

HOUSING, PLANNING, & ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE

Date: 4 February 2021

Subject: Biowaste Management Strategy

Report of: Councillor Andrew Western, Portfolio Lead for Green City Region, and Alison McKenzie-Folan, Portfolio Lead Chief Executive for Green City Region

PURPOSE OF REPORT

This report sets out the steps required to develop a strategy to manage kerbside collected biowaste from across the conurbation in light of potential service changes arising from the implementation of the English Resources and Waste Strategy.

RECOMMENDATIONS:

Committee members are recommended to endorse the proposed approach noting:

1. The report and provide any comments on the proposed biowaste strategy; and
2. The procurement of biowaste treatment contracts for the period June 2022 to May 2026 with the proposed delegation of award to the Chief Executive of the GMCA.

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Equalities Implications:

There are no equalities implications arising from this report.

Climate Change Impact Assessment and Mitigation Measures –

Food and garden waste (biowaste) when not collected for composting or anaerobic digestion can generate significant volumes of greenhouse gases if landfilled instead. The GMCA and its constituent districts already collect a significant quantity of biowaste for composting thereby eliminating the generation of methane and creating a carbon-rich resource that can be applied to land for agricultural benefit.

The strategy proposed here continues the GMCA's record of climate change mitigation through the proper treatment of biowaste and the Authority's wider communications work seeks to increase the capture of biowaste reducing climate change impacts further.

Risk Management:

As part of the development of the proposed biowaste strategy a risk assessment will be undertaken of options. However, at this stage key risks are considered to be:

- Market appetite for the GMCA's biowaste in the short and longer terms;
- Market capacity to accommodate the GMCA's biowaste;
- The capital and revenue implications of change – however, if change is a requirement of implementing the English Resources and Waste Strategy new burdens funding from Government will apply; and
- English Strategy non-compliance – during the life of the biowaste strategy a clearer understanding of the position will emerge and this will be included in the options appraisal.

Legal Considerations:

Procurement law – final options will be assessed to ensure compliance with applicable procurement legislation.

Financial Consequences – Revenue:

The current contract costs have been inflated by indexation and included in the Waste Medium Term Financial Plan and levy projections for the next five years to ensure the procurement outcome is captured in the revenue budget.

Financial Consequences – Capital:

As with the revenue consequences, work will consider the whole life costs to inform our future new burdens claim.

Number of attachments to the report:

None

Comments/recommendations from Overview & Scrutiny Committee

BACKGROUND PAPERS:

1. Biowaste Package B procurement reports presented to the GMCA in January 2020
2. [Our Waste, Our Resources: A Strategy for England](#)
3. (Draft) Biowaste Treatment Assessment – WRM Ltd

TRACKING/PROCESS		
Does this report relate to a major strategic decision, as set out in the GMCA Constitution		Yes
EXEMPTION FROM CALL IN		
Are there any aspects in this report which means it should be considered to be exempt from call in by the relevant Scrutiny Committee on the grounds of urgency?		None
GMCA	Overview & Scrutiny Committee	
12 th February 2021	HPE O&SC 4 th February 2021	

1. INTRODUCTION/BACKGROUND

1.1 Mixed biowaste collections form an important part of the recycling services provided by the authorities across Greater Manchester with different districts currently adopting different collection frequencies to suit their local circumstances (and currently in response to any local COVID-19 staffing pressures). The material collected is delivered to GMCA facilities for bulking up before being treated at contracted merchant facilities.

1.2 The English Resources and Waste Strategy proposes that food waste should be collected separately from garden waste and on a weekly basis. If this approach is mandated (it will feature in forthcoming DEFRA consultations) then that would require a significant change of services across the conurbation.

1.3 This report summarises:

- The implications of a move to weekly separate food waste collections on the district councils;
- The consequential impacts on GMCA facilities and contracts; and
- Proposals for a strategic approach for agreement to examining alternative contractual and infrastructural approaches to managing biowaste in the future.

