

WHERE CAN YOUR RECYCLING GO?

Report of the ALDES Fringe Meeting, Autumn 2005 Conference

This was a well attended, very useful, lively meeting. Ray Georgeson, WRAP's policy director, gave an excellent presentation.

Following various Government and EU directives most councils, said Ray, are trying hard to increase the proportion of municipal waste which is recycled and searching for the optimum way to do it. Their initiatives are principally concerned with collection systems however, rather than what happens downstream. Yet, unless the waste is to be shipped overseas (as indeed much is), uses have to be found. It cannot simply pile up.

WRAP, the Waste and Resources Action Programme, was established in April 2000 as a Government funded non-profit making agency to find new markets for the waste stream. WRAP searches for potential uses, funds research, brings partners together and looks at supply chains. There is no point finding a new use and potential market if supply and demand swing widely out of balance - as happened in the past when over collection of waste paper for example led to plummeting prices and piles of rotting newsprint.

WRAP also provide 'last resort' seed corn finance. This includes the eEquip scheme which provides a financial safety net preventing innovators losing everything. Thus WRAP acts as a facilitator, minimising risk, building confidence, exploding myths. For example industry had not worked with horticulture before and there was no standard for material reduced to compost. Growers had no guarantee that 'recycled' compost contained specific concentrations of nutrients such as nitrogen and phosphate. WRAP funded research and trials comparing the compost against peat and drew up a certification scheme with the various partners. Two thirds of recycled compost is now certificated and has the ultimate seal of approval: it is used at RHS Wisley. Recycling statistics might be measured by volume or toxicity but are most easily recorded by weight and partly for this reason, and partly due to its high energy content, increased glass recycling has been a priority target.



All clear glass can be re-used in containers but a problem remains with green glass where imports, particularly of wine, exceed exports. Hitherto green and brown glass has been employed to prevent deterioration of red wine through light, but surveys suggest much volume supermarket wine is consumed within days and little is 'laid down' so clear bottles could often be used. Additional uses for green glass however have been found: as a high quality sand filter media in waterworks and swimming pools; for grit blasting; for golf course greens: and as a flux in brick making. Currently the market for plastics' recycling is dominated by small, Freds in sheds, operations and has a negative image. Any plastic reused in food packaging needs to meet tough standards enforced by the Food Standard's Agency. Even so 10-15% of recycled plastic is being used in large Pepsi bottles and Loughborough University have developed a fill material (Panelplus) for lorry body

skins which is lighter so increasing payload.

Plastic of course covers a range of very different compounds. When mixed they offer only a 'lowest common denominator' substance. Even so mixed plastic can be used in fence posts, garden benches, kerbstones, bollards and so on. There is a 1 1/2 mile walkway at Peterborough which incorporates 15000 plastic bottles which, though more expensive than wood, will require less maintenance.

Paper recycling has achieved a mature market and newspaper (a low grade paper) is virtually 100% recycled. Wood is recycled as wood chip mulch or safety surface material for playgrounds. The market for recycled aggregates is growing rapidly and was the main component of a rise in recycled materials from 1.8 to 2.5 M tonnes in the last year. One effect is that the UK is no longer the 'dirty man of Europe'. Helped by the accession of 10 new countries it is now in the upper half of the league, 11th out of 25 with

23% of municipal waste recycled last year (up from 17% 12 months earlier and 6% 4 years ago). Even this may understate the achievements because there is no standard EU measurement for recycling percentage and it is known some countries include items the UK omits.

So the recycling wagon has begun to motor though, at 23%, there is clearly a long way to go. WRAP are now searching for the best ways to recycle batteries, tyres and plasterboard and also improving collection systems. Currently there are myriad routes with no clear optimum. Should one collect on the doorstep or expect residents to go to a recycling point? Quantities will be higher with a doorstep system but collection costs will be higher too. Should one put all recyclables (glass, cans, paper etc) in one bag or in separate colour coded boxes? The first requires expensive sorting equipment at a centre, the second risks muddle and subsequent contamination. Educationally aware residents might cope but not others in poorer areas and these might simply not bother. Should whole glass (and plastic?) bottles and other containers be returned to the supermarket with a deposit refunded? In the Czech Republic a 90% return of glass bottles was achieved with a deposit system. However this requires sorting by the supermarket by colour, size and different manufacturer, because container shapes vary widely. How quickly could we change to a system of standard sizes as used in Canada and Germany? Local Government procurement and consumer awareness is important here. An attractive logo made up of a circular arrow with a heart shaped head is being introduced to indicate an 'easy to recycle' product.

Though worthwhile, recycling is not cheap. The landfill tax needs to be raised from the present £18/tonne to at least £36 to allow recycling to compete in a free market but the extra cost risks increased fly tipping. Similarly it is obviously counterproductive to charge for the collection of garden waste but, if free, more revenue is lost. Some money could be raised though by a charge on plastic bags as in Ireland.

Even setting aside price however, one should not expect to recycle everything. At some point the amount of energy used to transport, sort, clean up and deal with the by-product, will exceed the energy used providing the item in the first place. This will increase the overall carbon dioxide emitted which defeats one key purpose of recycling. This waste will still have to go to landfill or, better, energy from waste plants. An excellent meeting.