



**Caledonian
Environment
Centre**

**An assessment of the factors
contributing to the
Top 10 English Councils' Recycling Rates**



SUSTAINABLE SOLUTIONS

**Report to COSLA
(under the Scheme Optimisation Programme)**

November 2009

An assessment of the factors contributing to the Top 10 English Councils' Recycling Rates

Submitted to: COSLA (under the Scheme Optimisation Programme)

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Remade Scotland was the first UK market development programme for recycled materials. The programme has evolved to provide specific Scottish market intelligence, technical research and recycling performance support to Scottish Local Authorities and the Scottish Government. The Scottish Government contracts with the Caledonian Environment Centre (part of Glasgow Caledonian University) for the delivery of the programme.

The Caledonian Environment Centre is part of the School of the Built and Natural Environment, Glasgow Caledonian University and is supporting environmental research and policy development in Scotland.

Glasgow Caledonian University is a registered Scottish charity, number SC02147



Executive Summary

As part of the Remade Scotland Scheme Optimisation programme, a number of Local Authorities have requested a package of work surrounding the investigation of potential areas for improvement as demonstrated by English Local Authorities with high recycling rates. This report aims to highlight the main features of the highest performing collection authorities in England.

In June 2009 letsrecycle.com reported on the ten English Local Authorities with the highest household waste recycling and composting rates¹ in 2008/09. These top ten English Councils were subsequently confirmed after DEFRA's official release of 2008/09 figures on 5th November 2009².

At the time of analysis, public access to English WasteDataFlow tonnages was available up until December 2008 only. Kerbside recycling tonnages were, therefore, collated for all ten Councils for the calendar year 2008 (except at Uttlesford DC where compostable waste was collected in only three quarters). Details of kerbside residual waste and recycling schemes were also compiled from Council websites and publicly available council documents.

The analysis suggests that a number of factors are likely to affect the recycling and composting rate of Local Authorities but that not all attributes are present in all top performing Councils.

The main contributing factors to the high recycling rates of the top ten performing English Councils in 2008/09 are thought to be:

- High performance in kerbside compostable waste services
 - *Food waste is collected at the kerbside*
 - *Collection frequency is at least once a fortnight*
- Moderate to high performance in kerbside dry recycling schemes
 - *A wide range of materials are collected*
 - *Collection frequency is at least once a fortnight*
- All Councils collect residual waste on a fortnightly basis
 - *Many Councils collect residual waste in 180l wheeled bins*
- Dry kerbside services appear to be extended to serve the majority of flatted properties
- Compostable kerbside services appear to be extended to serve at least some flatted properties in some Local Authorities
- The vast majority of bulky uplifts incur a charge

¹ http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=5315&listitemid=52221

² http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=217&listitemid=53847

- *Any residual waste not uplifted by collection crews is diverted outside the collection authority to Household Waste Recycling Centres*
- Commercial waste is not included in household recycling and composting figures

Factors which were not taken into account (but which may still affect performance) include:

- Number of inhabitants per household
- Age of population
- Deprivation index
- Property archetype beyond basic description i.e. own door/ flatted property

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1. Introduction

As part of its 2008/09 programme, Remade Scotland have offered all Scottish Local Authorities five days of support to assist with the ongoing challenges of achieving higher recovery rates. Remade Scotland has worked with COSLA through a Local Authority Steering Group to deliver a method of approach to assist Councils optimise their recycling schemes.

The programme involves discussions with each of the Councils on their objectives and needs which may come under the following themes:

- Review the current kerbside dry recycle collection service;
- Identification of areas of potential enhancement;
- Examination of the opportunities where additional or new and innovative services can be introduced;
- Assessment of carbon savings.

As part of the programme, a number of Local Authorities have requested a package of work surrounding the investigation of potential areas for improvement as demonstrated by English Local Authorities with high recycling rates. This report, therefore, aims to highlight the main features of the highest performing collection authorities in England.

2. Methodology

In June 2009 letsrecycle.com reported on the ten English Local Authorities with the highest household waste recycling and composting rates³. These top ten English Councils were subsequently confirmed after DEFRA's official release of 2008/09 figures on 5th November 2009⁴.