2. CURRENT CONTRACTUAL POSITION

2.1 The biowaste collected at the kerbside is delivered by the districts to our network of biowaste transfer loading stations and distributed to merchant treatment facilities (in-vessel composting sites) through two different contractual routes:

- Around 80,000 tonnes is managed by Suez through the Waste and Resources Management Services (WRMS) contract; and
- A framework of contractors is in place and through call-off arrangements two 'packages' of biowaste quantities are composted - an annual 'baseline' of around 136,300 tonnes and a seasonal amount of c.36,300 tonnes.

2.2 The Suez biowaste treatment contract is part of the WRMS Contract. The initial term expires in March 2026. The biowaste framework expires in March 2023 with the current call-off contracts expiring in May 2022.

3. IMPLICATIONS OF THE RESOURCES AND WASTE STRATEGY

3.1 The English Resources and Waste Strategy proposes that food waste should be collected separately from garden waste and on a weekly basis. This proposal is being explored further through consultation by DEFRA (likely to be published in March 2021). In anticipation of this requirement, GMCA commissioned research to assess the implications of this proposal on waste collection and treatment across Greater Manchester.

3.2 If our Waste Collection Authorities are mandated to change to the weekly separate collection of food waste there are clearly significant implications not only for those authorities but also for the GMCA as Waste Disposal Authority and the wider market.

3.3 Currently it is not believed that there is sufficient capacity in the market place (especially in the North West) to treat the potential increase in separately collected food waste that is likely to be generated (food waste as a separate stream is more appropriately treated using the anaerobic digestion (AD) technology). That would suggest that if Greater Manchester is to change it needs to ensure the market has capacity for its waste either through long term agreements or developing infrastructure to secure (perhaps exclusive) capacity.

3.4 GMCA commissioned a consultancy, WRM, to investigate and quantify the implications of a number of scenarios:

	1. Treat biowaste on facilities developed at GMCA transfer loading stations	2. Treat biowaste on facilities developed at new sites in the conurbation	3. Use available market capacity
a) Source segregated food to 'wet' AD ¹ , garden waste to open windrow composting (OWC)	✓	✓	✓
b) Commingled biowaste to IVC	✓	✓	✓
c) Commingled to 'dry' AD ²	✓	✓	✗

3.5 To inform other aspects of the Resources and Waste Strategy proposals, a further study has been commissioned to identify the whole waste collection and disposal system impacts to complement the work already undertaken on biowaste, this work is being undertaken by the consultants, Wood. The detailed results of the two studies will be reported in due course.

3.6 However, in summary the biowaste study found that for collection:

- Scenarios 1b and c, 2b and c and 3b all have the same collection costs as they use the same fleet as each other and as now; and
- Scenarios 1a, 2a and 3a see an overall costs increase of around 36% as additional fleet and crews are required to deliver these scenarios.

3.7 For treatment:

¹ Wet anaerobic digestion systems are designed to process biodegradable feedstock into a digestate slurry with typically less than 15% total solids.

² Dry anaerobic digestion handles a drier input and generates a drier output whilst still generating gas.

- For every GM district the lowest cost option is scenario 1b followed by 2b (effectively the current service baseline position);
- Developing our own commingled biowaste treatment capacity using dry AD (scenarios 1c and 2c) is 6% more costly per tonne than 1b and 2b; and
- The source segregated scenarios have lower treatment costs (as garden waste is treated via open windrow composting (OWC) which has lower gate fees) but not low enough to negate increased collection costs.

3.8 The treatment of commingled biowaste via dry AD (scenarios 1c and 2c) creates the greatest carbon savings (as gas from digestion of the material is collected and converted to electricity). The scenarios using wet AD (1a, 2a and 3a) also perform well on carbon. The IVC scenarios have a lower carbon saving compared to AD-based technologies.

