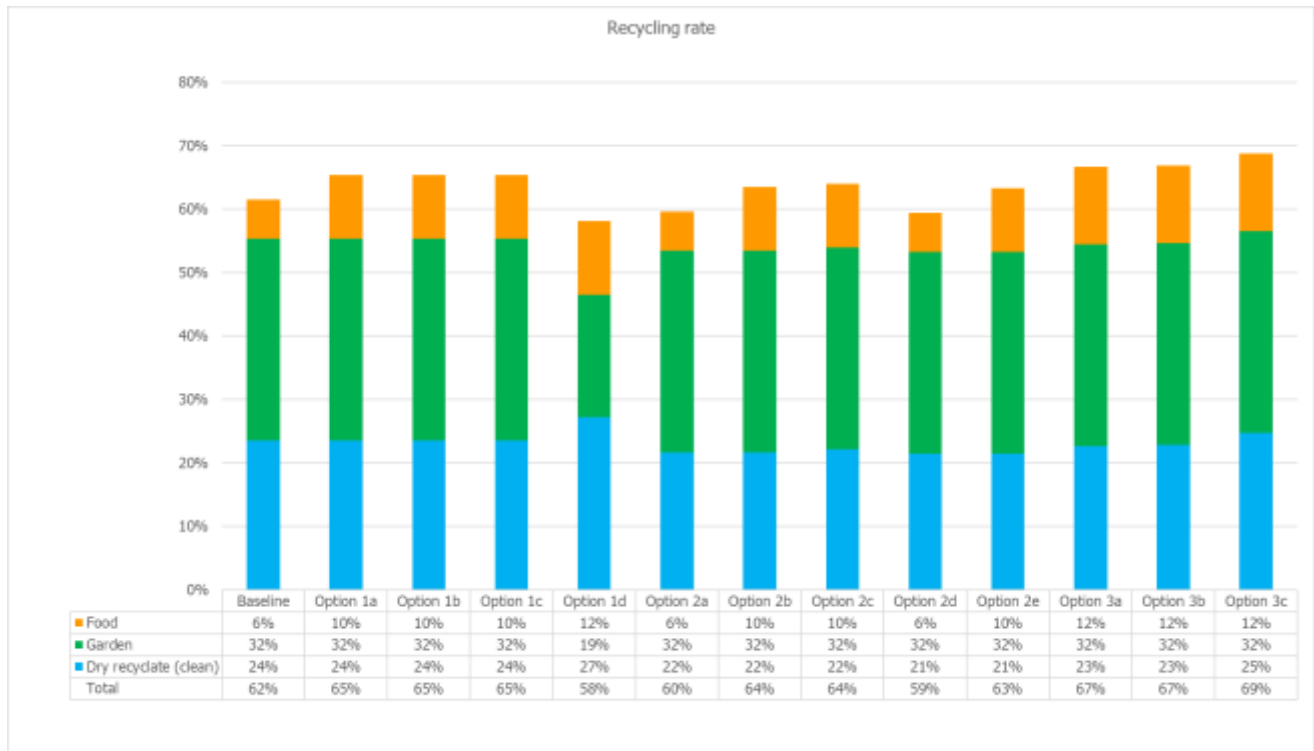
5.3 Further details of the options are provided in Appendix 1.

## 6 CONCLUSION OF THE OPTIONS MODELLING

- 6.1 The Member Working Group was presented with the findings from modelling work carried out by Ricardo Energy & Environment on behalf of WRAP and the Council (the “Ricardo Report”).
- 6.2 The modelling work assessed the comparative costs, anticipated performance and resource implications of an agreed range of household waste collection schemes.
- 6.3 A baseline of the current scheme was established with various assumptions applied. An options appraisal comparing performance and costs of a range of collection methods was completed.
- 6.4 The scheme was then benchmarked against other Councils. The conclusion drawn from the benchmarking is that current performance is good and the Council is in the upper quartile for recycling, which is reflected by local authority league tables.
- 6.5 The Ricardo Report looked at two key parameters of the waste collection service:
  - 1) The recycling rate that can be achieved; and
  - 2) Costs of collection.
 These are discussed below.

### 1) Estimated Recycling Rates

- 6.6 The estimated recycling rates for each option can be seen below.

