

More competition, less waste

**Public procurement and
competition in the municipal
waste management sector**

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EXECUTIVE SUMMARY

This report aims to identify how the use of landfill to dispose of municipal waste in England could be reduced through the development of competitive markets. It also considers how competition could be enhanced for the municipal waste collection services. It draws primarily on research conducted as part of the Office of Government Commerce (OGC) Second Kelly Market (SKM) waste management project. The value of the municipal waste management services sector is estimated to be approximately £2 billion.¹

Changing policy environment

Historically, the UK has been reliant on landfill for waste disposal. However, recent EU legislation, in particular the EU Directive on landfill waste (the Landfill Directive),² and government regulation, means this must change. This new legislation requires substantial reductions in the amount of biodegradable municipal waste (BMW) being landfilled.³

The Department for Environment, Food and Rural Affairs (Defra) is responsible for putting in place policies and support mechanisms that:

- ensure the diversion of municipal waste away from landfill, and
- help local authorities deliver around £300 million worth of efficiency gains in waste services.

¹ Defra Local Authority Waste Recycling, Recovery and Disposal (LAWRRD) model. See: www.defra.gov.uk/corporate/consult/wastestratreview/partialRIA.pdf

² Council Directive 99/31/EC of 26 April 1999, entered into force 16 July 1999. www.europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31999L0031&model=guichett. This Directive has been implemented in England and Wales: The Landfill (England and Wales) Regulations 2002.

³ EU obligations require the volume of BMW sent to landfill to be reduced to 75 per cent of the 1995 level produced by 2010; 50 per cent by 2013; and 35 per cent by 2020.

Government is committed to achieving landfill reduction targets, derived from European directives, and in order to meet Defra's statutory waste targets (and avoid the fines for exceeding the landfill allowances),⁴ local authorities (LAs) will have to turn increasingly towards new waste treatment technologies to manage municipal waste. However, the infrastructure to meet the waste targets does not currently exist, with some estimating that 2,300 new waste treatment facilities will be required by 2020.⁵ Evidence suggests that even if the currently planned treatment facilities were completed within the project timescales, there is a serious risk that the Landfill Directive targets would still not be met.⁶

The changing policy framework, sheer volume of legislation related to waste management and the burden of keeping up to date with changes in regulatory requirements is creating a climate of uncertainty. Defra, through its Waste Implementation Programme (WIP), already provide extensive support and funding to overcome this uncertainty and the aim of the Defra *Review of Waste Strategy*, due to be published later this year,⁷ is to improve policy clarity and promote private sector investment in the treatment facilities the UK needs.

Why is competition important?

Competitive markets are vital to the delivery of Defra's objectives, to ensure the diversion of municipal waste away from landfill, and to help local authorities deliver around £300 million worth of efficiency gains in waste services.

Within competitive markets efficient firms grow and are rewarded for their investment and innovation. Procuring from such markets will therefore help ensure that cost effective capacity is put in place to meet Defra's objectives.

⁴ In order to incentivise local authorities to meet the targets, the Landfill Allowance Trading scheme has been introduced under the Waste and Emissions Trading Act 2003. This also includes fines of £150 per tonne for exceeding the allowance.

⁵ *The State of the Nation 2004*, published by the Institute of Civil Engineers, June 2004.

⁶ Based on evidence collected as part of the OGC SKM project.

⁷ The review of the Waste Strategy is currently out for consultation. See: www.defra.gov.uk/corporate/consult/wastestratreview

In the waste management sector, competition is about the intensity of rivalry between bidders to provide both a quality service and a fair price, and about openness to new entrants. As the treatment sector grows it is vital that LAs avoid the pitfalls associated with over dependency on a limited number of suppliers. This paper sets out the issues they will face.

Key findings

Municipal waste collection

Unlike treatment, the collection of municipal waste is relatively easy for many firms to provide. Small firms are likely to be able to deliver waste collection contracts as efficiently as larger firms.⁸

Local authority in-house providers (known as Direct Service Operators (DSOs)) are currently the major players in the municipal waste collection sector, holding around 52 per cent of contracts by tonnage, and this prevalence does not appear to vary across regions. The remaining contracts are held by the larger waste management services suppliers and a number of smaller suppliers.

