

# Chichester District Council

## OVERVIEW AND SCRUTINY COMMITTEE

17 January 2023

### Domestic Food Waste Collections

#### 1. Contacts

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#### 2. Recommendations

- 2.1 The Committee is requested to note the proposal that in the absence of any clarity regarding the Government's requirements and funding, that the Council should not yet commence the implementation of a separate domestic food waste collection service, but instead keep a watching brief and update members as and when the Government progresses matters.**

#### 3. Background

- 3.1 The Environment Act 2021 and the Governments Resources and Waste Strategy identified weekly food waste collections will be mandated for all domestic properties by 2025 as well as changes to other waste stream collection responsibilities.
- 3.2 The Government have stated that new funding would be made available in the form of payments to implement new statutory responsibilities included within the Act and indicated its intention to make New Burdens funding available for the introduction of these responsibilities, committing £295 million of capital funding for local authorities to prepare for separate food waste collections via its Net Zero Strategy.
- 3.3 Subsequently the government called for further evidence, to which local authorities responded. Most recently the government has indicated continuing support for Net Zero without specific detail around the status of financial commitments made in the strategy.
- 3.4 Government consultations on various aspects of The Environment Act have been undertaken although Government responses to these consultations have been delayed several times. Defra have recently indicated that it is still the Government's intention to see through the reforms and responses to the consultations can be expected at "the end of 2022".
- 3.5 With the delay in receiving the details of the new statutory responsibilities, the confirmation of funding being made available and the mechanism for payment

of this funding, most local authorities who are not currently collecting food waste have delayed any decision to implement this new service.

- 3.6 Cabinet in July 2022 resolved to commence planning work for the implementation of domestic food waste collection and released £22,500 from reserves to support this work. A formal report was to be prepared for presentation to the Overview and Scrutiny committee. The report should include the following areas:
  - 3.6.1 Update of 2019 Eunomia model using current data to identify total system costs for the implementation of a kerbside food waste collection service.
  - 3.6.2 Development of more detailed operational plans to identify different delivery model options for consideration.
  - 3.6.3 Development of implementation timescales, from formal approval to proceed to commencement of service provision.
  - 3.6.4 Identification of key risks and issues that would be associated with the introduction of a food waste collection service.
  - 3.6.5 Identification of waste disposal requirements from WSCC
  - 3.6.6 Identification of any potential opportunities for the growth of commercial food waste collections
- 3.7 CDC currently serves approximately 60,000 domestic properties. CDC's current service consists of:
  - 3.7.1 fortnightly co-mingled recycling with a 240-litre wheeled bin for dry mixed recycling (DMR), collecting glass, paper, card, cartons, plastic bottles, plastic pots, tubs and trays, and metal tins and cans, aerosols and foil
  - 3.7.2 fortnightly charged garden waste with a 240-litre wheeled bin, which residents can subscribe to; and
  - 3.7.3 fortnightly residual collections from 240-litre wheeled bins
  - 3.7.4 some smaller occupancy households have smaller 180ltr bins whilst larger households may have 360 ltr bins
  - 3.7.5 Flats and some Homes of Multiple Occupancy (HMO's) are serviced by 1,100-litre communal bins. Smaller vehicles are used to collect from 1,055 properties with restricted access. Garden waste is only collected from standard access households

## 4. Progress

### 4.1 Modelling report

4.2 Eunomia Research and Consulting (Eunomia) was commissioned in June 2022 by Chichester District Council (CDC), to carry out an options appraisal of the household waste collection service. The purpose of this options appraisal was to review the authority's current household waste collection system and evaluate the costs, resource implications and likely performance of introducing a separate weekly food waste collection service to all households.

4.3 The cost and performance outcomes of this study are intended to allow CDC to identify the lowest cost approach that will meet the food waste requirements set to be introduced under the Environment Act 2021 and the Resources and Waste Strategy

4.4 The approach taken to model CDC's system was first to gather data of CDC's collection service, including the current collection methodology, recycling performance, recent waste composition data etc.