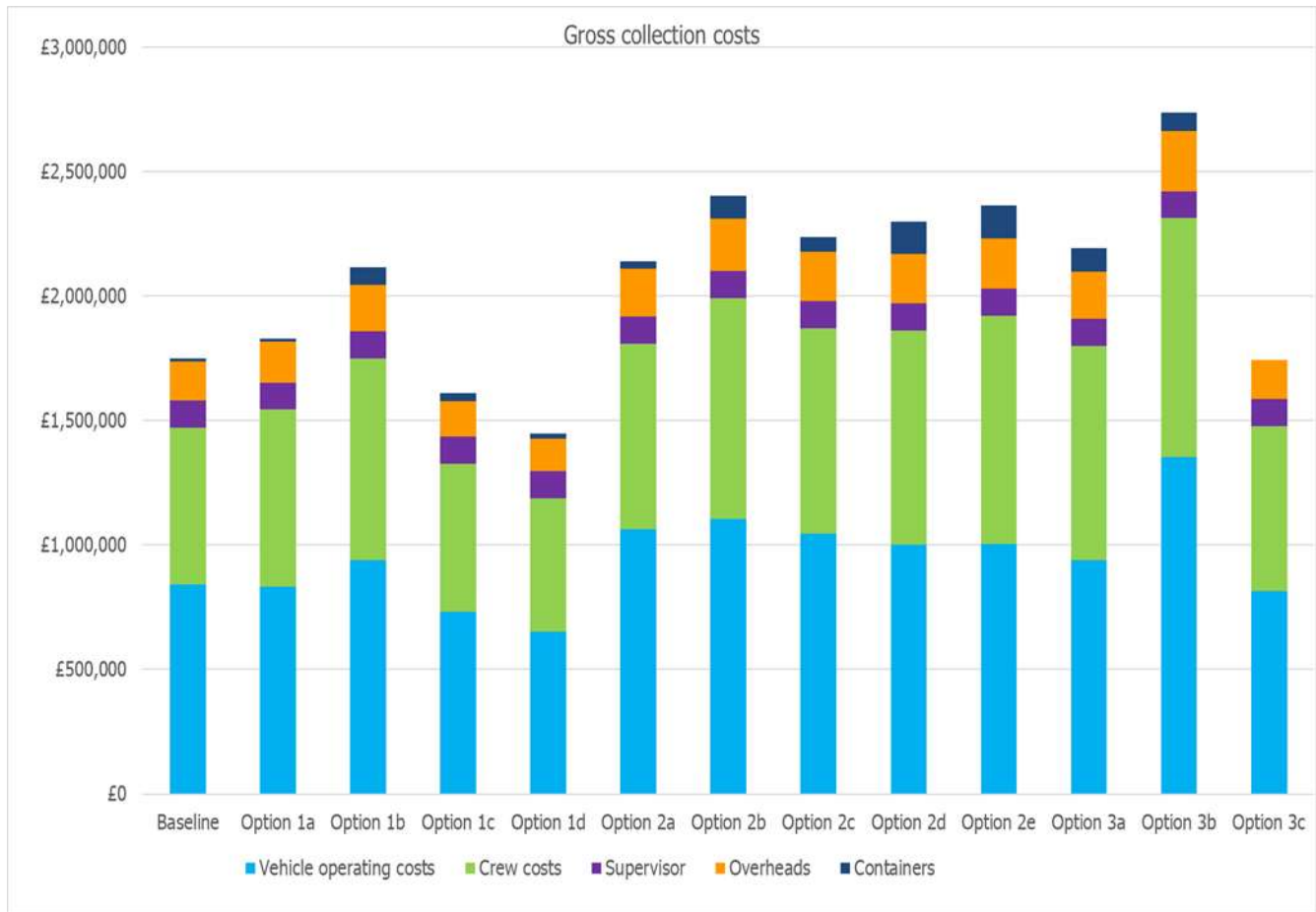


6.7 A number of observations can be made on the effect that differing collection options make to the recycling rate:

- The baseline recycling rate is already high at 62%;
- Adding a food waste collection that is not combined with the garden waste is estimated to add ~3 percentage points;
- A chargeable garden service and a separate food waste collection is predicted to drop recycling rates by ~ 4 percentage points;
- Moving to a two-stream service (Option 2a) decreases the tonnage and recycling rate (~2 percentage points). Although adding a separate food collection (Option 2b) can offset this and increase the overall performance by ~2 percentage points. Moving to a weekly two-stream collection (Option 2c) only marginally increases recycling rates (less than 1 percentage point);
- A multi-stream option (Option 2d) reduces recycling rates by ~3 percentage points but once again this can be offset by a separate food waste collection (Option 2e).
- The three-weekly residual collection options increase the recycling rate by 5-7%, mainly due to the increase in the food waste tonnage.

## 2) Cost of Collection Service

6.8 The graph below sets out the annual gross collection costs of different collection options.



- 6.9 From a front-line service provision (gross cost) collection standpoint, all options barring moving garden to fortnightly and collecting food separately (options 1b and 1c), cost more than the baseline. However, this does not take into account income streams such as recycling credits; sale of recyclate; charged services etc., which are included below.

### Cost of Net Waste Collection Service

- 6.10 In order to present the cost implications for the Council fully, the modelling included:
- MRF costs – Materials Recycling Facility gate fees for the separation of co-mingled material streams;
  - Income from dry recyclate – any revenue for material collected separately and sold directly to reprocessors;
  - Additional handling charge (applied to all separately collected materials); and
  - Green waste income from introducing a chargeable service.

- 6.11 The detail of assumptions and income generated are provided in Appendix 4.



- 6.12 The below graph sets out the relative net cost of the different collection systems scheme and the impact upon the recycling rate.