³ http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=5315&listitemid=52221

⁴ http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=217&listitemid=53847

Table 1 – The top ten English Councils in terms of household waste recycling and composting rates

Local Authority	Household waste recycling and composting rate 2008-09 (%)
Staffordshire Moorlands DC	61.58
Cotswold DC	60.83
East Lindsey DC	59.45
South Hams DC	57.9
South Shropshire DC	57.45
Teignbridge DC	57.37
Huntingdonshire DC	57.16
Waveney DC	55.91
North Kesteven BC	55.69
Uttlesford DC	53.73

Source: DEFRA

At the time of analysis public access to English WasteDataFlow tonnages was available up until December 2008 only. Kerbside recycling tonnages were, therefore, collated for all ten Councils for the calendar year 2008 (except at Uttlesford DC where compostable waste was collected in only three quarters). Details of kerbside residual waste and recycling schemes were also compiled from Council websites and publicly available council documents.

Average performance in kg/hh/wk was calculated, where the number of households was that in the final quarter of 2008. Some materials are not collected from all households; however, to simplify the calculation, the number of households attributed to kerbside services was that associated with the material which is collected from most households.

WasteDataFlow does not provide information on flatted properties. Very few details were found of recycling services serving multiple occupancy properties; however, from 2001 census estimates it was possible to gain approximate proportions for the number of flatted properties in each Council area. Comparisons were also made between households served by a dry recycle scheme and those served by a compostable waste scheme.

3. Factors

3.1. Factors affecting high performance

The analysis suggests that a number of factors are likely to affect the recycling and composting rate of a local authority but that not all attributes are present in all top performing Councils; these factors will be discussed in the following sections. Factors which were not taken into account (but which may still affect performance) include:

- Number of inhabitants per household
- Age of population
- Deprivation index
- Property archetype beyond basic description i.e. own door/ flatted property

3.2. Recycling schemes

Kerbside collections

All top performing councils perform very well in at least one aspect of kerbside collection. Staffordshire Moorlands excels in terms of average yield in its compostable waste service at 7.75 kg/hh/wk. This is a combined food and garden waste service. Nine of the top ten Councils achieve dry recyclate yields of between 3 and 4.29 kg/hh/wk (which is comparable to the higher performing Scottish Councils) and only one surpasses anything achieved in Scotland; North Kesteven with 5.59 kg/hh/wk compared with Midlothian Council which averages 4.65 kg/hh/wk to all households on a kerbside dry recycling service.

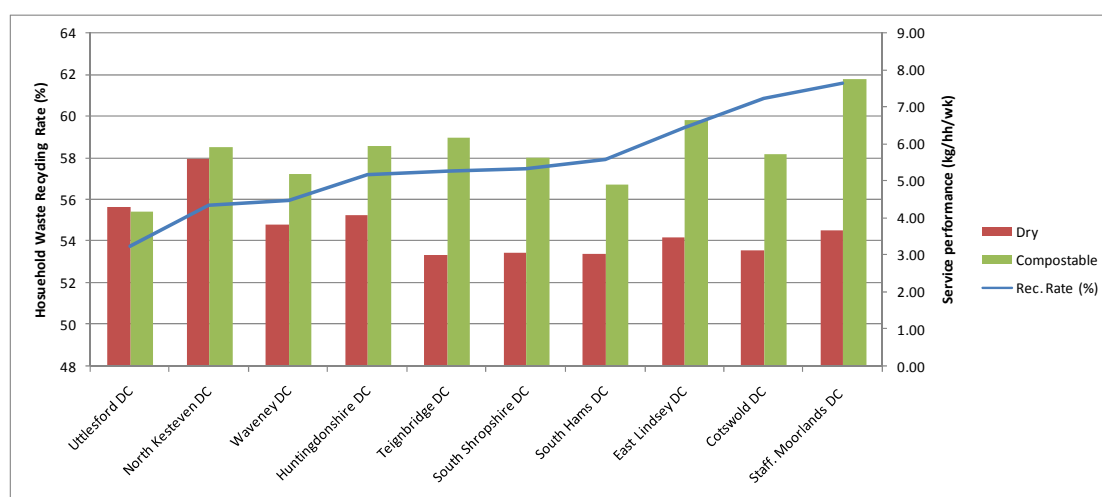
One feature of all but two of the Councils' characteristics is a kerbside food waste collection. In fact, this appears to be one of the main areas where the top English Councils perform above Scottish Local Authorities. In *Figure 1* we can see that the performance of the kerbside compostable waste service is more correlated to overall recycling rate than the performance of the kerbside dry service.

