

Subject:	Pots, Tubs & Trays Recycling		
Date of Meeting:	16 March 2021		
Report of:	Executive Director Economy, Environment & Culture		
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Ward(s) affected:	Hollingdean & Stanmer; All		

FOR GENERAL RELEASE**1. PURPOSE OF REPORT AND POLICY CONTEXT**

- 1.1 This report contains information for Members to consider on the introduction of Pots, Tubs & Trays (PTT) into the recycling stream across Brighton & Hove.
- 1.2 In considering whether to collect PTTs from households and sort at the Hollingdean Materials Recovery Facility (MRF) councillors are asked to consider the benefits, disbenefits, risks and opportunities associated of this. This report also covers the cost of introducing the change and how this will be funded.
- 1.3 The information provided in this report is a high-level analysis of the costs to introduce PTT into the recycling stream. A more detailed analysis is required, via a feasibility study, on retrofitting the Hollingdean MRF so that it can receive and partially sort PTT and also understand the ramifications of sending an unsorted mix of PTT for further processing and sorting. This feasibility study will refine the costs of the retrofit; it will not provide any further clarity on recycling levels and tonnage as based on current volumes; this is the tonnage that will be recycled.
- 1.4 Members last received an update on the potential for PTT recycling on 27 November 2018 via a report in response to the *Improve Brighton & Hove's Recycling Scheme* petition (see background documents). This report provides a further update and seeks authority for a feasibility study on the costs of retrofitting the MRF to introduce PTT recycling.

2. RECOMMENDATIONS:

- 2.1 That Environment, Transport & Sustainability Committee authorises for a feasibility study to be completed on the costs to retrofit the MRF to introduce PTT recycling, including the carbon impact of the construction works, processing of the material at the MRF rather than the Energy Recovery Facility (ERF) and the additional transport of this material.

3. CONTEXT/ BACKGROUND INFORMATION

- 3.1 In Brighton & Hove, paper, cardboard, aerosols tins and cans are recycled. For plastic, all plastic bottles are recycled; this includes drinks containers, kitchen and bathroom products and milk bottles. Other plastics, commonly known as

Pots, Tubs & Trays (PTT) are made from a much cheaper grade of plastic and are not currently included in recycling collections. Appendix 1 contains more information on the lower grade plastics and their common uses.

- 3.2 PTT is currently sent to the Energy Recovery Facility at Newhaven and generates electricity for 25,000 homes. None of it goes to landfill. In 2019/20:
- 29.4% of the household waste in the city was sent for reuse, recycling, composting or anaerobic digestion; this equates to 29,970 tonnes
 - 552.3kg of residual waste per household was collected; this equates to 71,917 tonnes
 - 2.7% of waste was sent to landfill; this equates to 2,779 tonnes
- 3.3 Some fractions within household PTT, such as polypropylene (PP) have recognised viable market opportunities and are commonly sorted in the UK and EU. However, some of the other plastic polymer types have less well-developed markets for recycling and can be sent to energy from waste, which attracts an associated disposal cost.
- 3.4 An analysis has been completed to determine the benefits, disbenefits, risks and opportunities associated with the introduction of PTT into the recycling stream, the results of which are presented below. A review by Veolia is in Appendix 2.

Benefits

- 3.5 Recycling PTT is an attractive offer to residents and the media, as many other local authorities collect the material.
- 3.6 PTT is bulky, but lightweight. It is estimated that around 550 tonnes of PTT will be recycled per annum, increasing the recycling rate by 0.5%. (Please note, 16,600 tonnes of recycling are currently handled by the MRF per annum).
- 3.7 Recycling PTT will reduce the contamination level within wheelie bins and communal bins. Many residents place PTT in recycling bins as they believe they are recyclable. When recycling is contaminated, the contents of the whole bin and – in many cases – lorry load must be treated as waste and not recycled. This also has a disposal cost.

Disbenefits

- 3.8 The mixed nature of the plastic material means that, depending on end markets, only 22-39% of the total would be regularly recycled. The remaining 78-61% would be sent to energy recovery and attracting a disposal cost. This is comparable with national rates of PTT collected for recycling.
- 3.9 The relatively small yield of lightweight material represents a significant initial and ongoing cost in order to capture it and then sort and process.

Risks

- 3.10 The costs in section 3.25 to 3.27 may turn out to be more than budgeted for.

