



Briefing 07/07

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TO: All Chief Executives, main, waster management and email contacts

Briefing – A Zero Waste UK

Key issues:

- The general meaning of zero waste is of a goal of zero waste to landfill over a period of five to 15 years: recycling 100 per cent of waste.
- To tackle waste properly and achieve zero waste, it will be necessary to look at how products are designed, made and used.
- Zero waste cannot be achieved by local government alone as it involves all sectors of the supply chain from design, production, manufacturing, packaging etc. through to retail and final consumption.
- Many authorities have achieved 40% recycling & recovery (or are close to it) but innovation will be needed to get beyond these levels involving sustainable solutions and new ways of thinking at a national level to achieve reduced consumption and increased environmental stewardship at a local level.

1. Introduction

The concept of zero waste has grown in popularity since the publication in late 2006 of the institute for public policy research (ippr) report of the same name. The concept of zero waste has been around for a number of years however and transforms waste management away from 'managing' to 'minimising' waste, as waste becomes fundamentally unacceptable. Being a relatively new concept, the breadth and depth of thinking and practice is undergoing significant development.

The concept also looks at product policy to persuade consumers to buy products that have less non-recyclable or hard-to-recycle packaging. This briefing looks at the main issues associated with creating a zero waste environment in the UK.

2. Background

The UK creates 300 million tonnes of waste each year with waste contributing 3% of the greenhouse gas emissions (mostly methane which is 21 times more warming than CO₂). Countries with established economies have systems which extract, produce, consume and then discard resources with few of these resources being genuinely recycled, and most staying in the economy for less than six months. In poorer countries, more is reused, but, as their economies establish so behaviours change. There is now much scientific evidence indicating that the planet's environmental limits are being reached in terms of the resources available or the environment's ability to absorb pollution.

3. Product Design

To tackle waste properly and achieve zero waste, it will be necessary to look at how products are designed, made and used. They should be designed to last, so that they become waste less quickly; they should be reused; they should be designed to be easily recycled; and, where possible, there should be a change in focus onto the service a product gives rather than on ownership of the product itself.

It is also necessary to go beyond simply recycling and think about all of a product's impacts: the so called 'cradle-to-cradle design'. However, most current economic drivers are towards ever-greater consumption and cheap, disposable products. Any change will need a new approach to dealing with waste and how things are manufactured. The indications are that this is also what the public wants even if their actions do not match the aspirations.

4. Zero Waste

The general meaning of zero waste is of a goal of zero waste to landfill over a period of five to 15 years: recycling 100 per cent of waste. A number of countries, regions and cities have adopted zero waste goals, such as, New Zealand, Philippines and San Francisco USA. In the UK, Bath and North East Somerset Council have adopted a long term vision of zero waste within their waste strategy. Many of these places have dramatically improved recycling rates and raised awareness about the nature of waste, with recycling rates of over 70 per cent being seen, in Flanders, Belgium, Kamikatsu, Japan and Canberra, Australia.

The major difficulty for local authorities in achieving zero waste is one of waste prevention, because they have little control over the kind of products that are put on the market. In the UK, the debates on waste and products have in the past been kept separate. The waste debate has revolved around meeting targets set by the EU for

diverting waste from landfill and for meeting packaging regulations. These targets have been successful in driving higher recycling, but have not helped to get any serious policy and business grip on waste prevention, or on the nature of products.

The Government's sustainable development strategy for the UK advocated decoupling economic growth from waste production and recognises that no longer can the ability to waste be seen as a sign of prosperity. The Government commissioned Stern review (see APSE Briefing 07-05) assessed the economic impacts of climate change with a key message from the review being that "stabilisation of carbon emissions and averting climate change is feasible and consistent with continued economic growth meaning the choice between climate and growth can be overcome". The same arguments could be used for waste. The revised waste strategy promised by the Government presents an opportunity to set out a vision of a zero waste society provided an appropriate package of policy measures is included.

5. Initiatives to achieve zero waste are likely to include

- ✓ *Setting higher household and business recycling targets*
Current targets for recycling are 40 per cent (by 2010) and 50 per cent (by 2020). The 2007 Comprehensive Spending Review is an opportunity for Government to set more ambitious targets with Scotland, Northern Ireland and Wales taking up parallel initiatives to drive forward on a UK wide perspective. A further initiative could be to set businesses recycling targets, which could be set on a sector basis.
- ✓ *Encourage more widespread charging for household waste*
Charging households for the amount of non-recyclable waste they produce offers the greatest potential for both increasing recycling rates and reducing the overall production of waste. Variable charging has been widely used in a number of countries including Australia, New Zealand, Denmark, Belgium and Ireland. Many organisations, including the LGA are lobbying for the forthcoming Local Government Bill to introduce powers to allow English local authorities to charge for household waste. However, before charging schemes receive government approval, local authorities will need to ensure that good kerbside recycling services are available, adequate communication strategies are in place, measures to deter illegal activity such as fly tipping, and find ways of coping with any disproportionate effects on low-income households.
- ✓ *Set a per capita residual waste target to drive better waste prevention*
This approach has been used in Flanders, Belgium where a target has been set of 150kg of residual waste (waste not recycled) per capita per year. In England, the per capita figure is presently about 400kg. The target if set at the appropriate level should stimulate waste prevention, not just from householders, but ultimately from producers as they react to pressure from the public.
- ✓ *Introduce better pricing of waste disposal to drive higher recycling rates*
The landfill tax is beginning to act as an effective price signal for encouraging waste producers to seek more sustainable waste management options, in

particular recycling. An option could be for the Government to increase the landfill escalator to £5 per tonne per year, so that the landfill tax exceeds £35 per tonne more quickly.