Table 2 – Kerbside services in the top performing Councils

Council	Recycling Rate %	Standard kerbside service					Extra kerbside collections							
		Kerbside Dry (kg/hh/wk)	Compostable (kg/hh/wk)	Food waste only	Garden waste only	Food & garden waste	Fridges & Freezers	Furniture	WEEE	Other scrap metal	Batteries	Books	Card	Glass
Staffordshire Moorlands DC	61.58	3.68	7.75			✓	✓							
Cotswold DC	60.83	3.13	5.71	✓		S	✓	✓	✓					
East Lindsey DC	59.45	3.46	6.64		✓		✓		✓	✓				
South Hams DC	57.9	3.04	4.89			✓	✓							
South Shropshire DC	57.45	3.05	5.63			✓								
Teignbridge DC	57.37	3.00	6.15			✓	✓		I	I	I			
Huntingdonshire DC	57.16	4.09	5.92			✓								
Waveney DC	55.91	3.81	5.18			✓			✓					✓ ⁵
North Kesteven DC	55.69	5.59	5.89		✓									
Uttlesford DC	53.73	4.29	4.15	✓	C		✓		✓			✓	✓ ⁶	

I – included in standard kerbside collection, C – charged, S – subscription only

Figure 1 - Recycling rate vs. dry and compostable kerbside service performance



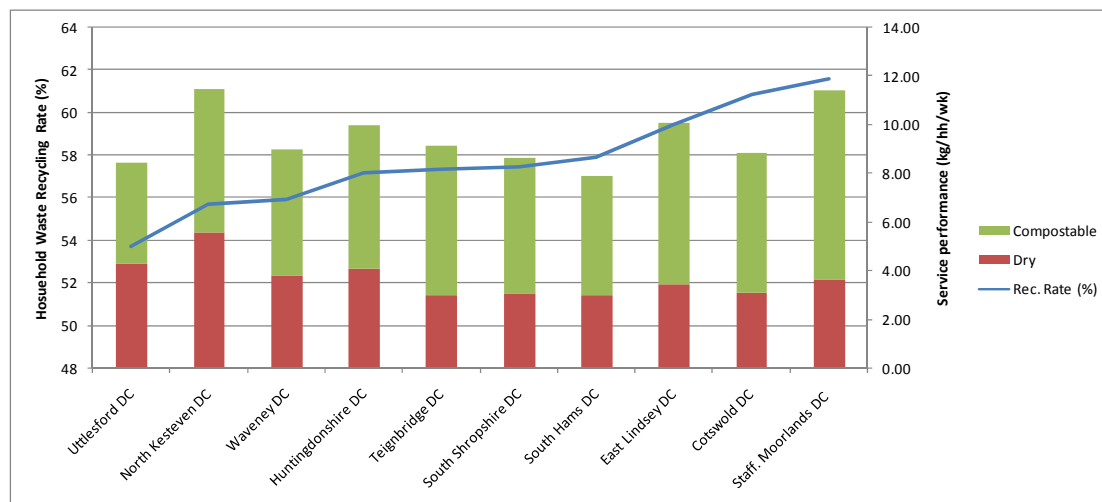
It is clear from *Figure 2* that the standard kerbside service performance is not the only factor which affects overall recycling rate. We know that some Councils also collect fridges and freezers and other WEEE from the kerbside and operate single

⁵ To a limited number of households

⁶ To a limited number of households

stream collections (e.g. card or glass) to limited numbers of households. Other influences such as kerbside service coverage, recycling points and HWRCs may also have an effect.