3.9 These results and the thinking around them will form the central evidence base for our biowaste strategy going forward. The study did not look at any consequential opportunities of options (such as the opportunity to charge for the collection of garden waste if that stream is collected separately at source), this will be considered in the further modelling work on wider collection systems being undertaken by Wood.

4. POTENTIAL OPTIONS FOR THE MANAGEMENT OF GREATER MANCHESTER'S BIOWASTE

4.1 It is clear that one way or another the collection of biowaste will continue to form a key service we will be required to provide. If the English Resources and Waste Strategy mandates the separate collection of food waste (and potentially from 2023 although a transitional period has been indicated) there will be competition for market capacity resulting in inflated gate fees as demand exceeds supply. The worst-case scenario would be landfill of biowaste if market treatment capacity cannot not be sourced.

4.2 In the development of a future strategy for Greater Manchester's biowaste we need to explore our options and their implications in greater detail. There are measures we will need to take in the shorter term to ensure continuity of services and others that have a longer development period which will require business cases to progress to fruition.

4.3 Options may include (this is a non-exhaustive list):

- Exploring the development of facilities on GMCA-owned land or the strategic purchase of new sites;
- Differing procurement, delivery and management models – whether we fund developments and pay a contractor to operate or seek an all-in gate fee that includes capital and revenue costs for example; and
- Further investigation of treatment technologies to assess the optimum cost and carbon benefits.

4.4 The strategy will take into account the 'whole system' impacts such as the purchase of containers, promotion and communication and the impact of our residents as well as identify any opportunities that may arise from options.

4.5 The development of a strategy will require a number of actions such as:

- A detailed analysis of data and the WRM and Wood reports;
- District consultation;
- Property search/assessment;
- Soft market testing; and
- Technology assessment.

4.6 In the first instance a scope to ensure this work is captured is required and that will commence on approval of the recommendations contained within this report.

5. NEXT STEPS – PROCURING 'STOP GAP' BIOWASTE TREATMENT CAPACITY

5.1 To develop the strategy, GMCA needs to understand the Government's position on food and garden waste collections and that will not become clear until responses have been analysed following the Spring 2021 consultation. However, this understanding is not likely to be gained until late 2021 which does not give us enough time to make changes within the lifetime of the current non-Suez biowaste contracts.

5.2 One action that is required immediately is the commencement of the process to re-let the biowaste treatment packages under our existing framework. Although they do not expire until May 2022 it would be prudent to let the contracts to afford us additional time to implement the biowaste strategy and secure market capacity for a period when demand may increase significantly.

5.3 The Service has sought legal advice on this course of action and the letting of the call-off contracts for a period that extends beyond the expiry of the overarching framework is permissible so long as those call-off contracts are let on the same basis (e.g. without a change to terms and conditions). Additionally, seeking to let them a year (for example) before they commence (thereby securing capacity immediately on expiry of the current call-offs) is also permissible. On that basis, the intention is to approach the market early in 2021 to source capacity for up to a further 4-year period from June 2022 to end of May 2026. That time frame then gives sufficient time for Government to clarify the requirements for food waste collection and treatment, an options appraisal to be undertaken and the long-term strategy for GMCA to be formalised.

5.4 The estimated value of the 'stop gap' biowaste treatment procurement based on a combination of current gate fees and the application of indexation is £17.97m over the four year term of the call-off contracts, therefore the decision is a Key Decision for GMCA. This sum has been built into the Waste medium term financial plan and levy projections over the next 5 years. The risks to this will be competition from other local authorities in the market

for finite capacity. Commencing the procurement well ahead of expiry of the existing arrangements seeks to mitigate this risk.

- 5.5 Subject to approval to commence the procurement process, this would be initiated in mid February with tender responses anticipated in March. A short period of evaluation would follow, meaning that contract awards would occur mid to late March potentially before the pre-election period. It is recommended that delegated authority to the GMCA Head of Paid Service in consultation with the GMCA Treasurer and the Portfolio Lead for Green Cities to approve the award of contracts under the biowaste framework is therefore sought.