### Key Points

- 6.13 Two-stream dry recycling options (Options 2a, 2b, 2c and 3b) reduce their MRF costs and generate some income. However, the benefit of the additional income is reduced by the provision of new containers for the services, making these options among the most expensive modelled
- 6.14 Separating materials at the kerbside and generating an income from their sale can be quite significant and reduces gross service expenditure by ~£600k where costs move from paying for a MRF to income generation from a multi-stream service. Operating a two-stream collection creates a net income of ~£10k from the dry-recyclate service.
- 6.15 Separating food waste and collecting it separately is likely to increase the net WCA costs for the Council by ~£90k if collected using dedicated vehicles (option 1a) and £300k if refuse collection vehicles with pods are used (option 1b). Combining a three weekly residual collection to food waste collection in pods (option 3c) is predicted to have marginally higher costs than the baseline.
- 6.16 Income generated from a chargeable garden service is ~£460k based on 35% participation and an annual charge of £40 per household. With reduced net collection costs, the savings for option 1d are in the region £770k when compared to the baseline, making it the lowest cost option.

**Option Appraisal Conclusions**

- 6.17 Introducing separate food waste collections results in a significant increase in the recycling rate; given the uncertainty from Government around future requirements for food waste collection and possible funding to be made available, the ability to add a dedicated food service in the future may be a prudent approach.
- 6.18 Introduction of separate food waste collection that is not combined with the garden waste is estimated to add ~3% to the recycling rate; separating food waste and collecting it separately is likely to increase the net waste collection costs for the Council by ~£90,000 if collected using dedicated vehicles (option 1a) and £300,000 if refuse collection vehicles with pods are used (option 1b).
- 6.19 The lowest cost option is to maintain the current dry recycle collection approach, but move to a fortnightly collection of garden waste with a separate weekly collection of food waste (options 1c and 1d).
- 6.20 Introducing two-streams collections does not increase recycling rate unless food waste is also separately collected and is an expensive approach from a WCA perspective, especially when food is co-collected in a pod.
- 6.21 Reduced frequency of residual waste collections provides the highest recycling rates and reduces residual waste arisings; reduces waste collection costs compared to fortnightly collections.
- 6.22 Introduction of three weekly collections can help to reduce overall costs and help boost recycling; the three-weekly residual collection option increases the recycling rate by 5-7%, mainly due to the increase in the food waste tonnage.
- 6.23 A chargeable garden waste service provides overall savings in the region of ~£700-800k (income and reduced vehicles/resources) but reduces the recycling rate by ~3-4 percentage points, even though food is collected separately.
- 6.24 Although the introduction of a separate weekly food waste collection with separate vehicles, and a chargeable garden waste collection service (option 1d) represented the net least cost option it was noted that charging for a garden waste service could be applied to any of the options that operate a garden waste collection service separate from the food waste collection service.
- 6.25 Use of split-back and/or pod vehicles for collection – it was noted that option 3c generated high recycling rates with a low net service cost; however, the Member Working Group was advised to treat the costs with caution, as there is an assumption that all waste streams are deposited to a single transfer station. This is not the case for the Council's current waste transfer arrangements. It was noted that securing a site that could operate as a waste depot/transfer station would be a longer-term aspiration for the Council.

## 7 AGREEING A PROPOSED WASTE STRATEGY

- 7.1 The Member Working Group, by exploring the main drivers for determining priorities of the waste strategy, established key principles that should be applied to the procurement of the new waste contract. These are:
- To ensure that any future waste strategy would seek to reduce the costs of waste collection service, where-as options that increase the cost would be ruled out;
  - To comply with relevant legislation and continue to collect a separate recyclable stream;
  - To factor a separate food collection service into any future waste collection provision;
  - To keep the kerb-side collection of waste and recyclables as simple as possible and as close to the existing system as possible;
  - To ensure that any future strategy plans for improving the quality of recyclables collected and flexibility in collection systems to react to changes in market demand; and
  - To ensure that any new contract considers alternatives to fossil fuels for waste collection service where economically feasible.
- 7.2 The Member Working Group noted that promotion of the service was key and that they would like to see more communication regarding the future collection scheme, including a renewal programme for bin stickers and educational tools. The Member Working Group also asked for a more visible presence from the recycling team throughout the District to ensure residents were engaged and supportive of the new scheme.

Container storage was noted as a concern for the Member Working Group, as they wanted to maintain the simplicity of the current scheme and not significantly increase the numbers of containers to be provided to the residents. There was concern as to how many bins would be accepted by residents.

## 8 DRAFT WASTE STRATEGY

- 8.1 Applying the above key principles to the options set out in the appraisal filters out those options that are unsuitable for consideration and tests the practicality of the remaining options and whether they are realistically compatible with the Council's aims. A series of filters were applied:

### Shorter Term Aims

- 8.2 Step 1 - Options that could not accommodate separate Food Waste Collection were removed i.e. – Co-collected – garden and food service – However, it was noted that a separate food collection service would raise the cost of the collection service;

- 8.3 Step 2 – To offset the cost of the separate food collection only those options that offered a fortnightly garden waste service were included. i.e. weekly garden waste collection service options were removed.