LAs may be able to make more of competition for municipal waste collection services by setting contract length to reflect the need for suppliers to be able to recover sunk costs: as the typical asset life is estimated to be around five years this may be an appropriate upper limit. In order to encourage more bidders, LAs should also avoid setting selection criteria requiring suppliers to have previous experience in the municipal waste collection sector. When including in-house providers in an invitation to tender LAs should take care to ensure fair competition so that private suppliers are not discouraged from bidding.

The following table summarises the OFT's recommendations for the procurement of municipal waste collection services.

⁸ This is in the absence of significant economies of scale and scope. The irrecoverable costs involved are not likely to be significant and entry barriers are relatively low. Average costs of collection will fall with rising output (economies of scale) to a limited extent, that is, only up to the size of the collection vehicle. More significant will be the cost advantages that firms with contracts to collect waste from closely located households possess over those firms having to travel greater distances between households to collect the waste (economies of density).

Table A: OFT recommendations for municipal waste collection

Recommendation	Reasons
<ul style="list-style-type: none"> Let contracts of a length to enable suppliers to recover any sunk costs but no longer. As suppliers indicated that typical asset life is around five years, this may be an appropriate upper limit. 	<ul style="list-style-type: none"> Relatively short lifespan of assets and the ability to recover costs on exit through selling vehicles on the secondhand market, suggests contracts need not be more than a few years. On average we found that collection contracts last seven years, but can last up to 26 years. The OECD⁹ reports shorter contract lengths in other countries (for example, three - five years in Italy). The longer the contract, the greater the risk of deterring other firms from bidding because the incumbent supplier has a more established position and detailed knowledge of costs; and the less flexibility local authorities have to adapt to changing circumstances.
<ul style="list-style-type: none"> Use 'open'¹⁰ procurement processes. 	<ul style="list-style-type: none"> Relatively simple nature of municipal waste collection suggests that there is less justification for 'restricted'¹¹ or 'negotiated' procurement processes.
<ul style="list-style-type: none"> Care should be taken not to set overly restrictive selection criteria. 	<ul style="list-style-type: none"> Relative ease of specifying and monitoring collection services suggests previous experience of providing collection services is not vital. Limited economies of scale suggest that small firms should be able to compete, so should not be excluded by the selection criteria.
<ul style="list-style-type: none"> Arrange access or acquire sites where potential suppliers' access to facilities is difficult. 	<ul style="list-style-type: none"> Potential suppliers may be deterred from bidding for contracts if they do not have access to necessary facilities, such as vehicle depots or transfer stations.

⁹ Organisation for Economic Cooperation and Development (OECD) report, *Competition in local services: Solid waste management 2000*.

¹⁰ 'Open' procurement is where all suppliers can tender.

¹¹ Restricted procurement is a two stage process where all suppliers may express an interest but only those suppliers (a minimum of five) selected from those who meet the client's minimum requirements for economic and financial standing and technical capabilities may tender.

<ul style="list-style-type: none"> • Consider carefully what services are aggregated and why when jointly procuring municipal waste collection with other waste management services. 	<ul style="list-style-type: none"> • No evidence suggesting significant cost savings from the joint provision of collection and other waste management services. • Bundling collection with other waste management services, particularly landfill, may significantly restrict the number and type of bidders.
<ul style="list-style-type: none"> • Ensure fair competition between in-house and private sector bidders. 	<ul style="list-style-type: none"> • Competition between DSOs and private sector will drive efficiency and improve value for money.
<ul style="list-style-type: none"> • Be aware of the risks of collusion, for example, monitor results. 	<ul style="list-style-type: none"> • If contracts are tendered frequently and there are repeated interactions between firms there are opportunities for collusion. • OECD has cited evidence of anti-competitive behaviour in other countries.

Municipal waste treatment

The policy direction is clear – more waste in the UK will be treated or recycled rather than sent to landfill. Waste treatment is more capital intensive than landfill, due to the processing facilities required, and this raises the level of challenge in ensuring that a competitive market emerges.

When procuring municipal waste treatment services LAs often enter into a long-term contract with a supplier who will both build the facility and then treat the waste for a given number of years.