- 3.11 The mixed nature of the plastic material means that, depending on end markets, only 22-39% of the total would be regularly recycled, with up to 78% going to energy recovery after collection and sorting.
- 3.12 Residents may assume that all PTT placed in recycling bins will be recycled. The council must be clear that up to 70% may not be recycled which may impact on public confidence.
- 3.13 Only PP (polypropylene) has a stable recycling market in the UK and on the continent. The recyclability of PET (polyethylene terephthalate) trays has not yet been demonstrated at scale. PS (polystyrene) and PVC (polyvinyl chloride) are not recyclable and no infrastructure is planned for it as the industry guidance is to avoid these polymers as much as possible.
- 3.14 It is known that some PTT collected in the UK is still being exported and disposed of irresponsibly and damaging the environment in developing countries. While Veolia will provide a full audit trail, once these materials are sold on, they will not have control. As the markets are so volatile, there is a risk that some of our plastics could be exported and managed irresponsibly.
- 3.15 Although delayed, the Environment Bill will oblige local authorities and industry to make several changes to how resources are managed, including the introduction of a core set of materials for local authorities to collect. The Bill also suggests there will be funding mechanisms to help with additional financial burdens that authorities may face. The form, amount and conditions attached to this funding are unknown at this stage. PTT is one possible material stream; other materials may include aluminium foil and cartons.
- 3.16 Introducing a range of less marketable plastics, and any contamination that comes with them, is likely to have an effect on the quality and value of the materials currently processed at Hollingdean. This could lead to a reduction in income to the Waste PFI reserve, which it is not possible to estimate.
- 3.17 While other local authorities do collect PTT, if they track that material, they are likely to see a mixed picture of some UK processing, overseas exports and a trail of not insignificant process loss. They are also likely to see that material being traded in some volatile markets. Recycling will take place but it's difficult to ascertain exactly what that looks like on a month by month basis.
- 3.18 Redevelopment of the Hollingdean MRF would require planning permission and Permitting approval, which includes consultation. The contract with Veolia is also a joint venture with Defra and ESCC who would also need to be consulted.

Opportunities

- 3.19 Burdens funding, associated with the Environment Bill, may be a source of funding which could enable the MRF to be retrofitted later, in line with legislation, and not at a cost to the council.
- 3.20 In the Environment Bill, the government is seeking to ensure packaging producers take more responsibility for the costs any waste of that packaging imposes, according to the 'polluter pays' principle, via Extended Producer

Responsibility (EPR). This will ensure producers pay the full net cost of dealing with their packaging waste to incentivise recyclability in its design. Producers currently only pay about 10% of these costs; the government is seeking to increase this to 100%. This is likely to change the types of plastics used during manufacture, increasing the volume that can be recycled

- 3.21 If PTT becomes a core material within the Environment Bill, it is likely that this will drive innovation, and in the future, the markets for recycling PTT will improve.
- 3.22 Reducing the volume of plastics sent to the ERF will contribute to the decarbonisation of the plant.
- 3.23 Veolia, through its Hollingdean MRF, produces a range of high-quality recyclable outputs. Concentrating on these streams enables Veolia to find viable, sustainable markets for these materials. BHCC and East Sussex County Council are assured that the onward movement, further sorting and later processing of materials is carried out in an appropriate way.
- 3.24 Redevelopment of the Hollingdean MRF would require planning and Permitting approval, which includes stakeholder consultation. The contract with Veolia is also a joint venture with Defra and ESCC who would also need to be consulted.

Costs

- 3.25 An initial 2021 high-level review estimates that a retrofit of the MRF will cost around £0.746m, with ongoing revenue costs of £0.080m per annum.
- 3.26 High level costings indicate the usual income share on the recycled material would provide BHCC around £0.028m per annum but after offsetting against the increased costs of residue disposal of £0.032m per annum and the annual running costs of £0.080m, collecting PTT would cost BHCC approximately - £0.084m per annum. This would mean that the costs to the Waste PFI would increase and there would be fewer funds to put in reserves each year.
- 3.27 Retrofitting the MRF would close the site for approximately two weeks. Processing recyclate elsewhere would cost BHCC £0.046m whilst changes were made.
- 3.28 All costs and income etc. are high level and are estimates would be refined through the in-depth feasibility study.

Funding

- 3.29 Following the Deed of Variation Report at Policy & Resources Committee in December 2019 where it was reported that a contract negotiation had delivered approximately a £1m saving plus recurring savings for the life of the contract, Members agreed to instruct Officers to identify how the savings could be ringfenced in order to fund additional recycling measures, including collection of more plastics. In March 2020, £0.0470m was ringfenced in order to fund additional recycling measures, including the collection of more plastics. This can be used towards the capital cost of the retrofit.

- 3.30 Changes have been made to the opening hours at the Hollingdean Waste Transfer Station which produces a saving of £0.050m to £0.060m per annum. This can be used towards the ongoing estimated additional revenue costs of £0.084m.
- 3.31 Cityclean will shortly be consulting on the introduction of charges for non-household waste at the Household Waste Recycling Sites. Some indicative financial modelling of the impact of charging has been carried out. Based on the same charging being adopted as East Sussex and considering similar setup and running costs, it is anticipated that savings of up to £0.150m per annum can be achieved. This is subject to the outcome of the consultation, further committee decisions and conversations with Veolia about how the operation will work. This income will be ringfenced to the Waste PFI and can be used towards ongoing revenue costs.

