



<u>Committee and Date</u>
Cabinet 21 st July 2021

<u>Item</u>

PROVISION OF WHEELED BINS FOR KERBSIDE COLLECTION OF PLASTIC, METAL AND GLASS RECYCLING

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1. Summary

- 1.1 This report sets out a programme for the provision of a 240-litre wheeled bin for recycling to all Shropshire households that request one. The bins will be an alternative to the boxes currently used to present recyclable glass bottles and jars, metal containers and plastic containers. Feedback from Shropshire residents indicates that this will make recycling more convenient and will also increase the basic capacity available for these waste streams. As a result, there will be a reduction in the amount of Shropshire waste sent for disposal and an increase in the amount recycled.
- 1.2 Veolia operate the kerbside recycling collections on behalf of Shropshire Council. The waste is collected fortnightly in two waste streams, a paper and card mixture using a blue bag, and a plastic, glass, and metal mixture using 55 litre boxes. Generally, there are two boxes per household, but more are provided if required, at no extra cost to the resident. In 2019/20 Veolia collected 14,250 tonnes of plastics, glass, and metals from the kerbside.
- 1.3 In addition, and in response to public comments, the switch to bins from boxes will reduce the amount of waste lost to the recycling process after being blown out of the boxes on windy days. This will improve the cleanliness of the local environment by removing that source of litter and further increase the tonnage of waste recycled by keeping it within the recycling collection system.
- 1.4 The provision of a 240-litre wheeled bin to replace the recycling boxes would:
 - increase the total basic container capacity for plastic, glass and metal from 110 litres to 240 litres
 - make the separation and storage of that waste stream more convenient for residents
 - reduce the amount of windblown litter from the boxes
 - Improve manual handling for residents and waste and recycling crews.

2. Recommendations

- 2.1 Cabinet is requested to approve in principle the use of a 240-litre wheeled bin for recycling, and the intended roll out plan as described in this report, subject to funding of the project being identified and approved.**
- 2.2 Cabinet is requested to determine its preference for funding this initiative, with options being:**
- a) The Council bearing the cost of the initiative, which has been estimated at £2.932m. This option would require material changes to be made to the Financial and Capital Strategies to take account of the cost. An additional capital cost of £2.932m would be likely to result in an additional revenue cost of £0.335m per annum for ten years. Revised Financial and Capital Strategies will require full Council approval.**

OR:

- b) Full cost recovery, whereby a charge is made to residents which covers the full cost of the bin. A charge for supply and delivery between £23 - £28, once finalised, would be agreed by the Director of Place in consultation with the Portfolio Holder for Climate Change, Natural Assets & The Green Economy, should the rollout of the initiative take place within the 2021/22 financial year.**

REPORT

3. Risk Assessment and Opportunities Appraisal

(NB This will include the following: Impact on Children and Vulnerable Adults, Risk Management, Human Rights, Equalities, Community and other Consultation)

- 3.1** The key risk associated with the use of bins is the potential for higher contamination levels, where non-recyclable material such as general refuse is mixed with recyclable waste. This can hinder the recycling process and on a large scale can result in whole loads of material being sent for disposal. The use of bins means that there is less opportunity for loaders to detect non-target material and either remove it or reject the specific container.
- 3.2** This risk is reduced in Shropshire as the current system has been in place for several years and residents are familiar with the accepted material streams. Further mitigation will be provided as loaders will be able to identify some contaminants as they are tipped and then use an established system of bin-hangers to advise householders of which material streams are accepted in the bin and a warning that if misuse persists the bin will be removed or not emptied.

- 3.3 The use of bins will not be compulsory. Some residents may not be able to use a bin due to housing layout or the lack of storage space for the bin. These residents will be able to continue to use their existing waste containers as will those residents who simply prefer to use boxes.
- 3.4 Turning to equality and social inclusion implications, a screening Equality and Social Inclusion Impact Assessment has been carried out and is attached as appendix to this Cabinet report. As the use of bins rather than boxes will reduce the bending and lifting involved in presenting waste for recycling, this will benefit residents who have difficulty with this activity. There are therefore predicted positive impacts for the Protected Characteristic groupings of Age, Disability, and Pregnancy and Maternity. This is also the case for the collection crew, presenting positive health and well-being impacts
- 3.5 The positive impacts of the service change will be explained by a communications plan to encourage residents to request a bin for recycling and maximise take-up of the container. Residents will be asked to request a bin via an online form but the CSC will also be available to receive requests by or on behalf of those residents who do not have access to the internet, or who have difficulty in using it, for example older people, people in rural areas without access to reliable digital connectivity.
- 3.6 If the option is taken to charge for the bin, there is a potential reputational risk that the Council is providing a two-tier service that potentially disadvantages those on lower incomes. These households are a grouping considered in our additional category in Shropshire, of Social Inclusion. Further to that, the forecast level of take up, currently forecast to be 80%, is also likely to be reduced, reducing any potential benefits of an increased recycling rate.