### **Longer Term Aims**

- 8.4 Step 3 – Through reducing the collection of garden waste to a fortnightly service (particularly if charging for the collection of garden waste is considered) will see a reduction in recycling rates. To offset the drop in recycling rate, options that offered the introduction of a three-weekly collection of residual and increasing recycling collection to a weekly collection, were selected;
- 8.5 Step 4 – the final filter sought to remove those options that at this time may not be suitable due to the collection systems being significantly different to those that the Council currently operates, i.e. those options that undertake collecting separate recyclable waste streams - requiring multiple containers for presentation. This is due to the uncertainty around securing suitable tipping points for the separate recycling materials and the significant upheaval this would cause to residents. It was noted that by applying the Step 3 filter, the selection of systems of weekly collection of recycling would maximise flexibility for introducing changes to the collection of separate waste streams at a later date.
- 8.6 It was noted that options highlighted through Step 3 and Step 4 of the filtering process would not necessarily be introduced, but merited consideration in developing the longer term aspirations of any waste strategy.

Through the application of the filters the options are reduced to:

Option 3b – 3 weekly residual waste; weekly collection of two recycling streams: 1) paper and card, 2) plastic and glass; weekly food collection; fortnightly collection of garden waste; and

Option 3c - 3 weekly residual waste; weekly collection of co-mingled recycling material; weekly food collection; fortnightly collection of garden waste.

- 8.7 It was emphasised that the application of the filters were not to arrive at a definitive collection system, but as an exercise in testing and exploring the principles that the Member Working Group are shaping to develop a waste strategy with longer term aspirations.
- 8.8 It was noted that further collection systems could be developed, applying the above principles; examples were explored and are set out in Appendix 5. The derived options underline the principles that the draft waste strategy wishes to put forward and is based upon the modelling the Ricardo undertook in the original options appraisal.
- 8.9 This demonstrates that a range of options broadly compatible with the key principles can be established. Therefore, the principles of the strategy can be

taken forward, confident that there are a range of deliverable and pragmatic waste collection solutions available.

- 8.10 Through further discussion within the Working Group the principles were crafted into the attached document: *Waste & Recycling Strategy 2021- 2028*. This sets out the Council's vision as:

**Leaner and Greener: Working Towards Zero Waste**

- Rochford will be making changes to collect the materials that really matter
- Looking to make savings
- Increase recycling rates,
- Head towards carbon neutral
- Taking care of people and the environment, and turning waste into resources

- 8.11 The strategy outlines the following priorities:

- Objective 1: Provide a cost-efficient service
- Objective 2: Provide an easy to use service for residents
- Objective 3: Meet statutory obligations
- Objective 4: Support the move towards a more circular economy
- Objective 5: Reduce carbon emissions

- 8.12 And would set out these key deliverables:

- Deliverable 1: Anticipate statutory changes to waste collection by introducing a separate weekly food collection
- Deliverable 2: Reduce garden waste collection to control service costs
- Deliverable 3: Maximise recycling through reduced non-recyclable waste capacity
- Deliverable 4: Maximise the quality and value of recyclables collected

## **9 RISK IMPLICATIONS**

- 9.1 It is important that the Council prioritises the development of a waste strategy that has considered the key drivers likely to influence how the collection service will operate over medium to long term. This is essential for determining the specification of the new waste contract to be procured in March 2022. The long-term nature of waste collection contracts can result in a service that is potentially out of step with current thinking/legislation. Any new specification will need to reflect a strategic approach as outlined in the proposed Waste Strategy.

**10 ENVIRONMENTAL IMPLICATIONS**

- 10.1 The proposed strategy aims to maintain and possibly improve the Council's recycling performance. It will also help the Council's work towards carbon neutrality by 2030, seeking to reduce the carbon footprint through using effective systems to recycle and seeking to utilise an electric fleet where possible.

**11 RESOURCE IMPLICATIONS**

- 11.1 There are no direct resource implications of agreeing the proposed waste management strategy at this stage.
- 11.2 The financial sustainability of any future waste contract has been considered by the Member Working Group and included as a key objective of the proposed Waste Strategy. This will be an important consideration as part of agreeing the Council's overall Medium Term Financial Strategy, since it represents the most financially significant contract for the Council and therefore the biggest area of spend the Council has within its future control, aside from staffing budgets.
- 11.3 The specification of any new contract will be aligned to the Council's Waste Strategy - the Strategy is therefore a key driver of future costs. Final costs of a new contract will not be known until a full competitive procurement process has been undertaken; however, further soft market testing will be undertaken in advance of the formal procurement process to provide further intelligence to inform the MTFS and enable further refinement of the proposed specification.

**12 LEGAL IMPLICATIONS**

- 12.1 The current legal obligations are set out in the Environmental Protection Act 1990. There are no direct legal implications in respect of the strategy but this will need to be reviewed once the Environment Bill is in force.