Figure 2 – Recycling rate vs. standard kerbside service performance

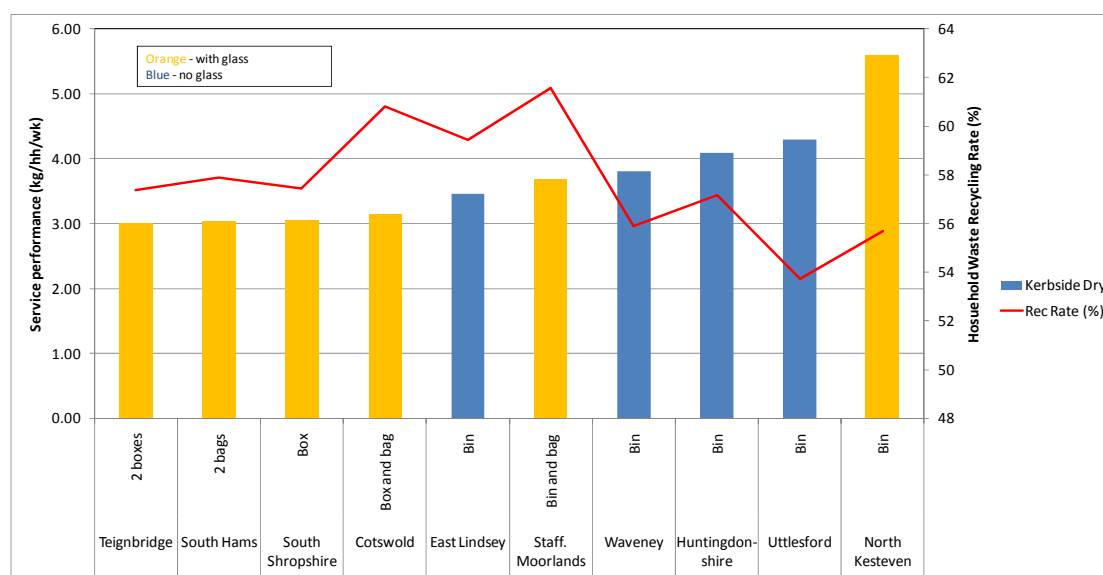


Dry recycle collection

All dry kerbside schemes at the top ten Councils capture at least 3 kg/hh/wk and all operate at least fortnightly. The highest performing dry kerbside service amongst the top ten Councils is at North Kesteven DC where the average yield is 5.59 kg/hh/wk. This is a co-mingled fortnightly scheme where householders can recycle paper, card, Tetrapak, glass, plastic bottles, other plastic, plastic film, carrier bags, cans (also foil and aerosols), textiles and shoes, all in the same bin. This is an example of a local authority where the range of materials that can be recycled in the co-mingled bin extends beyond the usual materials of paper, card, plastic bottles and cans. Other materials collected as part of dry recycle schemes amongst the top ten Councils include metal lids, CD/video cases, cartridges, phones and batteries. The co-mingled scheme at Waveney DC also allows children’s toys and ring binders amongst its other plastic.

It is interesting to note that, not only do many Councils in the top ten collect a wide range of materials, many collect sub-types of materials often not collected by other Local Authorities e.g. envelopes, foil, aerosols, other plastic and metal lids. It is also interesting to note, however, that four of the Councils do not collect plastic bottles from the kerbside.

Figure 3 – Kerbside dry recycling



According to WDF all but two Local Authorities reach 100% of households with a kerbside dry recycling service. The remaining two reach 99% of households.

Organic waste collection

Eight out of the top ten performing Councils collect food waste at the kerbside. Seven collect food with garden waste at the kerbside. (One of these Councils offers the combined service on subscription only but every household can recycle food waste separately.)

The highest garden waste yield amongst Scottish Local Authorities in 2007/08 was 4.06 kg/hh/wk. The lowest yield for organic material amongst the top ten English authorities in 2008 was 4.15 kg/hh/wk, the median value being 5.80 kg/hh/wk. The two Local Authorities which do not collect food waste recorded average garden waste yields of 5.89 and 6.64 kg/hh/wk. Households in all Councils receive an organic waste collection at least once every two weeks, however, the garden waste service is not always free of charge.

According to WDF five Local Authorities reach 100% of household with a kerbside compostable waste recycling service. On average the top ten Councils reach 95% of households with a kerbside compostable waste service.

3.3. Residual waste

All ten Councils collect residual waste on a fortnightly basis. Evidence has also been found to suggest that seven Councils collect residual waste in containers smaller than 240l; all but one of these use 180l bins. At present no Scottish Local Authorities collect residual waste from normal households in containers less than 240l in capacity.

3.4. Flatted properties

Dry recycle service

According to WDF all bar two Local Authorities reach 100% of households with a kerbside dry recycling service. The remaining two reach 99% of households. However, in the 2001 Census, the top ten local authority areas are stated as containing between 3% and 13% flatted properties (**NB** all under the English average of 19%). This suggests that dry kerbside schemes have been extended into the vast majority of multiple occupancy premises. Despite apparently moderate average yields in kg/hh/wk, the performance figures apply to all properties in the Council area in most cases.

Compostable waste service

According to WDF only three of the Councils have kerbside compostable waste schemes that reach less than 90% of properties. 2001 census figures suggest that in some Local Authorities kerbside compostable waste schemes must extend to include at least some flatted properties.