4.5 The current service was benchmarked against similar authorities to provide context on how CDC currently performs and to determine the likely performance within each collection option to be modelled.

4.6 A 'baseline' model was then created representing the current service. CDC specific inputs such as geography, number and type of households, current services and service performance, resources, and waste composition were then used to refine the model. These inputs were calibrated using known outputs (which in modelling terms includes the numbers of crew and vehicles used to deliver the collection services), as well as factors such as productivity, pass rates (houses per hr), set out rates (%) and capture rates (kg / household)

4.7 Waste flow modelling was undertaken to assess the indicative recycling rate for each of the options being modelled and used to determine the number of resources (vehicles and staff) required. Costs were then calculated. It should be noted that all costs identified within the model are presented as marginal costs relative to the baseline. The modelling does not include transition/implementation costs for service changes, including bin delivery/exchange; household communication costs, both on-going and in relation to service changes; or spare vehicles, staff cover for holiday and sickness, overheads (supervision and management) or back-office staff. These costs are to be added into the model output to provide a total cost of operation.

4.8 The options modelled are diagrammatically shown in Appendix A. No changes to the green waste or dry recycling collection services were modelled.

4.8.1 Baseline. Fortnightly residual, fortnightly comingled dry recycling and charged garden waste

- 4.8.2 Option 1. Fortnightly residual, fortnightly comingled dry recycling, weekly food waste collected in a 12t vehicle and charged garden waste
- 4.8.3 Option 2. Fortnightly residual, fortnightly comingled dry recycling, weekly food waste collected in a 7.5t vehicle and fortnightly charged garden waste
- 4.8.4 Option 3. 3-weekly residual, fortnightly comingled dry recycling, weekly food waste collected in a 7.5t vehicle and fortnightly charged garden waste. Communal properties continue to have fortnightly residual collection
- 4.8.5 Different vehicle sizes were modelled as larger vehicles have a greater payload and can service more households before returning to a transfer station. 12 t vehicles are however more expensive than 7.5t vehicles. Depending on driver age, 7.5 tonne drivers may not need to be HGV qualified and as such are easier to recruit than full HGV licence holders.

#### 4.9 Modelling results

#### 4.10 The main findings of the modelling suggest

- 4.10.1 Where only food waste is introduced (Options 1 and 2), there is an increase in the recycling rate from 44.9% to 55.2% across CDC.
- 4.10.2 The choice of food waste vehicle between 12 tonne (Option 1) and 7.5 tonne (Option 2) results in no change in recycling performance, as waste flows are not affected.
- 4.10.3 Only when the residual collection frequency is decreased (Option 3) from fortnightly to three-weekly does the recycling rate increase again, to 62.3%. It should be noted that this option has potential resident concerns and currently only a minority (but growing) of other local authorities have introduced this approach.
- 4.10.4 The theoretical annual marginal costs and the more realistic annual costs when adding in an operational consideration factor to cover vehicle non-availability, resource holiday and sickness cover etc , for each option are shown below.

	Annual Costs	
	Theoretical	Realistic
<b>Option 1</b>	£747,000	£933,000
<b>Option 2</b>	£730,000	£912,000
<b>Option 3</b>	£526,000	£702,000

Further breakdown of these costs are included in Appendix B NB:-These costs use input values valid in September 2022.

