

'Bring On' Recycling

The essential role of bring sites in achieving future recycling targets in the UK.

A Thought Leadership Report by Taylor Intelligence.



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> There is no doubt that local authorities across the UK have made great strides in increasing recycling rates in recent years. Indeed a recent Audit Commission report, *Well disposed: responding to the waste challenge* congratulates people and councils for their ongoing efforts to recycle and reduce the amount of waste produced in the first place. It highlights that recycling rates have quadrupled since 1999 and have dramatically reduced the amount of waste that ends up in the dump.

However, recycling levels will have to be further stepped up in the wake of Euro-MPs recently setting a new household waste recycling and reuse target of 50% by 2020 - with court action on the cards for governments failing to enforce the limits. Furthermore, the Scottish Government, building on an election manifesto pledge to move towards a "zero waste society", also proposed earlier this year to raise Scotland's national recycling rates with the aim of rising from the current 30% rate to a 40% recycling level in 2010 and then up to 70% by 2025. Whilst significant progress has been made we still lag behind other European countries when it comes to recycling rates. For example the Netherlands, Germany and Austria already recycle around half of their household waste. Local authorities in England, Wales and Scotland need to keep up the momentum if the UK is to become one of the best recyclers in Europe.

Kerbside collections have without doubt led to substantial increases in recycling over the The challenge, as acknowledged by Scotland's environment secretary, Richard Lochhead – and indeed the relatively untapped opportunity as identified by recent research conducted by the Caledonian Environment Centre – lies in gaining increased recycling participation from householders in high density, high rise apartments. Many of these buildings were the result of the tower-building boom of the 60s to provide housing for low income families.

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So how can these recycling targets be achieved? The development of recycling services in the UK over the last few years has focussed primarily on the introduction and expansion of schemes that hamess participation by offering residents convenient kerbside collections.

Kerbside collections have without doubt led to substantial increases in recycling over the past three years, with some UK authorities reporting recycling at 50% but such schemes are predominant in street level housing. The potential for increasing recycling rates through this approach is therefore limited to the number of suitable properties, and therefore other options need to be considered. In recent years, new high raise flats have become a prominent feature of cities, including Birmingham, Glasgow, Leeds, Cardiff, Liverpool, London and Manchester – this time for wealthy professionals. In Scotland alone 33% of the population are in multi-occupancy homes, many without any form of recycling.

Residents in these dwellings are often excluded from popular recycling schemes and there are practical problems regarding a lack of physical space for recycling containers. In addition there are significant fire safety issues, which negates the use of non-steel kerbside containers outside every door.

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> The research conducted on behalf of Taylor Intelligence by Professor Jim Baird at Caledonian Environment Centre, part of the School of the Built and Natural Environment at Glasgow Caledonian University, set out to evaluate the potential recycling yields from bring banks serving high rise apartments in a district in Scotland.

> > Significantly, it revealed that an extra 0.48kg/HH/week of co-mingled material for recycling could be achieved through bring banks/recycling facilities. Although representing only about 25% of kerbside, it would otherwise be zero without the recycling points and should therefore be seen as a critical element in making the necessary jump to new, tougher targets in the future.

The research centred on householders in West Whitlawburn Housing Co-operative in South Lanarkshire, which consists of six highrise apartment blocks. This was chosen as the South Lanarkshire Council had introduced six of Taylor's node^{ov} recycling facilities, which provide the opportunity to segregate paper, card, cans, tins and plastic bottles, in car parks surrounding the 495 properties distributed through six high rise apartments and several low rise, multioccupancy dwellings.

The aim was to explore their potential for capturing material not otherwise collected, or for offering recycling services to properties not suitable for kerbside collections, as well as examining how householders feel about using communal facilities of this kind.

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Fifty-one participants took part in the survey. of which 29 did not recycle and 22 did recycle. However of those 22 who did recycle, there were 16 new recyclers due to the recycling facilities being introduced, representing a 300% increase.

Of those that did not recycle, 41% said they potentially would be interested if they had more information about what was required.

The researchers identified that the introduction of segregated waste facilities has made recycling more accessible to respondents by making it more convenient. The study revealed that having these facilities adjacent to the properties, means that recycling trips are easily integrated into a wider range of trips, rather than before, when generally they were integrated into shopping trips. This is reflected in how frequently respondents use the recycling services (chart below) and the nature of their recycling trips.

