

**Title of meeting**: Full Cabinet

**Date of meeting**: 4th February 2020

Subject: Enhanced Recycling Options

**Report by:** James Hill, Director of Housing, Neighbourhood and Building

Services

Wards affected: All

Key decision: Yes

Full Council decision: No

## 1. Purpose of report

To update the Cabinet on the outcomes of the food waste trials and present options for consideration to reduce waste and improve the recycling offer in Portsmouth.

## 2. Options and recommendation

- 1) Continue to provide separate weekly food waste collections to those households in the trial.
- 2) Expand the trial to provide an additional set of trials of separate weekly food waste (1 round over 5 days)
- 3) Rollout the weekly food waste collection service to all houses and flats in the City where it is practicable to do so.
- 2.1. The financial implications of each of these options is detailed in section 4.
- 2.2. The recommendation is to implement option 2. The council will also work towards a city wide rollout that links in with the end of the current collection contract in September 2021 subject to funding being identified.



# 3. Background and progress

- 3.1. Existing Service offer Portsmouth has a weekly kerbside refuse collection from either a 140litre wheeled bin or 3 standard bin bag allowance, a fortnightly kerbside recycling collection from a 240litre wheeled bin or 55litre box(es) collecting plastic bottles, paper, card, tins/cans, and aerosols. Residents can also recycle small electrical items by placing them in a carrier bag on the lid of their recycling. This is supported by a network of bring banks for glass, textiles and cartons along with a Household Waste Recycling Centre located at Port Solent. Residents can also subscribe to a fortnightly garden waste collection service. A healthcare waste collection service is also provided to service users referred by the NHS, and a bulky waste collections service is available to paying customers along with those residents in receipt of council tax support who may qualify for a 'free' bulky collection.
- 3.2. Performance Portsmouth currently has one of the highest household refuse (black bag waste) kg per person in the county at 337.3kg per person (2018/19). This is down from 354.9kg in 2017/18)
- 3.3. Our current recycling rate (2018/19) is 25.5% (up from 24.8% in 2017/18) although PCC still has one of the lowest recycling rates in the country. We have reduced the amount of waste going to landfill to 4.2% (from 4.8% 2017/18) as black bag waste continues to go to the Energy Recovery Facility in Quartremaine Road for treatment.
- 3.4. The wheeled bins and 3 standard bin bag allowance was introduced in October 2018 following a number of successful trials across the City. Black bag waste has reduced by over 4300 tonnes (approx.10%) in the first year since its introduction, recycling has increased by approx. 600 tonnes (approx. 7.5%) including kerbside recycling and glass recycling). This has led to a reduction in disposal costs and an improvement in the street scene as refuse related litter has also reduced.
- 3.5. Additionally, we have installed carton bring banks at 3 sites in the City which are being well used since the introduction of the first bank in January 2019, we have collected over 1500kgs of cartons.
- 3.6. Why trial food waste? A recent waste composition analysis (Oct 18) found that 39.4% of waste in the black bin/bag collection was food waste with 9.1% of that being unavoidable food waste, vegetable peelings, tea bags, etc. and 30.3% being avoidable food waste that has gone out of date or is uneaten (approx. 17470 tonnes per annum). This waste could be recycled using anaerobic digestion.
- 3.7. Other items already targeted for recycling such as glass, paper and card are also still ending up in the black bin/bag waste. Plastics (other than plastic bottles) are currently not targeted for recycling this makes up 14.7% of the overall black bag waste (approx. 6420 tonnes) Currently, there are only markets for approx. 20%



of these types of plastics (approx. 1284 tonnes) - for full breakdown of waste types in rubbish bin see appendix 1

