

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

Appendix VII: East Dorset District Council

East Dorset District Council

Introduction

East Dorset District Council (EDDC) received Round 2 funding to replace and expand its kerbside co-mingled collection of dry recyclables without glass with a kerbside sorted collection that included glass. The funding was part of a partnership bid led by Dorset County Council and provides for Christchurch Borough Council, North Dorset District Council and Weymouth & Portland Borough Council introducing similar collections. Round 2 funding for EDDC covered purchase of vehicles, reusable plastic sacks, the salaries of additional collection crew members and promotion of the new collection. The vehicles released from the co-mingled collection were redeployed to introduce a kitchen waste, cardboard and garden waste collection to 30% of properties in EDDC.

Prior to the introduction of the kerbside sorted collections, EDDC achieved a recycling rate of just over 15% through its co-mingled kerbside collection and bring banks. It has achieved an average rate of 18% recycling and composting in 2003/04, the first year of operation of the sorted collections. The following year, in which the garden waste collections were introduced, the overall recycling and composting rate achieved rose to approximately 26%.

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

EDDC comprises approximately 38,000 households. Refuse is collected weekly in sacks and since 2001 all properties suitable for kerbside collection, approximately 91%, were provided with a box for the collection of co-mingled dry recyclables including paper (newspapers & magazines and junk mail), steel and aluminium cans and plastic bottles. The materials were taken to a MRF at Hurn for sorting. EDDC receives a gate fee from the WDA for this, but receives no recycling credits or sales revenues for the materials sold. In 2002/03, 2,637 tonnes of material was collected from approximately 32,300 properties. Of this approximately 10% was rejected by the MRF, and a total of 2,368 tonnes was sold for recycling, equivalent to approximately 69 kg/household/year.

In 2002 a Municipal Waste Strategy for Dorset was agreed that included the following policies:

- Policy 5: By 2010, the majority of households in Dorset will have a 3 stream waste collection;
- Policy 5A: The Dorset authorities will collect dry recyclables at the kerbside from 80% of households within 5 years. The Dorset authorities will promote and encourage the use of the service by households to achieve 75% participation and 75% use;
- Policy 5B: The Dorset authorities will collect organic material at the kerbside from 60% to 80% of households by 2010. The Dorset authorities will promote and encourage the use of the service by households to achieve 75% participation and 75% use.

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The Dorset waste collection authorities could decide the most appropriate means to implement these policies, but all of them agreed that the best way to implement the policies was for dry recyclables to be sorted at the kerbside. They considered that this option has the advantage over the co-mingled system of reduced possibility of contamination, enabling glass to be included without affecting the quality of the other materials collected and it would ensure the engagement of the public.

It was these policies that provided the basis for the submission to Defra for Round 2 funding.

Collections funded from Round 2 NWMRF

The Round 2 funding provided to EDDC was part of a partnership bid for funding to provide a total of 66,100 properties within Dorset with the fortnightly kerbside sorted collection, 34,800 of which were not yet provided with any kerbside collection. It also provided some funding for additional equipment and some redevelopment of 2 transfer stations, the MRF at Hurn and a depot, so that the sorted materials could be dropped off at local points. Finally, it covered some revenue costs to operate the collections during the first year and for promotion.

The funding received by EDDC covered the 3 vehicles necessary to provide the sorted collections to 13,700 properties and reusable plastic sacks for the paper. This represented one and a half collection rounds for the previous co-mingled collection. As the collection replaced an existing collection using 58L boxes, new boxes were not required. The kerbside sorted collection was launched in May 2003.

The collection uses stillage vehicles with stillages for brown, green and flint glass, and paper. Mixed cans and plastic bottles are collected in a cage on the same vehicle. The materials are delivered to the MRF at Hurn that is now used as a bulking station and for the separation of the co-mingled cans and plastic bottles. The gate fee and conditions remain the same as for the co-mingled materials.

As the collection replaced an existing collection but uses different vehicles, the vehicles used for the co-mingled collection were redeployed to service a new weekly compostable waste collection that targets food wastes, cardboard and soft green garden waste. Residents have been provided with 120L wheeled bins and kitchen caddies to collect these materials. To restrict the quantities of garden waste placed into the bins householders have been instructed that their bin will not be collected if the lid is not shut. Although not funded by Defra, the Round 2 funding effectively subsidised the compostable collection by providing alternative vehicles for the dry materials. The compostable collection was launched in March 2004.

EDDC funded the expansion of the kerbside sorted collection to a remaining 21,000 properties, so 91% of the residents are provided with the collection. The remaining 9% of properties are in very rural areas and would be expensive to serve.

Three additional staff were recruited to crew the stillage vehicles plus one Waste Reduction Officer, all of whom have remained in post subsequently.

Roll-out of the collection

The initial phase, comprising the 13,000 properties and funded by Defra was launched in May 2003. EDDC took the opportunity of the change in collection to rationalise the collection rounds so they operated in a more logical 'sweep' from west to east across the district. The compostable collection was introduced to residents in the east of the district in March 2004.

