

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

Appendix XII: Kingston upon Hull City Council

Kingston upon Hull City Council

Introduction

Kingston upon Hull City Council (KHCC) received Round 2 funding to introduce a kerbside dry recyclables collection to 60,000 properties to complement an existing kerbside collection of paper. Round 2 funding covered purchase of boxes with lids for the households and salary costs for a Recycling Officer. Prior to the introduction of the collection it achieved a recycling rate of approximately 10% in 2002/03 through a bring collection, a kerbside collection of paper and a targeted collection of garden waste. It has achieved an average rate of approximately 13% recycling and composting in 2004/05, following the collection of a wider range of dry recyclables.

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

KHCC comprises approximately 114,000 households in one of the most socially deprived areas of the country (ranked 14th most deprived by the Audit Commission). Housing is predominantly terraced, 63%, or semi detached, 20%. Refuse is collected weekly in 240 L wheeled bins.

Between May 2001 and July 2002 a kerbside collection of paper (N&P, junk mail) was provided to 83,000 properties following a successful trial. Residents were provided with a blue 140L wheeled bin that is collected monthly. Properties not covered by the scheme are those unable to accommodate a second wheeled bin. In addition there are approximately 60 bring sites and a further 30 sites at schools, community centres etc. Plastic bottles are included in the bring collections. All the collections are operated in-house.

In addition there is one Household Waste Recycling Site located in KHCC that recycled 31% of the materials entering in 2002/2003. Hull Friends of the Earth also operate a garden waste collection service using an electric vehicle to a small number of households in one part of the city. Subsidised home compost units have also been provided. As many properties do not have gardens these schemes can only ever have a limited impact on the overall recycling performance of KHCC.

A 99% satisfaction was recorded with the services, which also reflects the overall policy to collect whatever is put out.

A trial into collecting a wider range of dry recyclables was conducted on 2,500 properties with Hull Friends of the Earth to evaluate the potential to introduce recycling collections into 'hard-to-reach' areas, such as properties with difficult access, flats and those with a socially challenging population. The results of the trial have been used to develop operating practices and to define target areas for the introduction of the scheme funded by Round 2.

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Collections funded from Round 2 NWMRF

Following the trial it was decided to introduce the kerbside collection of the expanded range of dry recyclables to 60,000 properties. 9,000 properties were already on the scheme prior to the Defra funding being approved. The funding provided one 53L box to be provided to the targeted households for the collection of cans, foil, aerosols, plastic bottles, textiles and glass. The materials are collected in Kerbsider vehicles and sorted into six streams (the cans, foil and aerosols are mixed).

An analysis of the waste composition in KHCC suggests that 15% to 20% of the refuse comprises these materials.

Roll-out of the collection

The collection was rolled-out in 2 phases. Delivery of the first 20,000 boxes started on 10th November 2003 with the first collections starting on 24th November. The remaining 40,000 boxes were distributed in March 2004 as dictated by the procurement of the specialist collection vehicles.

All the boxes are bar coded and scanned by the collection crews when emptied. Although this has the potential to accurately measure set-out and participation as well as crew performance it requires the administrative back-up to be up-to-date i.e. to monitor when residents move house, report a box missing or stolen etc.

Participation ranges from between 15% to 100% depending on the area, with an average estimated at approximately 40% for the Round 2 collections. (Round 3 funding enabled the collections to be expanded City wide and include the hard-to-reach areas so overall participation is now estimated to be lower, closer to 35%).

Communications and promotion of the collection

Approximately 4 to 6 weeks prior to the collection commencing a pack was hand delivered to each household that was to receive the collection. This explained that boxes would soon be delivered, it described the materials that could be recycled in the box, the frequency of the collection and how it related to the existing blue bin collection of paper. It also contained a 'Frequently asked Questions' page. Finally, it provided residents with a number of options to let KHCC know that they did not want to participate (reply paid post card, telephone number and e-mail).

As a result of this approximately 14% (9,000 out of 69,000) of properties opted out, although a number of these subsequently then requested a box once they saw their neighbours recycling.

A second leaflet was delivered to all the households when the boxes were delivered. This leaflet described the collection arrangements and detailed the materials that could be placed in the box.

The Round 2 support from Defra also funded a Recycling Officer to promote the collections. Regular press releases were made to the local papers and articles are placed in the monthly Council newsletter. Annually, residents receive a leaflet reminding them of the collection and how to participate in it.

Performance of the collection

The collection was launched in the second quarter of the financial year 2003/04. In the first quarter it collected 7,327 tonnes of garden waste and dry recyclables through its bring banks, HWRS and kerbside collections, equivalent to 128 kg/household/year. In 2004/05, following the introduction of the kerbside collection, it collected a total of 17,250 tonnes equivalent to 151 kg/household/year. Of this, the kerbside collection funded by Round 2 generated 2,022 tonnes, equivalent to 34 kg/household/year per household served.

Participation in the scheme is estimated using the chipped bins at approximately 45%. Thus, the capture by participating households is approximately 75 kg/participating household/year.

Overall, the collection has contributed 1.6% to the combined BVPI 82a and 82b; however it must be remembered that it is only provided to 60,000 properties out of a total of 114,000, equivalent to just under 50% of the households. Also, the collection does not include paper that is collected separately in wheeled bins, and which is a significant contributor to the recycling rate in many authorities.

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.

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 KHCC are presented in Table 1. All the costs are **gross**, i.e. do not include any benefits from the sales of materials or from the receipt of recycling credits if payable.

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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	–	114,000	Weekly	88,199	26	20
Paper	–	83,000	Monthly	6,552	83	7
Dry sorted	for 60,000 households	60,000	Fortnightly	2,022	329	11
Total	–	114,000	–	96,773	36	31

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

Overall, Officers are pleased with the collection and believe that the implementation went smoothly. In particular they are pleased with:

- the use of New Deal labour for the crews;
- promotion materials used to inform residents about the scheme and to encourage them to participate;
- the scheduling of the collection rounds;
- the inclusion of plastic in the collection;
- the policy to offer households more than one box if required, with several households having 3 or even 4 boxes due to the volume of plastic;
- the bar coding of boxes; and
- having achieved the implementation in a short timescale.

Some of the less positive aspects of the collection are:

- the decision to allow residents to opt out resulted in a lot of additional work to manage both the requests in box distribution and in the database; subsequently many of those who had opted out then decided they wanted a box which led to more work;
- capacity of the box with respect to plastics;

- providing lids for the boxes has created problems for the collection. Also, there have been complaints that the lids don't fit;
- disappointment in the performance with follow-up focus group research suggesting that some residents will use any excuse not to participate, e.g. requests to clean the containers etc. reducing participation. Future campaigns will focus on specific materials.

Developments following the Round 2 funding

Expansion of the dry recyclables collection

KHCC received funding through Round 3 to expand the dry recyclables collection to all properties, including those harder to reach. This has on the whole been successful, but the nature of the properties has meant that overall the performance per property has decreased.

Following this the next step will be to include the paper in the box collection, capacity being made available in the Kerbsider vehicles by either mixing the green and brown glass or collecting the textiles in bags. The bins currently used for the paper collection could possibly be used to expand the garden waste collection and to add cardboard.

Other

KHCC together with E. Riding Council are preparing a joint waste strategy (the 2 authorities share their waste disposal contract) and have already agreed a joint recycling target of 45%. Towards achieving this target, the garden waste collection will be expanded in 2006/07 and cardboard may be included. Options for the collection of kitchen waste are also being considered. Finally, to encourage recycling, consideration is being given to reducing the size of the refuse bin and to introduce the enforcement of a 'no side waste' policy.