- 4.10.5 Where food waste is introduced with 12t vehicles (Option 1), the increase in costs is highest at £747,000. This is closely followed by Option 2, which is not quite as expensive due to the use of the less expensive 7.5T food waste

vehicles. Staff costs, however, are higher than in Option 1

4.10.6 The greatest residual disposal cost savings arise in Option 3 where a greater amount of food waste and some dry recycling is diverted from the 3-weekly residual waste service. This option also has the lowest total collection costs, due to savings on residual waste vehicles. In Option 3, unlike other options, there is also a small increase in recycling treatment costs due to CDC collecting additional recycling, but this is fully offset by the residual waste savings

4.10.7 In addition to the operational costs included in 4.10.4, one off service change costs must also be considered for the introduction of the food waste service. Indicative service change communication costs are between £0.50 and £1.50 per household. Using £1.00 per household for the first year as well as £50,000 of additional resource to plan and manage the roll out approximately £110,000 will be required. Additional one-off costs for new vehicles and food caddies per household will also be required. Indicative one off costs are shown in the table below

	One off costs			
	Communication / Project	Vehicles	Bins/ Caddies	Total
<b>Option 1</b>	£110,000	£880,000	£249,000	<b>£1,239,000</b>
<b>Option 2</b>	£110,000	£680,000	£249,000	<b>£1,039,000</b>
<b>Option 3</b>	£110,000	£765,000	£249,000	<b>£1,124,000</b>

4.11 Delivery Plan

4.12 From receiving approval to commence a domestic food waste implementation project to the service commencing will be circa 20 -22 months

4.13 Vehicle availability is currently 12 months from receipt of a purchase order. A full competitive tender process will be required to purchase the new food waste collection fleet. The procurement activities of the fleet are all on the critical path for the project.

4.14 For the introduction of a new universal service and in consideration of the total project cost a full governance process will need to be followed, including Cabinet and full Council reports and approvals. These activities are also on the projects critical path.

4.15 Appendix C, shows a top level project Gantt chart

4.16 Whole System Costs

4.17 Although CDC is responsible only for collection costs, with disposal costs falling to West Sussex County Council, it is important to understand the impact of the proposed changes on costs across the whole local authority waste management system. Changes that reduce the amount of residual waste being generated will

tend to reduce costs for the County Council, even if they result in increased collection costs for CDC. This may give rise to opportunities to discuss how any disposal savings may be shared.

- 4.18 The disposal cost of residual waste is significantly higher than for a similar weight of food waste. There are significant residual disposal savings in all options due to the diversion of food waste from the residual waste stream. The Eunomia model estimated that any increase in collection costs as stated in 4.10.4 could potentially be fully offset by the estimated disposal cost reduction. These estimates do not however include the significant capital costs the County Council must incur to modify the disposal infrastructure to accept, transport and process separately collected food waste. The Micro Biological Treatment (MBT) plant in Brockenhurst Wood will require significant modification as will each transfer station to be able to accept and keep segregated the food waste collected by each District and Borough.
- 4.19 West Sussex County Council currently await the Government position on any potential new burden funding that may become available to assist with implementation of separate food waste collection and processing. Once this position is known WSCC may be in a better position to discuss whole system costs, including savings that would accrue to them as the disposal authority.
- 4.20 WSCC are in a similar position to CDC and other District and Boroughs as the Government has yet to clarify if any funding will be made available to support these modifications, any service transition or ongoing revenue support costs.
- 4.21 Commercial Food Waste impact
- 4.22 It is expected that the Government will confirm that businesses who generate food waste must have a weekly collection service of food waste in place. Industry is awaiting the timescales of when this will be made mandatory and what the criteria would be for a business to have to comply.
- 4.23 CDC already has a commercial food waste collection business, which after COVID has seen a steady growth with now over 50 customers receiving regular collections.
- 4.24 When similar legislation was introduced into Scotland, the few organisations with an established commercial food waste collection service in place saw a significant increase in demand for that service. CCS, in anticipation of this have started to consider the operational requirements to expand its current service with one option being to leverage the domestic food waste fleet to support the expansion of the commercial service.
- 4.25 Separate rounds would be required to ensure domestic and commercial food waste is segregated and the current operational working practices will be changed to support this approach.
- 4.26 Key Risks

- 4.27 There are many risks and opportunities associated with the introduction of a new kerbside waste collection service. The risks identified within this report only focus on if and / or when a decision should be taken to introduce food waste.
- 4.28 The risk matrix shown in Appendix D identifies some of the strategic risks CDC may face in the timing of making any decision.