Currently larger private sector firms able to supply integrated waste management services¹² are prevalent in this sector. In some regions a single firm may hold a very high market share. This may be associated with the location of supplier's assets such as landfill sites as local authorities may aggregate treatment and landfill contracts. Therefore, particular care should be taken about aggregating municipal waste treatment and landfill contracts. Finding mechanisms to deliver bids from a number of suppliers, both within and outside the region, is a priority to mitigate the risk of regional monopolies developing and becoming entrenched. Disaggregation of contracts may be a way of achieving this aim. LAs should also take care to guard against the risks of

¹² Integrated contracts cover all waste management services - collection, treatment and disposal (landfill).

collusion. For example, information relating to 'deal flow' of waste management contracts may encourage bidding but care needs to be taken to avoid giving suppliers the ability to collude and share out contracts.

The table summarises the OFT's recommendations for the procurement of municipal waste treatment services.

Table B: OFT recommendations for municipal waste treatment

Recommendation	Reasons
<ul style="list-style-type: none"> • Weigh up carefully the costs and benefits of specifying inputs as opposed to outputs. 	<ul style="list-style-type: none"> • Specification of which treatment technology a LA wants to procure risks restricting bidder participation and reducing scope for innovation.
<ul style="list-style-type: none"> • Arrange sites and planning permission prior to putting contracts out to tender where possible or share the risk with suppliers. 	<ul style="list-style-type: none"> • Considerable risks relate to obtaining planning permission and it is often a lengthy, difficult process, which could deter bidders not best placed to manage these risks. • Many LAs have not identified sites for planned facilities and the lengthy planning process threatens delivery against statutory waste targets.
<ul style="list-style-type: none"> • Remain open to consortia bids, especially where smaller waste management companies and companies with relevant experience from other sectors are involved. 	<ul style="list-style-type: none"> • Suppliers' previous experience in the waste management sector is often a prerequisite for LAs. • There may be potential suppliers with the relevant skill set (for example, from the construction industry) and smaller waste management companies who may be able to join a consortium, widening the supplier base.
<ul style="list-style-type: none"> • Consider carefully what services are aggregated and why. • Particular care should be taken about aggregating municipal waste treatment and landfill contracts. 	<ul style="list-style-type: none"> • Aggregating treatment with landfill contracts can strengthen regional dominance of suppliers who own landfill sites. • Economies of scale may justify aggregation of contracts and larger contracts may attract more bidders. But they also potentially exclude smaller suppliers so the approach to aggregation must balance these risks.
<ul style="list-style-type: none"> • Encourage bids from suppliers active outside the region, for example, by ensuring that they will have access to landfill sites. 	<ul style="list-style-type: none"> • Potential suppliers may be deterred from bidding for contracts if they do not have access to necessary facilities, such as landfill sites.

<ul style="list-style-type: none"> • Ensure fair competition between private sector bidders and LAWDCs. 	<ul style="list-style-type: none"> • Some suppliers have indicated that they would rarely bid in direct competition with a LAWDC. • Fair competition between local authority waste disposal companies (LAWDCs) and private sector will drive efficiency and improve value for money.
<ul style="list-style-type: none"> • Consider building waste treatment facilities that can meet the needs of the industrial and commercial sector as well as LA demand. 	<ul style="list-style-type: none"> • Limited anecdotal evidence suggests LAs may not be able to build treatment facilities with additional capacity to service private sector demand. • Competition for industrial and commercial waste may be adversely affected by LAs actions. Industrial and commercial waste accounts for a much more significant proportion of the waste stream. • Larger treatment facilities will be better able to realise economies of scale which means waste will be cheaper to treat.
<ul style="list-style-type: none"> • Be aware of the risk of collusion. • The results of competitive tendering at a regional/national level should be subject to independent monitoring. Defra and LAs should be aware of risks of market sharing. 	<ul style="list-style-type: none"> • Certain characteristics of the municipal waste treatment sector may facilitate collusion: • Relatively few suppliers and few new entrants in the treatment sector; • Need for many new treatment facilities so scope for repeated interactions between suppliers; and • Current strong regional variation in presence of suppliers could provide a basis for collusion, for example, by regionally sharing markets.