The remaining 21,000 properties changed to the kerbside sorted collections in March 2004 (funded by EDDC), and further properties were added to the compostable collections in October 2004. (Although the sorted collection covers 91% of properties the putrescible collection only covers approximately 30%).

Communications and promotion of the collection

Prior to the launch of the collections, articles were provided to the press describing the changes, for example, when the new vehicles arrived. Immediately before and during the launch, roadshows were held in the relevant areas. A couple of weeks before the new vehicles came into operation the reusable sacks were hand delivered to each household together with a leaflet explaining the new arrangements. As the kerbside sorted collection is slower than the co-mingled collection, most of the rounds and collection days also changed, so calendars were provided when the sacks were delivered.

EDDC does not operate a call centre and residents were provided with the main switchboard number and all queries were passed onto the staff in the Technical Services secretariat. The publicity surrounding the collections resulted in a large increase in calls.

On an ongoing basis articles appear in the quarterly council magazine. A programme of participation surveys is also being undertaken and following these residents receive feedback newsletters on EDDC's recycling performance. These frequently generate further phone calls with enquiries on the collections.

Performance of the collection

In 2002/03, the year prior to the introduction of the sorted collection, a total of 2,368 tonnes of dry recyclables was sold after MRF sorting for recycling, equivalent to approximately 69 kg/household/year. Between May 2003 and February 2004, 1,557 tonnes of dry recyclables were collected in the sorted collection from 13,700 properties, equivalent to approximately 136kg/household/year. In 2004/05 5,032 tonnes of dry recyclables were collected from 34,102 households, equivalent to 147 kg/household/year.

Participation in the scheme is estimated at an average of 60%. Thus, the capture by participating households in 2004/05 is approximately 246 kg/participating household/year.

It is difficult to accurately assess the additional recycling that has resulted from the introduction of the kerbside sorted collection because it replaced an existing collection, and also because of the phased roll-out, Round 2 funding only covering the first phase. However, as can be seen from the figures above, there has been more than a 2 fold increase in the quantities of dry recyclables being collected since the introduction of glass combined with the change to the sorted collection and the associated publicity surrounding the new collections.

In 2002/03 prior to the glass being included in the kerbside collection, 1,347 tonnes were collected in the bring banks. This has dropped to 739 tonnes in 2004/05. Overall, the quantity of material collected in the bring banks has fallen by 677 tonnes between 2002/03 and 2004/05. However, kerbside tonnages have increased by 2,814 tonnes (excluding MRF residues) in the same period, suggesting that the introduction of the kerbside sorted collections has resulted in more residents recycling

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The compostable collection generated 465 tonnes from 5,000 households between April and September 2004. In the subsequent 11 months, 2,177 tonnes were collected from 12,600 households, equivalent to 188 kg/household/year.

Overall, the combined BVPI 82a and 82b has increased from approximately 16% in 2002/03 to approximately 26% in 2004/05. Initial results for the first 5 months of 2005/06 show the rate rising to approximately 29%.

Overall, the quantity of waste collected has increased by approximately 8% between 2002/03 and 2004/05.

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 EDDC 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.

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	–	38,102	Weekly	22,030	45	26
Sorted dry	for 13,700 households	34,102	Fortnightly	5,032	101	15
Kitchen, card & some garden	-	12,600	Weekly	2,374	118	22
Total	-	38,102	-	29,437	61	47

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, the collection has been well accepted by residents and is considered to be a success by Officers. Particular successes and reasons for success are:

- the increase in tonnes collected following the introduction of the sorted collection;
- the use of the separate ‘broadsheet’ sized reusable bag for paper;
- being able to introduce the kitchen waste collections as an additional service;
- the improved quality of the materials compared to the co-mingled collections;
- good relationships with the WDA; and
- strong Member support.

Despite this, there is still room for improvement on participation, and the collections still fall short of the target.

Developments following the Round 2 funding

Expansion of the sorted dry recyclables collection

As already described above, the Defra funded scheme covered the provision of the service to 13,700 households. Twelve months after implementing this service EDDC funded the expansion to a further 21,000 properties, to cover 91% of the District.

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Introduction of the kitchen waste collection

The 2 RCVs that had been used to collect the co-mingled dry recyclables are now being used to provide a weekly collection of kitchen waste with cardboard and some garden waste.

Other

EDDC would like to expand the kitchen waste collection to the rest of the District. This will be necessary to achieve their policy target to provide kerbside collection of compostable material to 60% – 80% of properties by 2010. It may move to alternate week collection of refuse collection to drive up participation in the dry recyclables collections. However, EDDC is now able to achieve its statutory performance standard of 30% with the existing collections so finding the additional resources necessary for these proposed changes will be difficult. Also, moving to alternate week collections will be controversial and will require continued strong Member support.