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Briefing 13/35

The impact of the economic downturn on household waste generation

To: All APSE contacts in England

Key Issues
- This briefing assesses the impact of the economic downturn on household waste generated and the associated costs.
- The analysis is based on figures collected by the APSE Performance Networks refuse service and data extracted from Waste Dataflow with analysis covering the years 2007/08 to 2011/12.
- Although there are a number of other factors that are contributing to overall household waste reductions, it is safe to say that the economic downturn has been the major reason.
- However, the total costs continue to rise steadily ahead of the GDP Deflator projections but it is reasonable to expect these to level out once revenue funded ‘capital’ investment in recycling schemes steadies.
- The combination of a general reduction in waste generation along with an increase in the amount of waste being recycled has led to a significant reduction in the amount of residual waste going to landfill. The effects of the increase in landfill tax therefore has, and will continue to be, significantly reduced.

1. Overview

This briefing uses data from the APSE performance networks refuse collection service to assess the possible impact of the economic downturn on household waste generated and the associated costs.

Background

Refuse collection is at the forefront of local public service delivery and at a neighbourhood level is often considered to be the visible face of ‘the council’. Media debates around recycling, carbon reduction and green initiatives show no signs of abating even with the current economic climate and in spite of year on year improvement in performance in household waste collection and recycling, throughout the UK.

The global financial crisis first touched the England when Northern Rock collapsed in 2007 and six years on England remains within an economic downturn. In 2009 Chancellor Alistair Darling forecast the biggest deficit in UK financial history- £175 billion- the difference between the government’s annual income and its outgoings. In 2011 there was growth in the first three quarters, but the economy contracted again at the end of the year. Unemployment peaked at 2.6 million, the highest since 1996. The squeeze on household spending intensified as inflation topped 5%. In 2012 the government announced big welfare changes and said its austerity programme would last longer than thought. 2013 began with the UK loosing its AAA credit rating. The economy grew 0.3% in the first quarter, narrowly avoiding a triple-dip recession and growth has been broadly flat now since the beginning of 2012.
This economic context and the government's approach to paying off the deficit has impacted on local government finance. Since 2007 Councils have seen a 33% cut in funding from central government. This has led to reductions in local services in some areas. Local government was exempt from a further reduction in funding in 2013-14. The position for 2014-15 is not yet clear. However the Department for Communities and Local Government has already agreed to a 10% cut in its budget with the Treasury for the next spending round, which will have an ongoing impact on revenue support to councils in England up to at least 2017. Any further cuts next year and beyond are likely to have a significant negative impact, particularly as the rising demand for, and cost of, services such as adult social care and changes to National Insurance are already guaranteed to soak up an increasing share of local government funds.

Approach to analysis

The approach undertaken in this report in assessing the impact of the economic downturn on residual waste arisings has been as follows:

- Firstly, to assess the total household waste generated in England year on year since 2007/08 and to identify the possible reasons for any decrease.
- Secondly, to compare the increased cost of the overall recycling and residual waste service and map this against the anticipated increase in costs using the GDP Deflator projection.
- Finally, to assess the relationship between increasing costs and falling tonnages of waste generated.

The analysis is based on figures collected by the APSE Performance Networks refuse service. The report also draws from data extracted from Waste Dataflow. Averages across the whole service are used, where by we mean the average data returns from all local authorities participating in the refuse performance networks service. Data returns from English Local Authorities have been focused on as authorities in Wales and Scotland operate under different policy frameworks. The most recent data set referred to is 2011/12 with analysis covering the years 2007/08 to 2011/12.

The Gross Domestic Product (GDP) deflator has been applied to performance figures relating to cost of service in this report. GDP deflator is a measure of the change in prices of goods newly produced within a country over the course of a specific time period with GDP used as a common measure for growth. The GDP deflator is used in economics to account for inflation. In this report it has been used to indicate what the expected cost of service should have been for that year taking into account changes in GDP and inflation but assuming all other cost factors remained constant.

2. Trend analysis

2.1 Household waste generated since 2007/08

The analysis of household waste data in England illustrates a reduction in total household waste since 2007/08. As the graph below indicates total household waste collected by the English Authorities has reduced year on year. Since 2007/08 to 2011/12 the total tonnage has fallen by 10.76%.
There are a number of reasons that will have contributed to this reduction. Firstly, the economic downturn since 2007/08 has seen a fall in real incomes and consumer spending. This will reduce the volume of goods being replaced and disposed of as well as reduce the amount of packaging used for food and consumer goods that results in recyclable or residual waste.