- 3.8. Food waste trials have been carried out over 13 weeks (16 September 13 December 2019) in Drayton, Portsea/Old Portsmouth, Southsea, Baffins. 8172 homes were issued with a 23 litre food waste caddy to present weekly for collection along with a 5litre caddy for their kitchen.
- 3.9. The food waste collected is sent for Anaerobic Digestion and counts as <u>recycling</u> as it produces a biogas and digestate (used by farmers).
- 3.10. Participation Over the 13 weeks of the trial 61% of residents have placed out their food waste caddy for collection each week. This is high in comparison with other areas where separate food waste collections are provided. 7% have never presented their caddy for collection. This compares favourably with Eastleigh Council (the other Hampshire authority that collects food waste) who have a participation rate of approx. 50%.
- 3.11. <u>Tonnage</u> An average of 19.54% of the total waste collected each week in the trial areas has been presented in the food waste caddies. This means that this waste is no longer sent for energy recovery but instead is being recycled.
- 3.12. Additional monitoring has evidenced that 71% of those presenting food waste caddies are either presenting refuse bins with 50% or less waste in them or not presenting a refuse bin each week (6%)
- 3.13. Where residents have not presented a food waste caddy, 61% of residents are presenting refuse bins with 50% or less waste in them.
- 3.14. Letters were sent to all residents not presenting their food waste caddies in the trial areas to get feedback about why and we received feedback that indicated that the reasons for non-participation ranged from 'I don't have any food waste' & 'I work away during the week' to 'I compost any food waste that I have' or 'the dog eats our leftovers'.
- 3.15. However, analysis of the refuse where residents are not presenting a food waste caddy demonstrated that many of the bins contained food waste as well as targeted recycling (paper, card, tins/cans, aerosols and plastic bottles). In a sample (97 properties) of the 39% of residents who regularly did not present a food waste caddy, 80.4% of their black bins/bags contained food waste and 49.48% had targeted recycling within the black bin.
- 3.16. A feedback survey was answered by 881 households (10.8% of households within the trial area). 93.19% of respondents were satisfied or very satisfied with the food waste trial. For full results see appendix 2.
- 3.17. The trial was also extended to 7 blocks of flats and included 134 households. Residents in these flats were each issued with a 5l kitchen caddy and their blocks were provided with 140l wheeled bins in which to present their food waste.



Participation is less easy to monitor but there was uptake and this was maintained as the trial progressed. It would be possible to extend this to blocks of flats in the City where there is sufficient room to place a communal food waste bin. This will need to be done on a block by block basis.

- 3.18. Feedback from Veolia (waste disposal contractor) has been that the food waste collected has been largely contamination free and has been acceptable at the end disposal point.
- 3.19. If the separate weekly food waste collection is rolled out across the City and produces similar results it is estimated that the recycling rate could improve by approximately 6-8% (overall rate could 31.5%-33.5%)
- 3.20. Overall waste tonnages in the trial areas (food waste and refuse) have increased during the trial period (appendix 3). This could be due to residents using the capacity in their refuse bins/3 bin bag allowance created by their separate food waste collections. This could be an unintended consequence of providing separate food waste collections without making other changes to the system.
- 3.21. <u>National Policy Signals</u> The Government's waste and resources strategy has signalled that the Government is considering a number of significant changes to waste management which include:
  - Consistency of collection this includes types of collection, frequency, and items collected from the kerbside
  - Mandatory separate food waste collection/free garden waste collection/separate glass collection
  - Deposit Return Scheme for plastic bottles, glass, coffee cups etc.
  - Extended Producer Responsibility this is about making sure businesses that manufacture, import and sell products are responsible for their end of life impact

There will be further consultations in the Spring 2020 to develop these policies further.

If the policies being consulted on are introduced, then this will mean changes to what we collect and how we collect it, and will also have an impact of the disposal side of waste management and the infrastructure that will be needed.

#### 4.0 Rationale for options

4.1. Aside from the direction indicated in the Government's waste and resources strategy, the administration are keen to respond to calls from residents to develop further opportunities for recycling. As a unitary authority the Council is responsible for both collection and disposal of waste. There are high levels of contamination in the recycling (approx. 20%) and widening the range of materials that can be collected will also help reduce contamination. An improved offer will reduce the



amount of waste, improve the City's recycling rate and reduce CO2e emissions. Changes to the waste collection service will also contribute towards the corporate priority of 'making the City greener and cleaner'.