Feasibility study

- 3.32 A full feasibility study will clarify the technical options available to sort PTT at Hollingdean. It will also clarify the possible option to put PTT through the facility for later sorting at Veolia's Plastic Recovery Facility at Rainham, Essex. Analysis of this option would detail issues surrounding possible contamination of the fibre outputs at Hollingdean and also the degradation of the Plastic Bottle outputs.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 Other options considered were:
- Await further information about the core set of materials in the Environment Bill and the parameters of burdens funding. Although the Bill has been delayed, a consultation is taking place in March and the expectation is that there will be more information within this. If PTT becomes a core material, it is likely that, in the future, the markets for recycling PTT will improve. If PTT is not a core material, the emphasis will be on eliminating this from production through Extended Producer Responsibility and taxation on producers is more likely to end the use of it, so it may not be worth the investment.
 - Launch a communications campaign explaining why it is not recycled in Brighton & Hove, referencing: the risks of it ending up exported; that if it is collected, up to 70% would not get recycled as there is no market for it; emphasising that no PTT is exported, ends up in the sea or landfill etc. The campaign could also focus on increasing plastic bottle recycling which is good quality and will be recycled.
 - Run a public consultation on the matter, explaining the benefits, disbenefits, risks and opportunities of introducing this recycling stream, and seek the views of residents. The results would be presented to Environment, Transport & Sustainability Committee to agree a way forward.
 - Initially focus on working with Veolia to introduce foil recycling for which there is a clear market and is very likely to be included as a core material in the Environment Bill.

End destinations

- 4.2 As highlighted in a [report to Environment, Transport & Sustainability Committee](#) in November 2018 in response to a petition to increase our recycling scheme, *there is currently no, or very limited, markets for the recycling of pots, tubs and trays (PTTs) and therefore it is unlikely that a business case can be made for the investment required in collection and sorting services. However, the situation will be closely monitored for market changes.* Furthermore, 'Everyday Plastic' by Webb and Schneider states that an estimated 63% of plastics collected for recycling in the UK, are exported. In July 2018 the National Audit Office stated there is a significant risk that PTT is exported from the UK for recycling and ending up in landfill in the importing countries, rather than being recycled. A report by Greenpeace published in 'Unearthed' in October 2018 stated an extensive quantity of plastic waste, bagged by several UK local authorities, was found on multiple sites in Malaysia. This plastic was being stored in conditions that rendered it largely impossible to recycle.
- 4.3 A [May 2019 report from Recoup](#) stated 52% of councils responding to a survey said they had experienced difficulties with plastics markets in recent months. The councils said they found good demand for sorted bottle grades such as clear PET and natural HDPE bottles.
- 4.4 While the reports are a couple of years old, there is little evidence that this has changed.

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 Redevelopment of the Hollingdean MRF would require planning and Permitting approval, which includes stakeholder consultation. The contract with Veolia is also a joint venture with Defra and ESCC who would also need to be consulted.

6. CONCLUSION

- 6.1 This report presents the benefits, disbenefits, risks and opportunities associated with the introduction of PTT recycling in Brighton & Hove.
- 6.2 A feasibility study will provide the council with the technical options and costs for retrofitting the MRF to process PTT.
- 6.3 The study will be brought to a future committee for Members to consider the next steps.

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 The proposed feasibility study will establish the financial impacts of the proposal although high level estimates are included within this report. The study will be funded from the £0.470m resources ringfenced within the Waste PFI reserve. Any net costs will take into account the £0.050m to £0.060m recurrent savings from changes to the Hollingdean Waste Transfer station opening times and

potential savings from charging for non domestic waste at Household Waste recycling sites.

Finance Officer Consulted: James Hengeveld

Date: 04/03/2021

Legal Implications:

- 7.2 There are no direct legal implications arising from the report.

Lawyer Consulted: Hilary Woodward

Date: 02/03/2021

Sustainability Implications:

- 7.3 The sustainability implications are outlined in the main body of the report.

Corporate / Citywide Implications:

- 7.4 *Collecting a wider range of plastics for reprocessing when market conditions improve* is a commitment within the Corporate Plan.

SUPPORTING DOCUMENTATION

Appendices

1. Pots, Tubs & Trays classifications
2. Veolia Hollingdean MRF – update 02/2021

Background Documents

1. [Improve Brighton & Hove's Recycling Scheme Petition Report](#) to Environment, Transport & Sustainability Committee on 27 November 2018 (item 45)
2. [Deed of Variation to the Integrated Waste Management Services Contract Report](#) to Policy & Resources Committee on 5 December 2019 (item 96)