- ✓ *Ensure that incineration is not the preferred option over recycling*
The role of energy from waste continues to raise controversy and despite public reservations, some forms of energy from waste can represent a more sustainable option than landfill despite being a distraction from improving recycling performance. The risk is that waste may be steered towards the next cheapest or easiest option in the waste hierarchy as the cost of landfill increases due to the landfill tax escalator.
- ✓ *Consider bans on sending recyclable waste to landfill or incineration*
This approach works best for those streams that are clearly recyclable, but where price signals are not showing signs of driving big improvements.
- ✓ *Use public procurement to drive better products*
There is currently a large gap between the Government's aspiration to lead on green procurement, and practice on the ground. One method to drive innovation would be for public institutions to adopt 'waste neutral' objectives. This means seeking to balance the amount of waste sent offsite with recycled materials purchased. The new requirement for site waste management plans for construction and demolition projects in the Clean Neighbourhoods and Environment Act could be used as a driver.
- ✓ *Give more responsibility to producers – not just for dealing with waste, but also for designing out waste*
It is argued that "producer responsibility" does not seem to bite on individual producers enough to make them substantially rethink their products. Further producer responsibility measures are needed that will inspire new approaches to design.
- ✓ *Tax environmentally damaging or hard-to-recycle products*
This would involve the introduction of a product levy to shift behaviour from certain products towards better alternatives. This could include disposable or non-recyclable or hard-to-recycle products, such as cameras and non-refillable printer cartridges. There could also be a levy on composite materials, such as hard-to-recycle multi-layered beverage cartons and could also apply to plastic packaging, of which only two types of plastic are routinely recycled in the UK. The money from a levy on such packaging could be used to fund collection and recycling, or the charge could be levied in such a way as to encourage consumers to choose products with the best overall environmental performance.
- ✓ *Embed cradle-to-cradle thinking across government and in business practice*
The UK has, so far, suffered from a distinct reluctance to join up the waste and product agendas.

6. Challenges to Establishing a Zero Waste Strategy

There are a number of major challenges for local authorities because waste generation processes involve all sectors of society and are not always easily addressed at a local level. Additionally, the lack of any legislative requirement to reduce waste also acts as a barrier. Therefore the main focus of the zero target should be to encourage innovation rather than being seen as an absolute.

Many authorities have achieved 40% recycling & recovery (or are close to it) but innovation will be needed to get beyond these levels. This will involve sustainable solutions and new ways of thinking at a national level to achieve reduced consumerism and increased environmental stewardship at a local level. Additionally, further resource and investment in new technology and processes will be required to achieve progress.

7. APSE Comment

Although municipal waste levels collected fell in 2005/06 the trend over the last five years shows levels of waste rising at 0.5% per annum. The results for 2006/07 which will be published in autumn 2007 will provide further evidence if the trends of recent years will be sustained. Recycling and composting is increasing at faster rate than the level of waste and has reached 27% for 2005/06 but is still not at a fast enough rate to meet EU landfill targets by 2010 and still lags behind the majority of our European neighbours (sources Defra & National Audit Office).

Achieving zero waste will not be easy as the concept is challenging, and requires action from government, business and communities. Clearly zero waste cannot be achieved by local government alone as it involves all sectors of the supply chain from design, production, manufacturing, packaging etc. through to retail and final consumption. However, local authorities can take the lead with a zero waste vision (as shown by Bath & North East Somerset Council www.bathnes.gov.uk) by raising awareness in the local community, and encouraging community, business and householder participation. The vision must create a climate for continual improvement so local authorities can take a lead in facilitating the concept by developing further contracts and measures which prioritise material and resource recovery over disposal.

APSE believes there is no solution to this problem that does not involve a change in public behaviour. The public are going to need to take ownership to both reduce and separate waste. At present voluntary participation in recycling varies widely from 90% to 40% dependent on the success of communications and campaigns (source; research for Devon CC by Eunomia consulting). To increase this either a stick or carrot approach will be needed, providing economic drivers for behavioural change. It can be argued that a greater business process re-engineering (bpr) approach to waste management needs to be taken.

APSE is proposing that an approach based on increased education and awareness of the issue together with some form of charging (or incentive) to encourage both recycling and waste minimisation (and prevention). This could involve giving every individual an "Annual Household Residual Waste Allowance". This individual allowance would overcome the common argument that large families would be penalised as they would be allowed a greater allowance. The incentive would be to dispose of less waste than your allowance.

There are a number of questions with such a policy. Charging schemes have attracted considerable negative publicity especially over possible increases in fly tipping and cross contamination. In Europe a range of charging schemes are in operation with the common view taken is that although there is some illegal measures taken these are outweighed by the benefits. The evidence from one scheme in Flanders, Belgium shows that substantial reduction in residual waste can be achieved. There is no evidence to suggest that such a scheme would not work for the UK and could act as a driver towards zero waste strategies.

The recent local government white paper; strong and prosperous communities is an opportunity for the Government to commit to increasing recycling and reducing overall waste production by giving local authorities increased powers to manage the issue of household waste. The Lyons Inquiry into local government is also investigating the possibility for charging for waste as an alternative to tax.

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