4. Financial Implications

- 4.1 Based on an estimate of 80% of Shropshire households (116,762 properties) requesting a bin, Veolia estimates the following costs for a mass rollout:

	Unit Cost	Quantity	Total
Bin Supply	£ 17.65	116,762	£ 2,060,856.36
Delivery Cost	£ 2.48	116,762	£ 289,570.75
Supervision	£ 0.25	116,762	£ 29,190.60
		Grand Total	£ 2,350,427.11

- 4.2 This price includes the economies of scale associated with bulk purchase and delivery, with bins picked up directly from a manufacturer in Telford. The price for delivery of smaller quantities for later requests would be higher, with costs subject to further negotiation. It is suggested that requests made after a fixed cut-off date would be grouped and delivered when an economic quantity is reached. This may cause delays to delivery but would minimise costs. This is included in the total estimated cost given below. Also, the estimate above is based on current prices and it should be noted that a projected shortage of

suitable pelletised plastic in the coming months may increase the cost of bin supply by up to 50p per unit

- 4.3 To be prudent, the Council will work on the basis of 140,444 households (96.7%) taking up the offer of the new bin from the outset, which is estimated to cost a total of £2.932m including the 50p contingency related to plastic prices. Unless, a charge is made to residents for the cost of the bins, this cost will be borne by the Council. It is possible to capitalise this cost. An additional capital cost of £2.932m would need to be funded through borrowing. The implication would be that the Council's revenue budget would repay the loan over the period of the assets' life. The length of asset life could be determined by the manufacturer's guarantee. MRP and interest charges on a loan of £2.932m, at an interest rate of 2.5%, would result in an additional revenue budget pressure as follows:

Asset Life	Estimated MRP and Interest Charge Cost (Revenue Cost) per Annum
10 years	£335,007
15 years	£236,807
20 years	£188,079

- 4.4 It has been agreed with Veolia that the replacement of lost or damaged bins will be included as part of the existing Unitary Charge for the service and involve no extra cost to the Council. The delivery of bins to new build properties will also be included.
- 4.5 Should the new recycling bins result in a change in residents' behaviour, there would be a financial benefit to the Council of approximately £84,000 for every 1,000 tonnes of waste diverted from the residual bin to the recycling bin. This is primarily through the sale of the capacity at the Energy Recovery Facility which would be freed up by reducing the amount of residual waste collected from the kerbside.
- 4.6 It is not possible to be definitive in calculating the weight of waste diverted as a result of switching containers due to the difficulty in predicting the impact on residents' behaviour. If there were a 5% increase in the recycling stream that would equate to a financial benefit of £60,000 per annum, a 10% increase in the recycling stream would equate to a financial benefit of £120,000 per annum, and a 15% increase in the recycling stream would equate to a financial benefit of £180,000 per annum.
- 4.7 The direct financial impact on Council budgets of the cost of the bins would be removed if residents were charged the full cost of manufacturing and delivering the bins. Charging residents to buy their bin would mean that the project would be cost neutral to the Council. The unit cost of the bins would be higher than that shown in the table above, for the following reasons
- a) A charge is likely to reduce the total quantity ordered and therefore some economies of scale will be lost both in manufacture and delivery

- b) Use of a unique identifier on the bin to minimise the impact of theft, e.g. a serial number imprinted on the bin, secure sticker, or RFID chip, which would link the bin to the resident who purchased it.
- c) The online request form for the bin would need to include the ability to accept payment, which would increase cost and timescale. The impact on the Customer Service Centre would also increase if their role were to be extended to include receipt of payment.