**13 EQUALITY AND DIVERSITY IMPLICATIONS**

- 13.1 An Equality Impact Assessment has been completed and found there to be no impacts (either positive or negative) on protected groups as defined under the Equality Act 2010.

**14 RECOMMENDATION**

- 14.1 It is proposed that the Committee **RECOMMENDS TO COUNCIL**

That the attached Waste and Recycling Strategy be adopted.



Assistant Director, Place and Environment

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**Background Papers:-**

None.

For further information please contact Marcus Hotten on:-

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If you would like this report in large print, Braille or another language please contact 01702 318111.

APPENDIX 1 – Table 1. - Modelling options for the waste collection service

Option	Residual waste	Dry recycling	Garden waste	Food waste
Current (Baseline)	Fortnightly via 180l wheeled bin utilising RCV	Fortnightly co-mingled with 240l wheeled bins utilising RCV	Weekly collection of 140l container by RCV	Co-collected with garden waste
Option 1a	Fortnightly via 180l wheeled bin utilising RCV	Fortnightly co-mingled with 240l wheeled bins utilising RCV	Weekly via with 140l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection via dedicated 7.5t payload vehicle
Option 1b	Fortnightly via 180l wheeled bin utilising RCV with pod	Fortnightly co-mingled with 240l wheeled bins utilising RCV with pod	Weekly via with 140l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected on a pod
Option 1c	Fortnightly via 180l wheeled bin utilising RCV	Fortnightly co-mingled with 240l wheeled bins utilising RCV	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection via dedicated 7.5t payload vehicle
Option 1d	Fortnightly via 180l wheeled bin utilising RCV	Fortnightly co-mingled with 240l wheeled bins utilising RCVs	Fortnightly (chargeable) via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection via dedicated 7.5t payload vehicle
Option 2a	Fortnightly via 180l wheeled bin utilising RCV	Fortnightly 240l wheeled bin and 1 x box/sack utilising Twin-Pack 70:30	Weekly via with 140l wheeled bins utilising RCV	Co-collected with Garden
Option 2b	Fortnightly via 180l wheeled bin utilising RCV with pod	Fortnightly 240l wheeled bin and 1 x box/sack utilising One Pass	Weekly via with 140l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected on a pod
Option 2c	Fortnightly via 180l wheeled bin utilising RCV	Weekly 240l wheeled bin and 1 x box/sack utilising Twin-Pack 70:30	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection via dedicated 7.5t payload vehicle
Option 2d	Fortnightly via 180l wheeled bin utilising RCV	Weekly 3 x 40l box – triple stacker, collecting paper & card; cans: plastic; bottles and PTT glass utilising RRV	Weekly via with 140l wheeled bins utilising RCV	Co-collected with Garden
Option 2e	Fortnightly via 180l wheeled bin utilising RCV	Weekly 3 x 40l box – triple stacker collecting cans, plastics, card, paper and glass utilising RRV	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected with dry recycling
Option 3a	Three-weekly via 180l wheeled bin utilising RCV	Weekly 2 x box/sacks collecting cans, plastics, glass & fibres out, utilising RRV	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected with dry recycling
Option 3b	Three-weekly via 180l wheeled bin utilising RCV	Weekly 240l wheeled bin and 1 x box/sack utilising One Pass	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected with dry recycling
Option 3c	Three-weekly via 180l wheeled bin utilising RCV	Weekly 240l wheeled bin collecting fully co-mingled utilising RCV with Pod	Fortnightly via with 240l wheeled bins utilising RCV	Weekly indoor & outdoor caddy collection co-collected with dry recycling



APPENDIX 2 – Table 2. – Summary of Benefits and Disadvantages of Waste Collection Service Options

Method of Kerbside Collection	Benefits	Disadvantages
<b>DRY RECYCLING OPTIONS</b>		
Single stream co-mingled - all materials collected together require sorting at MRF	<ul style="list-style-type: none"> <li>▪ Single wheeled bin easily stored</li> <li>▪ Easy for residents to understand and use</li> <li>▪ Multiple materials collected in single vehicle</li> <li>▪ Sorted at MRF in one place</li> </ul>	<ul style="list-style-type: none"> <li>▪ Higher contamination rates</li> <li>▪ Poorer quality materials</li> <li>▪ Lower value materials</li> </ul>
Twin Stream Recycling Single pass vehicle	<ul style="list-style-type: none"> <li>▪ Split-bodied vehicle</li> <li>▪ Separate compartment for paper &amp; card</li> <li>▪ Two material streams collected in one</li> <li>▪ Can also collect food on a pod</li> <li>▪ Standard bin plus additional container for paper</li> </ul>	<ul style="list-style-type: none"> <li>▪ May need different tipping locations</li> <li>▪ More complex for householders to use</li> <li>▪ Running costs higher due to low MPG</li> <li>▪ Vehicle purchase cost higher</li> <li>▪ Additional loader needed for food waste</li> </ul>
Kerbside Sort Recycling	<ul style="list-style-type: none"> <li>• Collect all recycling in a single vehicle</li> <li>• High recycling rates</li> <li>• Eliminate contamination</li> <li>• TEEP compliant</li> </ul>	<ul style="list-style-type: none"> <li>• Slower to collect</li> <li>• May delay traffic</li> <li>• Difficulty accessing some streets</li> </ul>
<b>FOOD COLLECTION OPTIONS</b>		
Optional food waste on side POD	<ul style="list-style-type: none"> <li>• All materials collected in one pass</li> </ul>	<ul style="list-style-type: none"> <li>• Additional wear and tear on vehicle</li> <li>• Vehicles most expensive type to purchase</li> <li>• Low mpg</li> </ul>
Separate food waste collection vehicle types	<ul style="list-style-type: none"> <li>• Statutory requirement</li> <li>• Increased recycling rate</li> <li>• Remove food from dry recycling and residual streams</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of implementation</li> </ul>

