

# Kerbside Recycling – Experiences from authorities receiving funding from the National Waste Minimisation and Recycling Fund

Appendix VIII: Elmbridge Borough Council

# Elmbridge Borough Council

Elmbridge Borough Council (EBC) received Round 2 funding to expand a pilot multi-material dry recyclable collection to serve 18,000 out of its 53,000 properties. Prior to the introduction of this collection it achieved a recycling rate of approximately 12% in 2002/03 through fortnightly kerbside collections of paper and glass on alternate weeks and bring banks. It achieved an average rate of 18% recycling and composting for the first year of operation of the new scheme.

This report describes the detail of the collection and its performance together with a discussion of the lessons learnt in implementing the collection.

## Description of the collections

### Recycling and refuse collections before the Round 2 funding

In September 2001 EBC introduced a pilot collection of co-mingled recyclables collected fortnightly using 240L wheeled bins. The collection targeted plastic bottles, cans, paper and card. A customer satisfaction survey of the service recorded a 95% satisfaction. The service was an 'opt-in' collection with approximately 5,000 households using it out of 7,500 offered the service. The rest of the borough was provided with a kerbside collection of newspapers and magazines collected fortnightly in reusable sacks.

EBC received Round 1 Defra funding to provide a fortnightly kerbside glass collection to 25,000 properties. This was introduced to areas not receiving the pilot co-mingled collection and the collections were operated on alternate weeks to the paper collection. The glass is collected in 55L boxes that are emptied into a slave bin before being loaded into the vehicle. The glass is collected mixed.

Refuse has been collected from residents using 240L wheeled bins and the authority operates 'no side waste', 'closed lid' and 'single bin' policies.

### Collections funded from Round 2 NWMRF

The Round 2 funding provided the wheeled bins necessary to expand the co-mingled collection to an additional 18,000 properties, and followed a survey that indicated that the collection was popular and wanted by all residents. Expanding the collection brought the total number of households served by the collection to 25,500, equivalent to 2 collection rounds. The standard bins used by most residents are 240L, but smaller, 140L bins, are available on request.

The collected materials are currently taken to a MRF at Colnbrook, but will soon be delivered to a new facility in Mole Valley, a neighbouring authority. This will significantly reduce the driving time and enable the vehicles to be more productive. A gate fee of £29/tonne is paid and no sales revenues are received.

At the same time as the collection was expanded the contractor introduced zoning for the refuse collection.

The collections were phased in starting in September 2003 and the full collection was launched in April 2004.

Further Defra funding from Round 3 enabled the collection to be rolled-out borough wide.

## **Kerbside Recycling Experiences**

### **Roll-out of the collection**

The collection was rolled out in three phases to approximately 7,500 households at a time and was organised to fit in with the new zoned refuse rounds. This enabled each area to be thoroughly evaluated with regard to the most suitable bin sizes and for a database to be compiled of all the addresses. This information was then provided to the bin supplier who organised the bin delivery with the help of Officers (an Officer accompanied each delivery to ensure it went smoothly).

One to two weeks before the bins were delivered a letter was posted to the targeted residents informing them of the change, i.e. that the co-mingled collection would replace the current paper collection, and letting them request a different sized bin or opt out. EBC does not operate a central call centre and all the calls were handled by the general administration desk. A calendar was delivered with the bins and information on what can and can't be recycled in the bin is embossed on the lid.

The collections started a fortnight after the bins were delivered.

As the roll-out took place over an extended period, it did not entail an extensive project management effort. The only additional staff involved during the implementation was an assistant to help on completing the survey of the new areas and compiling the database. A campaigns Officer was also employed to provide the promotion and publicity materials.

### **Communications and promotion of the collection**

Because the collection is not offered to all residents the promotion and marketing had to be carefully targeted to ensure that residents not receiving the new co-mingled collection would continue to participate properly in the paper collection. Furthermore, some residents not receiving the co-mingled collection were receiving the glass collection. Overall, there were 4 possible combinations of collection:

- paper in reusable sacks collected fortnightly;
- glass in boxes and paper in reusable sacks, collected on alternate weeks;
- glass in boxes and co-mingled recyclables in the wheeled bin, collected on alternate weeks; and
- co-mingled recyclables in the wheeled bin collected fortnightly.

The promotion of all the collections is therefore limited to primarily targeting of specific households through leaflets. Articles also appear in the regular Council magazine.

A newsletter and follow-up questionnaire was sent to residents after the introduction of the collections. The results suggested that most residents knew what was required and that the collection was popular.

### **Performance of the collection**

In 2003/04, when the co-mingled collection was provided to approximately 21,200 households, 4,291 tonnes were collected in the co-mingled collections, equivalent to approximately 202 kg/household/year. Participation in the collection is estimated at approximately 75%, thus the quantity collected from participating households is approximately 269 kg/household/year.

It is difficult to assess the performance of the Round 2 funded collection in isolation because data are unavailable on the quantities of paper collected on the rounds now served by the co-mingled collection. Also, separate weights for the co-mingled recyclables for the original pilot area and for the households served as a result of Round 3 funding are also unavailable.

The paper collection generated 1,300 tonnes in 2004/05 from 27,300 properties, equivalent to approximately 48 kg/household/year. The mixed glass collection generated 1,420 tonnes in 2004/05 from 25,000 properties, equivalent to approximately 57 kg/household/year.

