# Food Waste Collection

a draft consultation and discussion document for SERA Socialist Environment and Resources Association

15<sup>th</sup> May 2013

research specified by Tracey Hill conducted and compiled by Jim Adams

# FOOD WASTE COLLECTION SUMMARY

The study answers a number of questions on food waste collection put by Tracey Hill.

Chapter I contains a comparison of food waste collection and processing methods. The questions are

Which councils are currently collecting food waste – and how many are there?

There are at least 75 out of 150 councils in England collecting food waste, 50%.

Figures are broken down between two-tier shire counties, London boroughs, metropolitan districts and unitary authorities.

How often are collections taking place? (weekly/fortnightly)

For London boroughs, 70% have a weekly collection, 4% have a fortnightly collection and 11% have no collection, others excluded are 15%.

For metropolitan districts, 25% have a weekly collection, 8% have a fortnightly collection, so leaving 67% with no discovered collection.

For unitary authorities, 22% have a weekly collection, 9% have a fortnightly collection and 69% have no discovered collection.

How do the collections tie in with other collections?

A description of the types of collection, being refuse, recycling, food waste and garden waste, and their frequency is given for a sample of London boroughs.

What is happening to the food waste and what are the options there?

In the UK, each household generates approximately 330kg per year or 6kg per week of food and drink waste. Brighton & Hove, with 115,000 households, would then generate 38,000 tonnes of food waste per year. It is currently incinerated.

The options are: weekly or fortnightly food waste collections, weekly food collections with refuse and recycling fortnightly, in-vessel composting with green waste, weekly or fortnightly, and do nothing.

The food waste under separate collection would be anaerobically digested (that is, not in air) and industrial-sized facilities would probably have to be constructed. In-vessel composting is an alternative and may be cheaper – see Appendix 4.

Chapter II contains information on finance and funding. A question is

What sources of funding are available?

These are funding from Central Government, Council Tax (25% of revenues), PFI contracts and grants from the EU. Advice is available on framing bids.

There are a number of appendices, which might be of interest to SERA members.

# Chapter I

# A comparison of food waste collection and processing methods

The objective of the document is to research food waste collection. For Chapter I we consider

- (1) Which councils are currently collecting food waste and how many are there?
- (2) How often are collections taking place? (weekly/fortnightly)
- (3) How do the collections tie in with other collections?
- (4) What is happening to the food waste and what are the options there?

The previous meeting of SERA came up with the suggestion:

A cost-neutral food waste collection scheme such as that in Maidstone, funded with external sources, reducing rubbish in "black bag" streets, so because of a member's interest in Maidstone's Food Waste, I will be looking specifically at Maidstone as well. This is in Appendix 3.

In order to limit the time taken, only councils in England were researched.

For (1) the figures are minimum ones. I found three extra councils in London with food waste recycling by looking specifically for these. I cannot scan every council website in England!

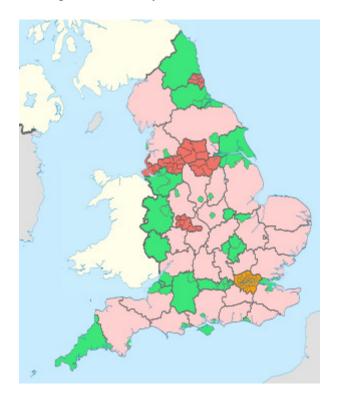
- For (2) time limitations means I have excluded two-tier shire counties from the figures.
- (3) has been restricted to a sample of London boroughs.

For (4) two main sources of information were used: an edited study on food waste collection in the UK and France, and the official information portal on anaerobic digestion in the UK, the second of which you are invited to look at on the web.