## 5. Proposal

- 5.1 In the absence of any clarity regarding the Governments requirements and funding that the Council should not yet commence the implementation of a separate domestic food waste collection service but instead keep a watching brief and update members as and when the Government progresses matters.

## 6. Alternatives Considered

- 6.1 As an alternative option to the proposal included in 5.0 members could go ahead and commence implementing a separate domestic food waste collection service. However, given the Council current financial pressures this would require members to identify how such a service would be funded.
- 6.2 To implement the service prior to any Government announcement could also jeopardise how much funding might be available later as there is a risk that some of the funding may be targeted towards those authorities that had yet decided upon such an implementation.

## 7. Resource and Legal Implications







- 7.1 The resource and legal implications will be key considerations for the options appraisal along with the other considerations set out in paragraph 4.2

## 8. Other Implications

	Yes	No
<b>Crime and Disorder</b>		x
<b>Biodiversity and Climate Change Mitigation</b> Potential to reduce the carbon footprint of the Council's buildings.	x	
<b>Human Rights and Equality Impact</b> An Equality Impact Assessment to be undertaken for any preferred option with a focus on accessibility.	x	
<b>Safeguarding and Early Help</b>		x
<b>General Data Protection Regulations (GDPR)</b>		x
<b>Health and Wellbeing</b>		x
<b>Other</b> (please specify)		

Appendices

Appendix A :- Illustration of the different options considered

	Baseline	Option 1	Option 2	Option 3
Dry Recycling	Fortnightly Comingled 			
Food Waste	None	Weekly  12T Vehicle	Weekly  7.5T Vehicle	
Garden Waste	Fortnightly, Charged 			
Residual Waste		Fortnightly 240L Bin 		3-Weekly 240L Bin 
	Baseline	Option 1	Option 2	Option 3