Assuming a similar average quantity of paper had been collected from the households served by the co-mingled collection, the increase in quantities collected is approximately 145 kg/household/year. Bearing in mind the very low relative weights of cans and plastics to paper, this suggests that more paper is being collected in the co-mingled collection than previously in the paper only collection. This is probably due to a combination of more households starting to separate out their recyclables as well as existing recyclers recycling more due to the extra capacity of the wheeled bin compared to the reusable sack.

Overall, the collection has contributed approximately 6% to BVPI 82a, although included in this figure is the paper already collected, so the actual contribution from the Round 2 funded element will be lower. However, this contribution to performance is from only 35% of the households as the scheme was not borough wide in 2004/05.

Between 2003/04 and 2004/05 the total quantity of waste arising has risen by 3.5%, or 1,889 tonnes.

### Standard collection costs

It is difficult to compare collection costs between authorities for many reasons including contracting out versus in-house service, lease versus purchase of capital equipment, accounting practices, etc. Therefore, for the purpose of the case study analysis, Kerbside Analysis Tool (KAT) has been used to estimate a standardised cost for each collection. It should be stressed that the use of KAT is to overcome difficulties in comparing a service that is operated and paid for in a number of different ways across authorities and not as a reflection of perceived inaccuracies in the audited or declared costs for individual authorities.

KAT uses information on the infrastructure actually employed to carry out the collection, for example the number and type of vehicles, and applies a unit cost, uniform depreciation and financing. **The standard costs calculated by KAT are not the same as the price paid to a contractor for operating the service or the same as the costs that appear in the audited accounts of the authority.** However, they enable a fair comparison between authorities of the costs of running kerbside collections.

Standard costs have been estimated for all the kerbside collections operating in the authority including refuse collection, regardless of if they were funded by Round 2 or not. It is sometimes impossible to separate out the elements funded by Round 2, for example if it only covered part of a collection or if it replaced an existing collection. Therefore, the cost analysis can only be undertaken at an authority wide level. Refuse collection costs are included as well as those for recyclables collection because it provides a useful base reference against which to compare the costs of the recyclables collections, refuse collection costs not being uniform over the country.

## Kerbside Recycling Experiences

The cost analysis is for the financial year 2004/05 and can therefore be directly related to the performance above.

The standard collection costs for the refuse and kerbside collections in EBC are presented in Table 1. All the costs are **gross**.

**Table 1:** KAT standard gross collection costs for household waste collected at the kerbside

Collected stream	Round 2 funding	Total households served	Collection frequency	Tonnes collected 04/05 (T)	Collection cost per tonne (£)	Collection cost per household (£)
Refuse	–	53,000	Weekly	45,000	28	24
Co-mingled dry recyclables	for 18,000 households	21,200	Fortnightly	4,291	70	14
Mixed glass	–	25,000	Fortnightly	1,420	184	10
Paper	–	27,300	Fortnightly	1,300	151	7
<b>Total</b>	–	<b>53,000</b>	–	<b>52,011</b>	<b>39</b>	<b>38</b>

When considering the costs presented in Table 1 it is essential to remember that they cover the collection of household waste/recyclables only, i.e. trade waste is not included, and additional costs for spare vehicles, depots and other support costs relating to collection are not included. Post collection costs, such as gate fees for refuse, MRF processing and composting, and ancillary costs such as for promotion, education, call centres and communications are also not included. Depending on the extent of these facilities and activities, and also the level of recycling credits or sales revenues, the standard KAT cost may be lower or higher than the audited accounts and a direct comparison is impossible with BVPI 86.

### Lessons learnt

The collection has been well received by residents. Some of the reasons for the success of the scheme are:

- piloting the scheme to make sure it works and to gauge public attitude;
- phasing of the roll-out enabled problems to be addressed immediately and didn't result in an overwhelming number of enquiries;
- surveying and database creation of each area enabled relatively easy bin distribution;
- good contractor relations;
- increased tonnages as a result of the co-mingled collection; and
- Member support.

Some of the less positive aspects of the implementation have been:

- publicity has been difficult due to the wide range of schemes and post roll-out publicity has not been good resulting in a drop-off in tonnes collected;
- database of addresses difficult to compile due to access to data and also the resources required to maintain it;
- lack of rigorous project management, with everything just being made to fit around usual jobs, meant it difficult to respond to problems and led to long hours being worked; and
- the lack of a County or District 'strategy' document providing a long term and integrated approach to managing the whole waste stream results in the piecemeal approach to the implementation, which has prevented a single, comprehensive service being provided to all residents. Residents without access to all the services are unhappy about this and it also makes promotion difficult. It also makes securing funding difficult.

## **Developments following the Round 2 funding**

### **Expansion of the co-mingled collection**

As mentioned above, Round 3 funding was secured to expand the service to all suitable households in the borough. The first phase of the expansion was in March 2005, but the second phase has been delayed from October 2005 to April 2006 due to the revenue implications.

### **Other**

The final stage of providing all residents with the same level of service for dry recyclables will be to provide the kerbside glass collection to the rest of the borough.

To encourage participation in the collections, it is considering introducing fortnightly refuse collections.

Trials for the collection of green waste are taking place with Mole Valley District Council using 2 reusable sacks collected fortnightly. A £20 charge is being made to households to be included in the service. The collection will be operated over 12 months. Options for the composting are being considered.