Figure 4 – Compostable waste kerbside scheme performance with coverage

Council	Rec. Rate (%)	Food waste	kg/hh/wk	% Flatted properties (2001)	Compostable Scheme Coverage
Staff. Moorlands DC	61.58	With GW	7.75	4%	99%
Cotswold DC	60.83	With GW and separate	5.71	10%	100%
East Lindsey DC	59.45	No	6.64	9%	88%
South Hams DC	57.9	With GW	4.89	13%	82%
South Shropshire DC	57.45	With GW	5.63	6%	100%
Teignbridge DC	57.37	With GW	6.15	13%	100%
Huntingdonshire DC	57.16	With GW	5.92	9%	100%
Waveney DC	55.91	With GW	5.18	10%	100%
North Kesteven DC	55.69	No	5.89	3%	97%
Uttercliffe DC	53.73	Separate	4.15	9%	87%

3.5. Bulky uplifts and HWRCs

All bar one Council charges for its special uplift service; the remaining Council offers a limited number of uplifts for no charge. Charging for special uplifts encourages householders to use Household Waste Recycling Centres (HWRC) to dispose of extra residual waste. As HWRCs are operated by county (i.e. disposal) authorities this practice would divert the extra residual waste out of the district (collection) authority waste streams, thereby helping to increase recycling rates.

3.6. Commercial waste

From Council websites, only six out of the top ten Councils appeared to collect commercial waste during 2008 - one has since ceased the practice. Commercial waste figures are not included in the household waste recycling and composting

figures. This may, therefore, artificially inflate English recycling figures when compared to Scottish Local Authorities.

4. Summary

The main contributing factors to the high recycling rates of the top ten performing English Councils in 2008/09 are thought to be:

- High performance in kerbside compostable waste services
 - *Food waste is collected at the kerbside*
 - *Collection frequency is at least once a fortnight*
- Moderate to high performance in kerbside dry recycling schemes
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- All Councils collect residual waste on a fortnightly basis
 - *Many Councils collect residual waste in 180l wheeled bins*
- Dry kerbside services appear to be extended to serve the majority of flatted properties
- Compostable kerbside services appear to be extended to serve at least some flatted properties in some Local Authorities
- The vast majority of bulky uplifts incur a charge
 - *Any residual waste not uplifted by collection crews is diverted outside the collection authority to Household Waste Recycling Centres*
- Commercial waste is not included in household recycling and composting figures

Appendix 1

Figure 5 – Kerbside scheme details

Recycling Rate (%)	Local authority	Residual		Recycling																				Comments										
		Frequency	Container	Paper	Envelopes	Card	Tetra	Glass	Plastic bottles	Other plastic	CD/video cases	Plastic film	Carrier bags	Cans	Metal lids	Foil	Aerosols	Metal	Textiles	Shoes	Phones	Cartridges	Batteries		Garden	Food	Bedding	Wood	Ash	Frequency	Container			
62	Staffordshire Moorlands DC	F	180l					✓	✓	✓					✓	✓													F	Grey 140l bin				
				✓	✓																✓										F	Clear bag		
																						✓	✓									F	Clear bag	
				✓																							✓	✓	✓			F	Brown 240l bin	
61	Cotswold DC	F	180l or sacks			✓								✓		✓													F	Blue sack				
				✓	✓			✓							✓														F	Black box				
																										✓	✓			W	240l or sacks	If subscribed		
																											✓			W	10l caddy			
59	East Lindsey DC	F	180l	✓	✓	✓			✓	✓				✓		✓	✓												F	240l Grey bin				
																										✓				F	240l Green bin			
58	South Hams DC	F	180l	✓	✓	✓			✓	✓					✓	✓	✓												F	Blue and clear sacks				
						✓																					✓	✓		F	Brown Bin (180l)			
57	South Shropshire DC	F	100-150	✓	✓			✓						✓	✓	✓	✓												F	Green box				
						✓																				✓	✓			F	Green bin			
57	Teignbridge DC	F	180l / 240l	✓				✓	✓					✓		✓						✓	✓						F	2 Boxes				
						✓																				✓	✓			F	Brown bin (240l)			
57	Huntingdonshire DC	F	?	✓	✓	✓			✓	✓					✓		✓												F	Bins or boxes or clear sacks				
				✓																						✓	✓			F	Green bin			
56	Waveney DC	F	?	✓	✓	✓	✓			✓	✓			✓	✓	✓	✓												F	Blue bin	Incl. toys and binders			
																										✓	✓			F	Green bin			
56	North Kesteven DC	F	?	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓									F	Green bin				
																										✓				F	Brown bin - 120l?	4 weekly in winter		
54	Uttlesford DC	F	180l			✓	✓		✓	✓	✓		✓	✓	✓	✓													F	Bin				
																														W	Sacks	Charged		
				✓	✓																									W	Brown bin			



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