4.8 Discussions with Veolia indicate that a charge to the resident of between £23 and £28 per bin would cover all costs. The final charge would be agreed by the Director of Place in consultation with the Portfolio Holder for Climate Change, Natural Assets & The Green Economy, assuming that the rollout of the initiative takes place within the 2021/22 financial year.

5. Veolia Contract Implications

5.1 Discussions with Veolia on this issue have identified that there are no requirements for a change or amendment to the existing contract. The consequences of this report remain within the scope of the existing contract and as stated any additional replacement, lost or stolen bins will be replaced by Veolia.

6. Climate Change Appraisal

6.1 The key climate change benefit of this proposal is the opportunity to divert more waste from disposal to recycling. This move will reduce the carbon impacts of the manufacturing process for packaging by replacing the resource intensive extraction and processing of virgin raw materials with containers made entirely or in part with recycled material.

7. Background

7.1 A customer satisfaction survey for the waste service conducted in 2018 included the question “What would make it easier to recycle at home?” 45% of the responses stated that this would be achieved using a wheeled bin for recycling.

7.2 For several years there has been consistent feedback on the Council’s social media channels from residents suggesting a bin for plastics, glass, and cans would reduce wind-blown litter from the open boxes currently used to collect these waste streams from the kerbside.

7.3 Further to this local interest, the latest government recycling tables for English Local Authorities covering 2019/20, show that all of the top five performing Councils (Three Rivers, Vale of White Horse, South Oxfordshire, East Riding of Yorkshire, and St. Albans) use a bin for collecting dry recycling.

- 7.4 It is apparent that the bin provides both increased convenience and greater capacity to divert more target material from the residual waste stream to recycling.
- 7.5 Around 2,500 tonnes of metal are recovered from the incineration process Energy Recovery Facility (ERF) bottom ash after processing. This indicates that recyclable material is still being put in the residual bin and although the metals can be recovered post-incineration the glass and plastics cannot. Diverting the metals mentioned would not impact on the Council's recycling rate but it would free up more capacity for third party waste to generate income.
- 7.6 If a charge is made for the bin it would become the property of the resident concerned. This is not the case with all other containers used in the service which remain the property of Shropshire Council. A further decision would have to be made on whether the resident would be charged for a replacement bin in the event of loss or damage.

8. Rollout Programme

- 8.1 Discussions with Veolia indicate that with an 80% take up by residents (c. 117,000 properties) a rollout of the scheme would be completed in around 6 months from an order being placed with the manufacturer, including 2 months for preparation and 4 months for deliveries.
- 8.2 Residents will be asked to request a bin via an online form developed by the Councils in-house IT Team. This timescale does not include the design and build of the form. The timescales and costs of this are being discussed with the Digital Transformation Team.
- 8.3 In order to facilitate an effective delivery mechanism there would be a fixed time frame for requests to be made. This time frame would be publicised to residents via a communications plan to ensure that most orders could be received and actioned within the six-month timescale mentioned above.
- 8.4 Orders received after the deadline will be held and fulfilled after the initial rollout is complete. These bins would be delivered in batches to minimise cost and environmental impact.
- 8.5 The bin will be 240 litres, the same as those in standard use for residual and garden waste. They will have a grey body with a purple lid, to differentiate them from the other bins in use. The lid colour has been chosen so as not to conflict with the Waste Resources Action Programme (WRAP) national colour schemes for recycling and anticipating more moves towards standardisation as part of the collection consistency model.
- 8.6 Residents would be encouraged to retain and re-use the existing collection boxes for different purposes. In the event of significant demand for residents to dispose of boxes they could be delivered to any of the county's five

Household Recycling Centres and then recycled at Veolia’s plastics reprocessing facility.

9. Conclusions

- 9.1 The provision of bins for recycling responds directly to comments by residents. The bins also offer the opportunity to divert waste from the residual waste stream to recycling and to reduce the amount of recyclable material blown out of the collection boxes.
- 9.2 The rollout plan described in this report provides the basis for development into an operationally achievable programme.

List of Background Papers (This MUST be completed for all reports, but does not include items containing exempt or confidential information)

n/a

Cabinet Member (Portfolio Holder) Councillor Ian Nellins

Local Member – All Councillors

Appendices

Appendix 1 - Equality and Social Inclusion Impact Assessment (ESIIA)