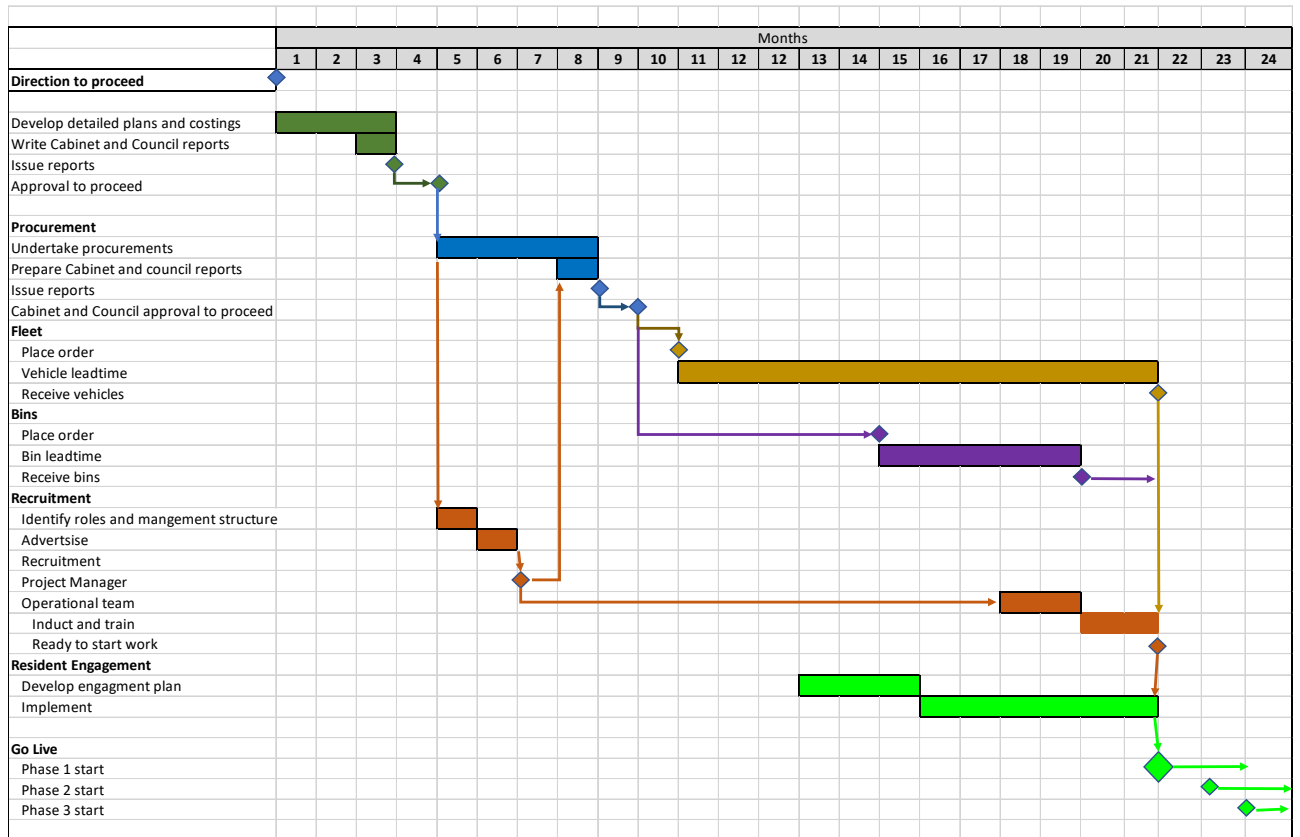


## Appendix B – Marginal costs for each option.

Annual Marginal Costs relative to baseline			
	Option 1	Option 2	Option 3
Vehicle costs	£243,000	£202,000	£169,000
Staff Costs	£467,000	£491,000	£356,000
Container costs	£37,000	£37,000	£37,000
Total gross costs	£747,000	£730,000	£562,000
<b>incl Operational factor (25%)</b>	<b>£933,750</b>	<b>£912,500</b>	<b>£702,500</b>

NB:- All options have used diesel powered vehicles, have used resource labour rates valid as at September 2022 and assume a 10 year lifecycle for vehicles.

## Appendix C:- Indicative implementation timetable



## Appendix D:- Strategic Risks

Strategic Risks - Timing of Decision						
Risk No	Risk	Type of Risk	Probability of risk	Severity of Risk	Comments	Mitigation
1	Public become frustrated with delay in implementing food waste collections	Reputational	Low	Low	To date only a relatively small number of residents have questioned why CDC do not have a food waste service	Develop agreed responses to resident queries
2	CDC's CO2 reduction target of 10% per year will not be met until food waste is implemented	Reputational / Environmental	High	Medium	The current CO2 reduction plan does not currently include food waste as a activity to reduce CO2. In practice since CDC are not responsible for waste disposal CDC's CO2 footprint will likely increase with the introduction of the kerbside collection service	Work with WSCC to indentify whole system CO2 footprint.
3	Residents object to implementing the service using diesel vehicles instead of electric version	Financial / Reputational / Environmental	Low	Low	The implementation costs have assumed diesel vehicles will be purchased. Electric vehicles may be available at the time of purchase but this will need to be confirmed.	If available then purchase electric vehicles or delay implementation until they are available. Electric vehicles will add approx £100k per annum to costs
4	Decision made to implement before Government announces any potential funding for new burden responsibilities..	Financial	Medium	High	Funding may not be made available retrospectively for costs already incurred or potentially for service implementation decisions made prior to funding being announced. It is hoped Government will at least support / assist with capital costs of the service so circa £1 million.	In anticipation of Government announcement which will hopefully include funding statement, start detailed planning work, including preparing the necessary procurement paperwork, without formally committing to providing the service if resource is available or to commit to providing the service before any government announcements and accept the risk.