Committee and Date	Item
Council 13th January 2022	

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

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1. Synopsis

1.1 Members are being asked to approve the recommendation to provide householders with bins for recycling and approve the capital investment required to achieve this.

2. Executive Summary

2.1 This paper requests Council to approve the provision of wheeled bins for kerbside collection of plastic metal and glass and approve the financial provision required. Council will be aware Cabinet approved its recommendation in July 2021 for this initiative.

2.2 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.

2.3 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.

2.4 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.

2.5 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.

3. Recommendations

3.1 Council is requested to approve the rollout of bins for recycling described in this report.

3.2 Council is requested to approve the capital investment estimated to be £2.932 million required to deliver this scheme, as an addition to the current Capital programme.

REPORT

4. Risk Assessment and Opportunities Appraisal

4.1 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 collection crews to detect contaminants and either remove them or reject the specific container.

4.2 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.

4.3 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.

4.4 The use of bins rather than boxes will reduce the bending and lifting involved in presenting waste for recycling and benefit residents who have difficulty with this activity, further they will assist the operational staff regarding manual handling and improve health and safety for operational crews.

4.5 An Equality, Social Inclusion and Health Impacts Assessment (ESHIA) had been completed for this project. The assessment identified no negative impacts on the Protected Characteristic groupings. Low positive impacts were identified due to the health benefits noted in 4.4 above.

5. Financial Implications

5.1 Based on an estimate of 80% of Shropshire households (116,762 properties) requesting a bin, the estimate for a mass rollout is:

	Unit Cost	**Quantity**	**Total**
Bin Supply	£ 17.65	116,762	£ 2,060,849
Delivery Cost	£ 2.48	116,762	£ 289,570
Supervision	£ 0.25	116,762	£ 29,191
		Grand Total	**£ 2,379,610**

5.2 This price includes the economies of scale associated with bulk purchase and delivery. Contractors for manufacture and delivery of the bins will be selected via a competitive public sector procurement framework. 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 above. 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.

5.3 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 for related to plastic prices.

	Unit Cost	Quantity	Total
Bin Supply	17.65	140,444	2,478,837
Delivery Cost	2.48	140,444	348,301
Supervision	0.25	140,444	35,111
Contingency for related to plastic prices.	0.5	140,444	70,222
		Grand Total	**2,932,471**

The proposal to finance this investment is through Public Works Loan Board (PWLB) funding which will result in an additional annual revenue liability of £0.335m over a ten-year period required to pay back the debt including interest.

5.4 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.

5.5 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.

5.6 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. The scheme would therefore require an increase in recycling of 28% to be cost neutral over the 10-year planning period. An improvement of this scale is unlikely and therefore there will be additional annual pressure of up to £335,000 on revenue budgets.

5.7 **Veolia Contract Implications -** 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. The procurement process for the bulk purchase and delivery of the bins described in this report will take place via a separate procurement framework.

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.

6.2 Recycling makes a very significant contribution to the Council's overall carbon performance, and this is recorded each year as part of Veolia's annual report. The measurement is made using the industry standard WRATE monitoring tool which evaluates the positive and negative carbon impacts for all aspects of the waste management process. In 2020 this calculation identified a total carbon saving of -30,184,043 kg CO2 equivalent. This was a further improvement on the figure for 2019 (-27,059,495 kg CO2 equivalent), largely due to an increase in the plastics, glass, and cans collected from the kerbside.

6.3 As stated previously, the provision of a bin will increase the collection capacity for this waste stream, and make the service more convenient for residents, both of which are likely to improve the carbon performance of the waste contract and of the Council as a whole. However, as described in 5.6 above, we cannot at this stage be definitive on the expected increase in recycling tonnage, but we can estimate the improved carbon performance in a similar scenario of a 5% increase in plastic, cans, and glass, recycling which would equate to a reduced carbon impact of -241,000 CO2 equivalent.

6.4 This project will have no significant impact on renewable energy generation although the diversion of more waste from the residual bin to recycling will free up more capacity in the Battlefield Energy Recovery Facility which has the potential to allow some waste to be disposed of via recovery rather than landfill.

6.5 This project will not offer opportunities for carbon off-setting or mitigation. The provision of recycling bins will have no significant contribution to the Councils resilience to climate change impacts such as bad weather.

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 Cabinet at its July 2021 meeting approved a report (please refer to link https://shropshire.gov.uk/committee-services/documents/b15197/To%20Follow%20report%20-%20Proposed%20Improvements%20to%20Recycling%20Containers%2021st-Jul-2021%2010.00%20Cabinet.pdf?T=9, the report presented options for Cabinet to approve: -

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 per bin, 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.

7.7 Cabinet chose and recommended to Full Council that the council bears the cost of this initiative, and due to the cost being more than £1 million, then Full Council are required consider and approve.

Rollout

7.8 It is estimated 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 and delivery company by Shropshire Council following a procurement framework process. This would include 2 months for preparation and 4 months for deliveries.

7.9 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.

7.10 However, the CSC would still be available to receive requests for residents who are unable to access the Council's website or portal. These requests would be added to those coming directly to the portal.

7.11 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.

7.12 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.

7.13 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.

7.14 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.

8. Conclusions

8.1 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.

8.2 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)

Cabinet report – July 21st, 2021 https://shropshire.gov.uk/committee-services/documents/b15197/To%20Follow%20report%20-%20Proposed%20Improvements%20to%20Recycling%20Containers%2021st-Jul-2021%2010.00%20Cabinet.pdf?T=9

Cabinet Member (Portfolio Holder) - Councillor Ian Nellins

Local Member – All Councillors

Appendices

App 1 Equality, Social Inclusion and Health Impact Assessment (ESHIA)