APPENDIX 3 - Table 3. – Summary of Benefits and Disadvantages of Container Options

Type of Container	Benefits	Disadvantages
Additional Container for twin stream recycling - Single use plastic sack for paper	<ul style="list-style-type: none"> <li>• Easy to use for householders</li> <li>• Keep out the elements to ensure fibres do not get wet</li> </ul>	<ul style="list-style-type: none"> <li>• The use of single use plastic bags may not align with the council's sustainability agenda</li> <li>• Storage of full bags indoors may be an issue for some residents</li> <li>• Reprocessor would need to accept fibres presented in sacks</li> <li>• Lifetime costs due to annual supply of bags</li> </ul>
Additional Container for twin stream recycling Crate for paper	<ul style="list-style-type: none"> <li>• Ease of separation of material</li> <li>• Additional capacity means more recycled</li> </ul>	<ul style="list-style-type: none"> <li>• Additional storage space needed</li> <li>• Can get lost following collection</li> <li>• Replacement costs</li> <li>• Paper can get wet unless a lid is used</li> </ul>
Containers - Hessian bag for paper	<ul style="list-style-type: none"> <li>• Ease of storage when not in use</li> <li>• Lightweight and easy to use</li> </ul>	<ul style="list-style-type: none"> <li>• The capacity of hessian bags may be insufficient to contain the volume of fibres.</li> <li>• Potential loss of bags to the kerbside after emptying</li> <li>• High cost of replacement or reduced use of the service</li> <li>• Fibres may get wet if open to the elements. Wet loads can be rejected by the reprocessor.</li> </ul>
Containers - Bin insert for paper recycling	<ul style="list-style-type: none"> <li>• Keeps materials dry</li> <li>• Easy to use</li> <li>• Better quality recycling</li> </ul>	<ul style="list-style-type: none"> <li>• No additional capacity from current scheme</li> <li>• Fills up quickly</li> <li>• Additional cost of inserts</li> </ul>
Kerbside sort containers – Multiple boxes and bags	<ul style="list-style-type: none"> <li>• Material separated by resident</li> <li>• Better quality material</li> <li>• Can be two stream or more</li> <li>• Low contamination</li> <li>• Increased capture of recyclable materials</li> </ul>	<ul style="list-style-type: none"> <li>• More containers for resident to store</li> <li>• Can be more confusing for residents</li> </ul>
Kerbside sort containers – Stacking box trolley	<ul style="list-style-type: none"> <li>• Improved material quality</li> <li>• Similar storage requirement as wheeled bin</li> <li>• Fully TEEP compliant</li> </ul>	<ul style="list-style-type: none"> <li>• More complex for householders to use</li> <li>• Purchase cost of containers</li> </ul>

## APPENDIX 4 – Cost Assumptions &amp; High level Cost For Waste Collection Service Options

Waste stream	Cost per tonne
Current recycling (Fully co-mingled)	£42.50
Source Segregated Materials	Weighted income, depending on tonnage, based on values in Table 14.
Two – stream, fibres separate	Weighted income, depending on paper to card ratio, based on values in Table 14.
Handling Charge (applied to all separately collected materials)	£42.50 (MDR fraction)
Recycling credit/Avoided disposal rate	£10
Chargeable garden waste	-£70.36
	-£40 per household

	Collection Costs	Dry Recyclate Income	MRF	Dry Recyclate Handling	Net Dry Recyclate Cost	Garden Waste Income	Recycling credits	Total	Difference to Baseline
Baseline	£1,740	£0	£340	£0	£340	£0	-£560	£1,520	
Option 1a	£1,830	£0	£340	£0	£340	£0	-£560	£1,610	£90
Option 1b	£2,050	£0	£340	£0	£340	£0	-£560	£1,830	£310
Option 1c	£1,650	£0	£340	£0	£340	£0	-£560	£1,430	-£90
Option 1d	£1,460	£0	£340	£0	£340	-£460	-£560	£780	-£740
Option 2a	£2,130	-£190	£150	£40	-£10	£0	-£500	£1,620	£100
Option 2b	£2,340	-£190	£150	£40	-£10	£0	-£500	£1,830	£310
Option 2c	£2,270	-£190	£150	£40	-£10	£0	-£510	£1,750	£230
Option 2d	£2,230	-£350	£0	£70	-£280	£0	-£480	£1,470	-£50
Option 2e	£2,360	-£350	£0	£70	-£280	£0	-£480	£1,600	£80
Option 3a	£2,230	-£370	£0	£70	-£300	£0	-£510	£1,420	-£100
Option 3b	£2,760	-£200	£160	£40	£0	£0	-£530	£2,230	£710
Option 3c	£1,820	£0	£360	£0	£360	£0	-£600	£1,580	£60