- 4.2. Option 1 Continue to provide separate weekly food waste collections to those households in the trial The food waste trial has enjoyed good participation and diversion of waste to recycling rather than to Energy Recovery. Residents are keen for more opportunities to recycle and this is one that will make a significant difference and help to reduce waste and increase recycling. Flat fronted properties can also participate as the food waste caddy is small and portable and has a lockable handle that would prevent pests from accessing the food waste.
- 4.3. Continuing with the existing trial would cost £146,000 in ongoing costs per annum assuming that gates fees remain the same.
- 4.4 Option 2 Expand the trial to provide an additional set of trials of separate weekly food waste (1 round over 5 days) Carrying out a further round of trials would cost £221,000 in capital costs and an additional £146,000 in revenue costs on an ongoing basis. This should mean that the trial can be extended to approx. 8-900 additional households. Delivering food waste to two rounds should lead to a capture rate of almost 1300 tonnes per annum. This would improve the recycling rate by approx. 1.5%.
- 4.5. Option 3 Rollout the weekly food waste collection service to all houses and flats in the City where is it practicable to do so It is estimated that a further 55,000 properties could benefit from a separate food waste collection in the initial roll out. This would include flat fronted properties. Flats could be rolled out where appropriate in a second stage.
- 4.6. The initial roll out would cost £1.7 million capital expenditure, and £1.1 million in revenue costs on an ongoing basis. This would be likely to reduce waste by approx. 5200 tonnes per annum. This would make a 6-8% difference to the recycling rate and could also reduce CO2e by approx. 800 tonnes per annum.
- 4.7. <u>Considerations</u> It should be noted that there is a risk that a food waste collection in isolation of other changes could lead to an increase in waste as residents use the capacity created in their refuse bins which would negate some of the waste reduction benefits.
- 4.8. The Government's Waste and Resources Strategy is likely to mandate separate food waste collections and indicates that there will be funding available for 'additional burdens' where these services are not already provided. Any additional funding is likely to be linked to delivering waste services in line with the governments approach to consistency. Consistency applies to materials collected local authorities will be required to collect a minimum set of materials and a minimum collection frequency.



- 4.9. The delivery of any further expansion of recycling services will be subject to a number of factors including:
  - Provision of adequate disposal facilities

For the trial and an additional trial, it is likely that current delivery arrangements to the transfer station can continue. It should be noted that capacity at an anaerobic digestion facility will need to be secured - currently provision is secure for the 6 months of the food waste trial only.

For a City wide rollout there will be a need for new disposal infrastructure as the transfer station currently used will not have sufficient capacity. This will need to be agreed and delivered with our waste disposal partners and contractor. Additionally, the waste disposal contractor will need to secure the capacity required from an AD facility provider.

• Collection round design

It will be necessary to review rounds ahead of rolling out an additional service.

Vehicle procurement

Vehicle procurement will be dependent on the type of disposal infrastructure agreed upon with the disposal contractor. Once this is known, then appropriate vehicles can be sourced. This type of vehicle can take in excess of 26 weeks to be delivered once an order is placed.

Additional vehicle depot space and associated operating licence requirements

The depot currently used by the waste collection contractor can potentially hold 1 further food waste vehicle. If there is a wider roll out further space will be required for the additional 7 vehicles. To comply with operating licence requirements, the contractor will need to apply for a separate operating licence for the separate site. The site will need to be suitable for HGV use, secure and have facilities to ensure compliance with the operating licence requirements.

Caddy delivery and supporting communications campaign

This will be carried out by the Waste Management team with support from Green & Clean, with support from the contractor in the event of a city wide roll out.

Contractual implications

The current food waste trial disposal arrangements are agreed as a variation of the waste disposal service contract. A continuation, expansion or city wide rollout will be subject to a formal variation process.



- 4.10. Once a decision is made then a project plan to incorporate the elements listed above can be further developed with timelines. Option 1 could continue as it is dependent upon securing AD capacity and any relevant contract variations that may be required. Option 2 would be subject to securing AD capacity, agreeing any contract variations and procurement of caddies, vehicle and recruitment of additional collection staff. This could be delivered from October 2020. There are more variables involved in delivering option 3 so this would require some prenegotiations, and decisions regarding infrastructure. A project plan with timelines could be developed by the Summer of 2020.
- 4.11. It is important to note that the waste collection contract ends in September 2021 and consideration is already being given to how collection services may be delivered after that date. It is vital to understand the requirements of the collection service in order to plan appropriately.
- 4.12. Changes to the waste collection policy would need to be made to reflect new services, but the principles of having a bin/allowance/caddy to meet your requirements as long as you are participating in the recycling schemes on offer would be maintained.
- 4.13. It is important to note that provision of suitable disposal facilities is dependent on securing available anaerobic digestion capacity the current disposal provision is via energy from waste plants provided under the Waste Disposal Service Contract. The administration are keen to understand the potential for providing a local anaerobic digestion facility to reduce disposal costs and reduce the carbon footprint related to disposal.