However, it would not be accurate to say that all of the reduction is due to this. Part of the reason for lower household waste generation is a result of greater environmental awareness leading consumers to select products with less packaging; longer life expectancy in electronic and white goods; more considerate food quantities; increased home composting and recycling.

Indeed over the same time period local authorities have seen an increase in the tonnes of household waste that is recycled, re-used or composted. As this graph below indicates the household waste recycled, reused and composted has increased year on year. In 2007/2008 a total of 34.60% was achieved and this has increased to 42.31% by 2011/2012. Local Authorities have been at the forefront of driving waste minimization strategies and this year’s data continues to demonstrate that service is improving on key areas such as recycling and composting of waste and reduction in the volume of waste sent to landfill.
Meanwhile, manufacturers and retailers (especially supermarkets) have made a conscious effort to reduce excess packaging and reduce bulk and weight of bottles and packaging. In addition, the value of many recyclates today has created a booming private and third sector market collecting materials directly and hence reducing the tonnages going through local authorities. There has also been a growth in the ‘re-use’ industries whereby re-usable materials may or may not go through the local authority waste management systems.

2.2 Cost of waste service since 2007/08

Analysis of the APSE Performance Networks performance indicator 01a- Cost of refuse collection service per household including central establishment charges (CECs)- shows that the cost of refuse collection services across the UK per household has risen from £66.31 in 2007/08 to £75.66 in 2011/12, against a GDP Deflator trend that would have expected 2011/12 projections of £72.48. It might be hoped that a reduction of 10% in the total waste generated would lead to a reduction in costs to local authorities as a result of reduced operational costs and lower landfill and disposal costs. However, this cost increase is likely to be as a result of invest-to-save measures such as those aimed at reducing waste and increasing recycling for the longer term as explained in more detail below.

A number of factors are likely to have contributed to this cost increase. Probably the most significant and sizeable aspect of increased costs will relate to the continuing expansion of recycling initiatives. The total tonnes of domestic waste sent for recycling per household per annum (PI 3b) has risen from 0.38 tonnes to 0.43 tonnes (an increase of 13%) and the percentage of households covered by kerbside recycling collections (PI 11) has risen from 95.77% to 98.65%. In addition, many of the more recent recycling initiatives have been the more difficult and expensive to implement, for example food waste.

Another major cost factor is the significant increase in landfill tax from £24 per tonne in 2007/08 to £56 per tonne in 2011/12; an increase of 133%. However, residual waste sent to landfill per annum per head of population (PI 32a) is down from 347.1 kg to 194.72 kg, a fall of nearly 44%. This would go some way to negating the increased cost of landfill tax.
The revenue funded investment in recycling schemes (PI 03a) has continued to grow disproportionately to the GDP deflator projections up until 2010/11 but according to APSE data has levelled out over the last two years to narrow the gap. A reason for this could be that local authorities had to initially invest in new equipment, vehicles etc with the changes in recycling over recent years. This trend is shown in the graph below.

Other APSE Performance Indicators also show that labour, transport and central cost ratios have consistently run ahead of the GDP Deflator projections between 2007/08 and 2011/12 with Central Establishment Charges increasing from 3.75% to 4.76%. However, the gap is much narrower than the total cost differential (PI 01a) as the graph below shows.
Also, set against this there has been a widespread drive to keep costs down through reductions in residual household waste collection frequencies, optimisation of collection rounds, introduction of charges for elements of the waste service (e.g. green waste collections), greater exploitation of chargeable trade waste services and improved staff absence management.

3. Conclusions

Although there are a number of other factors that are contributing to overall household waste reductions, it is safe to say that the economic downturn has been the major reason. For the time being total costs continue to rise steadily ahead of the GDP Deflator projections but it is reasonable to expect these to level out once revenue funded ‘capital’ investment in recycling schemes steadies.

The combination of a general reduction in waste generation along with an increase in the amount of waste being recycled (41.16% in 2011/12 compared to 33.29% in 2007/08) has led to a significant reduction in the amount of residual waste going to landfill. The effects of the increase in landfill tax therefore has, and will continue to be, significantly reduced.

4. APSE Comment

As local authorities continue to tighten their belts in the face of austerity and public spending cuts, the focus on efficiency and performance in the delivery of frontline local government services is essential for senior managers, councillors and staff. The pressure to demonstrate value for money to a range of internal and external stakeholders; continue to evidence that services are competitive both against their peers and other providers; and develop new and innovative approached to transforming the shape of local public services has never been greater. There is an on going need for robust and good quality performance information in order to benchmark services, identify improvement opportunities and demonstrate value for money. APSE Performance Networks is a service that is designed to support local performance management frameworks.

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