(Unit of Costs = £1,000)

APPENDIX 5 – Summary of Potential Waste Collection Service Options Compatible with the Proposed Waste Strategy

	RESIDUAL	RECYCLING	GARDEN	FOOD	RECYCLING RATE	COST
A	Three-weekly via 180l wheeled bin	Weekly 240l wheeled bin collecting fully co-mingled	Fortnightly via with 240l wheeled bins	Weekly collection co-collected with dry recycling	+7%	£60,000 PER YEAR INCREASE
B	Three-weekly via 180l wheeled bin	Weekly 240l wheeled bin collecting fully co-mingled	Fortnightly – CHARGING SERVICE via with 240l wheeled bins	Weekly collection co-collected with dry recycling	+4%	£700,000 PER YEAR SAVING
C	Three-weekly via 180l wheeled bin	Alternate weekly collection of cans, plastic glass, & Alternate weekly collection of paper & card using RCV	Fortnightly via with 240l wheeled bins	Weekly collection co-collected with dry recycling	+5%	£230,000 per year saving
D	Three-weekly via 180l wheeled bin	Alternate weekly collection of cans, plastic glass, & Alternate weekly collection of paper & card using RCV	Fortnightly – CHARGING SERVICE via with 240l wheeled bins	Weekly collection co-collected with dry recycling	+1%	£930,000 per year saving



# Rochford District

# Waste & Recycling Strategy





## ► Introduction

**Rochford District Council collects around 8,200 tonnes of recyclables, approximately 11,600 tonnes of compostables and 10,800 tonnes of non-recyclable waste annually from 35,800 households across the District. In 2019/20 Rochford's recycling rate was 61% well above the national average of approximately 50%.**

Rochford District Council first introduced a kerbside recycling service to households in 2008. Whilst the service significantly increased the use of the kerbside recycling service by households, the recycling levels have now plateaued. In addition to the missed environmental and local benefits, not making full use of the recycling services does not make best use of the taxpayers' money. This is because recycling is generally less than half the cost of landfilling it and the sale of some recyclable materials even generates an income.

In line with the Government's Resources and Waste Strategy this document supports the Government's ambition for moving towards a more circular economy where materials are considered as a resource and such resources are used efficiently.

The new Waste Strategy 2021-2028 has been developed to ensure the district maximises the environmental, community and financial benefits from the waste it produces.

30,600  
tonnes of waste collected





## ► Leaner & Greener: working towards zero waste

**Together we will reduce the amount of waste we generate, reuse what we can, and recycle and recover the remaining resources to reinvest back into the economy.**

We will embrace a waste management system that is user-friendly, with programs and facilities that balance the needs of the community and the environment with long term financial sustainability.

Together, we will ensure a safe, clean, and healthy District for the future.

### We aim to:

- Collect the stuff that really matters
- Make financial savings
- Increase recycling rates
- Head towards carbon neutral
- Take care of people and the environment
- Turn waste into resource



## ► Strategic Direction: Waste Strategy 2021- 2028

The waste strategy is set to deliver the following five objectives:

### **Objective 1: Provide a cost-efficient service**

We will provide a safe and efficient waste service which will maximise reuse and recycling whilst minimising the cost to the taxpayer. This approach will ensure we will strike the right balance and provide a safe, cost-efficient solution delivering environmental and local benefits without increased costs to the taxpayer.

### **Objective 2: Provide an easy to use service for residents**

We will ensure the services we provide are easy to use for householders and enable householders to maximise reuse and recycling of materials.





## ► Strategic Direction: Waste Strategy 2021- 2028

The waste strategy is set to deliver the following five objectives:

### **Objective 3: Meet statutory obligations**

We will meet our statutory obligations in line with our duties as a local authority, including complying with the statutory requirements set out in the legislation, such as the Environment Protection Act 1990.

### **Objective 4: Support the move towards a more circular economy**

We will play our role in creating a more circular economy by promoting waste prevention and enabling materials that are being discarded by households in the district to be used as a resource again, providing services that maximise opportunities for reuse and recycling of materials in an ethical and responsible way, and recovering energy from the rest.



## ► Strategic Direction: Waste Strategy 2021- 2028

The waste strategy is set to deliver the following five objectives:

### Objective 5: Reduce carbon emissions

We will ensure the services we provide are resource-efficient in terms of the vehicles we use, the fuel we need and the reuse, recycling and recovery options we procure to reduce carbon emissions.