## 5. Integrated Impact Assessment

See appendix 4 for the Integrated Impact Assessment. There is an existing full EIA for the current waste collection service which was amended to reflect the separate food waste collection trials. The IIA has also been completed and whilst it does highlight that some equality groups may be impacted, there are provisions in place to ensure that these impacts are mitigated.

## 6. Legal implications

- 6.1. Under the terms of the Environmental Protection Act, 1990, Portsmouth City Council (the 'Council') is classed as a Waste Collection and Disposal Authority, and as such, under section 45 (1), has a statutory duty to collect household waste from all domestic properties in the city. Under Section 46(4) of the Act, the Council has specific powers to stipulate:
  - The size and type of the collection receptacle(s)
  - Where the receptacle(s) must be placed for the purpose of collecting and emptying
  - The materials or items which may or may not be placed within the receptacle(s)



- 6.2. In addition the proposed policy does outline the basis upon which enforcement of the PCC imposed obligations can be dealt with. The obligations set out above are reasonable and unlikely to be challengeable or reviewable in a legal sense.
- 6.3. The waste collection policy outlines what steps can be taken to assist those who have a protected characteristic (principally a disability) to comply by way of seeking to register with PCC for assisted collection.
- 6.4. The Environment Bill 2019/2020 is currently going through Parliament. Part 3 of the Bill makes provisions for the managing of waste and producer responsibility. The provisions introduce amongst other matters amendments to the responsibilities and powers for separating and recycling waste. This will further impact the Local Authority's need to make effective waste management arrangements.

#### 7. Director of Finance's comments

7.1 The Capital and Revenue costs of the three options being considered are summarised below.

	Capital Costs	Revenue Costs each year
Option 1 - Continue Trial	£0	£146,000
Option 2 - Two Trial Rounds	£221,000	£292,000
Option 3 - Full Roll Out	£1,700,000	£1,100,000

- 7.2 Option 1, continuing the current trial, will mean that the Council would incur an additional revenue cost of £146,000 per annum, the initial pilot was funded from the Environment Portfolio reserve, there is no money remaining within the reserve to support this on an ongoing basis.
- 7.3 Option 2, adding an additional trial round, will require additional Capital expenditure of £221,000 to purchase a new vehicle and additional food waste receptacles. The expansion is likely to double the current annual cost to £292,000 per annum.
- 7.4 Option 3, a full roll out of food waste collection for the whole City, will incur much higher costs including 8 new waste collection vehicles, and additional receptacles for an estimated 55,000 additional homes amounting to £1.7m. Annual running costs of £1.1m per annum are estimated for the collection of food waste.
- 7.5 The current depot used by the City Council's waste operator is not large enough to store the additional waste collection vehicles so this may lead to additional ongoing costs but these are not yet fully understood.
- 7.6 Initial conversations with the current food waste disposal plant in Dorset have indicated that it would have insufficient capacity to cater for the waste generated by a city wide collection service and officers are looking at options for where this waste



- could be disposed of. The further afield that the food waste has to be taken the greater the transfer costs, these additional costs are as yet currently unknown.
- 7.7 Funding has been identified for option 2 as part of the Capital and Revenue budget setting for 2020/21. There is currently no funding available to finance option 3. Any decision regarding option 2 will be subject to the approval of the 20/21 Budget at full council in February.
- 7.8 There may be an opportunity for the Council to apply for New Burdens funding as a result of a Government directive to collect food waste, however although the Waste and Resources Strategy was published it has yet to become law and when this new funding will become available is unknown.

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## **Appendices:**

Appendix 1 - Waste Composition Analysis graphic

Appendix 2 - Survey feedback from trial

Appendix 3 - Winchart of overall waste tonnages in trial area

Appendix 4 - Integrated Impact Assessment

## Background list of documents: Section 100D of the Local Government Act 1972

The following documents disclose facts or matters, which have been relied upon to a material extent by the author in preparing this report:

Title of document	Location
Environmental Protection Act 1990	

The recommendation(s) set out a rejected by	 • •	deferred/
Signed by:		