How often do respondants use the node bins



> Weekly Veekly Fortnightly



Sixteen used the recycling centre more than weekly or weekly, whilst the other four used it fortnightly. Furthermore eleven respondents said they make dedicated recycling trips, seven said they integrate them with trips elsewhere and only two said that they integrated recycling into shopping trips.

Support for recycling in these high rise apartments was further evident from the range of materials respondents claim to recycle with 15 claiming they now recycle a wider range of materials than were catered for, including drink cartons, glass and yellow pages. Whilst contaminants were being placed in them, this was not identified as an issue by South Lanarkshire Council.

Of those that had recycled before the introduction of the facilities, five out of six said they now recycled more material.

In the same study for Taylor Intelligence, the Caledonian Environment Centre also surveyed householders in multiple occupancy properties in Glasgow. Interestingly here the recycling points were used to recycle material, such as glass, not collected through other services, which suggests that they can play a key role in complementing existing provision. This is further reinforced by an analysis of Scottish recycling schemes in 2006-7 conducted by the Centre for Remade Scotland, which revealed the potential for bring bank sites in supporting existing recycling facilities and thereby enhancing the convenience of recycling.

Whilst the research revealed that bring banks/recycling centres have significant potential in enhancing recycling performance and that 75% of users of the facility in \$outh Lanarkshire were

happy with the service (chart below), it also identified that servicing of such facilities and good communication are crucial if they are to play a critical role in helping local authorities meet new tougher targets in the future. The majority of those interviewed in the high rise apartments (50%), who had used the node[®] had found the bins full, preventing them from recycling. In addition 30% of the nonrecyclers would consider participation if they had more information, whilst 25% of those that used the recycling centre asked for information and frequent servicing of the existing facilities. In particular there was a lack of knowledge about which materials could be recycled and how local schemes work.

No

Do you find the bins easy to use?

Yes

No answe



Summary

With councils under significant pressure to maximise source segregation to meet recycling targets in the future and with the limitation of kerbside collections, the use of bring banks or other recycling systems in areas of high density, multi dwelling housing stock should form a key part of the waste strategies of local councils in the future as it is proven that they can capture material not otherwise collected. This is borne out by the Caledonian Environment Centre's research, which shows that householders in these type of dwellings, that have in recent years once again become a dominant feature of the UK's urban landscape, do use bring bank sites/recycling centres if they are conveniently placed.

Most significantly the study carried out by Professor Baird and his team revealed that the bring sites generated 0.48kg/household of new recycling – and when one is trying to up recycling rates by a number of percentage points, these smaller amounts become critical. By making a large number of small wins in multi occupancy high rise apartments, local authorities can overcome the limitations of further recycling from kerbside collections.

"Local authorities can no longer afford to ignore the potential of bring banks/recycling centres in such urban areas as they look to increase their recycling rates further"

The research suggests that local authorities can no longer afford to ignore the potential of bring banks/recycling centres in such urban areas as they look to increase their recycling rates further. Moreover, as London has the largest number of high rise apartments in the UK, such facilities will be an important consideration for the new London Waste & Recycling Board, which will help deliver increased sustainable waste management in London.

About Taylor Intelligence

Taylor Intelligence, a division of Taylor, the provider of innovative recycling and waste container solutions, horizon-scans trends in the waste and recycling collection and containment marketplace. It provides analysis and commentary on the impacts of these trends and legislative developments for waste containment and recycling collection.

Tel: 01299 251 333 www.taylorbins.co.uk

About Professor James Baird, Director of the Caledonian Environment Centre

Professor Jim Baird has undertaken waste-related studies for local authorities and the private sector in Scotland organised and presented on a wide range of waste courses. He is active in the Chartered Institution of Wastes Management and is currently its Scottish Centre Chair.

He is directly advising the Scottish Government on Waste and Recycling policies, including the Climate Change Bill, which is proposing that all Scottish businesses to have formal waste management plans. He is also advising on the new Scotland National Waste Plan due to launch in Autumn 2009.

The Centre offers a dedicated team of professionals with expertise in a varied range of environmental disciplines, including waste management, sustainability, environmental management and education.



Egbert H Taylor & Company Ltd Oak Park, Ryelands Lane Elmley Lovett, Droitwich. WR9 0QZ United Kingdom Tel: +44 (0)1299 251 333 Fax: +44 (0)1299 254 142 www.taylorbins.co.uk Egbert H. Taylor & Company Ltd. Registered in England No. 718441