## ► What we will do

Changes are required to ensure Rochford District meets these strategic objectives.

The following four measures will be taken to deliver the strategy:

### **Deliverable 1: Anticipate statutory changes to waste collection by introducing separate weekly food collection**

Despite most residents separating out their food into their green (mixed food and garden waste) bin, food waste takes up one fifth of the Districts green bins. This is bad for the environment and the tax-payer, as the garden waste is mixed in with food , and is sent away for expensive treatment via an Anaerobic Digestion (AD) plant. Although this is preferable to the use of land-fill, the significant majority of the green bin waste could be taken to a windrow composting treatment, if food waste was collected separately.

The government is pushing local authorities towards weekly separate food waste collections through its Resources and Waste Strategy, with a deadline of 2023 for the rollout of the service.

The Council plans to introduce its own food waste collection scheme in 2022.





## ► What we will do

Changes are required to ensure Rochford District meets these strategic objectives.

The following four measures will be taken to deliver the strategy:

### **Deliverable 2: Reduce garden waste collection to control service costs**

Councils are not required by law to collect garden waste from the kerbside.

To provide a 'free' garden waste collection involves running a fleet of garden waste collection vehicles and the provision of garden waste bins to households at a significant cost. Whilst such a collection is popular amongst residents, there is limited funding to continue to support a weekly collection. Accordingly, we will make the changes collecting garden waste, but on a fortnightly basis, rather than weekly as at present.

Home composting is the best environmental option for recycling garden waste. The Council will continue to provide advice on home composting and sell discounted home composting bins to residents. Some residents would be happy to pay for a garden waste collection service, and nationally over half of garden collection services are chargeable. The Council will also review the continuation of a free garden waste collection, recognising that charging for the service can serve as a valuable mechanism for controlling service demand and providing resource for improving other aspects of the waste collection service.





## ► What we will do

Changes are required to ensure Rochford District meets these strategic objectives.

The following four measures will be taken to deliver the strategy:

### **Deliverable 3: Maximise recycling through reduced non-recyclable waste capacity**

Research across the UK shows that one of the most effective ways to encourage residents to use the recycling services available to them is to reduce the quantity of non-recyclable waste collected from households.

Reducing the non-recyclable waste capacity available at kerbside is a key component of the District's waste strategy to encourage householders to make better use of the recycling services available to them. We will look to review the way we collect non-recycling waste, trying to reduce the amount collected, whilst considering the impact upon the overall collection service.

We will continue to provide additional recycling bins and food waste containers to households. Additional non-recyclable waste bins can be requested by households that fully use the recycling services and meet the criteria for additional non-recyclable waste bin capacity.





## ► What we will do

Changes are required to ensure Rochford District meets these strategic objectives.

The following four measures will be taken to deliver the strategy:

### **Deliverable 4: Maximise the quality and value of recyclables collected**

We will continue working with householders to ensure householders know what materials can be reused and recycled and how they need to be prepared to fully utilise the changes to the waste service. This will help maximise the quality and value of the reusable items and recyclables collected. We will put in place an effective communications and engagement strategy.

We will look for operational solutions to maximise financial value from the recyclables collected to reduce the cost of the recycling and waste services to the taxpayer. We will ensure that collection systems have the flexibility to change with relative operational ease should changes to recyclables markets determine this to be an economic imperative.



## ► How we will measure our success

The following targets and performance indicators have been put in place to monitor and manage the progress to achieve the strategy objectives:

STRATEGY OBJECTIVE	TARGET	INDICATOR
<b>Objective 1:</b> Provide a cost-efficient service	Reduce the cost of waste and recycling service provision by 2% by 2023 through savings in landfill disposal	Cost of service provision per household per year
	Reduce net operational Costs	Cost of Waste Collection Service
	Increase income	Revenue generated
<b>Objective 2:</b> Meet statutory obligations	Separate food waste collection by 2023	New service in place
<b>Objective 3:</b> Support the move towards a more circular economy	Reduce total waste arisings per household by 5% by 2025	Total waste arisings per household
	Maintain Rochford District's recycling rate over 62%	Recycling rate
	Decrease the amount of waste placed in non-recyclable waste bins by 20% by 2025	% of waste placed in non-recyclable waste bins
<b>Objective 4:</b> Provide an easy to use service for customers	As per Objective 1 – missed bins target	As per Objective 1
	Maintain number of missed per 1,000 households serviced to 30	Number of missed bins per 1,000 households serviced
<b>Objective 5:</b> Reduce carbon emissions	Reduce carbon emissions from the collection of waste by 15% by 2023	Carbon emissions from collection vehicles
	Introduce separate food and garden waste collection	Collection service in place
	Reduce carbon emissions from the collection of waste by 85% by 2027	Carbon emissions from vehicles
<b>Objective 6:</b> Operate a safe and efficient waste service	Minimise accidents and incidents	Number of accidents and incidents per 1,000 households serviced