There are a number of appendices not specified in the above, which I thought SERA members might be interested in, which I came across in obtaining the above information. This contains a recent announcement from Lewes District Council on Food Waste. Because I left out Scotland, Wales and Northern Ireland in this document, I have included a brief appendix on policy in the first two. I am interested in what has happened in South Shropshire, since this was a pioneer and is quoted in early government documents. This is now the only authority in which food waste collections are being changed to be incorporated with green waste, and I am interested in the reasons for this, so appendix 4 looks at it. The backdrop to one of the options – weekly food waste collections and fortnightly refuse and recycling – is given in appendix 5, with the article by Eric Pickles on weekly refuse collection.

# 1 Which councils are currently collecting food waste – and how many are there?

# Boroughs and Unitary authorities:



Information later retrieved: In 2009, 137 local authorities in the <u>UK</u> provided a food waste collection, with 47%, which equates to 64, offering food only collections (Brook Lyndhurst, 2009).

The information below is for <u>England</u>.

Weekly food waste collections are denoted by a W in the next table, and fortnightly by F.

Type	Authorities	Food Waste Collection	W	Total
Two-tier	Buckinghamshire	Aylesbury Vale.		21
'shire'	<u>Cambridgeshire</u>			out of
counties	<u>Cumbria</u>			27
(pink)	<u>Derbyshire</u>	$\sqrt{}$		
	<u>Devon</u>	E. Devon, N. Devon, W. Devon,		
		Torbay, Torridge.		
	<u>Dorset</u>	Sherborne, W. Dorset,		
		Portland & Weymouth.		
	East Sussex	Lewes – June 2013, Hastings.		
	<u>Essex</u>	Basildon, Brentwood,		
		Chelmsford, Colechester,		
		Malden, Uttlesford.		
	Gloucestershire	Cheltenham, Cotswold, Forest of Dean, Gloucester, S. Gloucestershire.		
	<u>Hampshire</u>	Eastleigh.		
	<u>Hertfordshire</u>	Stevenage.		
	Kent	Ashford, Dover,		
		Maidstone.		
	<u>Lancashire</u>	Lancaster, Preston.		
	<u>Leicestershire</u>	Harborough.		
	<u>Lincolnshire</u>			
	<u>Norfolk</u>	Braintree, Broadland, Norwich.		
	<u>Northamptonshire</u>	Daventry, Northampton,		
		E. Northamptonshire,		
		S. Northamptonshire.		

	NT41 N71 1 1 1	<u> </u>	l	
	North Yorkshire			
	<u>Nottinghamshire</u>	Ashfield, Gedling.		
	<u>Oxfordshire</u>	Cherwell, Oxford,		
		S. Oxfordshire, W. Oxfordshire.		
	Somerset	Taunton Deane, Wellington.		
	Staffordshire	<b>8</b>		
	Suffolk	Waverney.		
	·			
	Surrey	Elmsbridge, Epsom & Ewell,		
		Guildford, Mole Valley,		
		Reigate, Spelthorne, Surrey		
		Heath, Tondridge, Waveley.		
	<u>Warwickshire</u>	Nuneaton, Rugby, Stratford,		
		Warwick & Bedworth.		
	West Sussex			
	Worcestershire			
London	Barking and Dagenham	· ·		24
			W	out of
boroughs	Barnet	$\sqrt{}$		
(orange)	Bexley	$\sqrt{}$	F	32
	<u>Brent</u>		W	
	Bromley		W	
	<u>Camden</u>	1 V	W	
	Croydon		W	
	Ealing	N I	W	
	Enfield	N.	W	
	Greenwich	$$	w	
	1 ·		W	
	Hackney		VV	
	Hammersmith and Fulham			
	<u>Haringey</u>			
	<u>Harrow</u>		?	
	<u>Havering</u>	<b>√</b>	?	
	<u>Hillingdon</u>	to businesses, not households		
	<u>Hounslow</u>	$\sqrt{}$	W	
	<u>Islington</u>		W	
	Kensington and Chelsea			
	Kingston upon Thames		W	
	Lambeth	V	W	
	Lewisham	•	''	
	'		W	
	Merton Name to a second	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	Newham D. H. : 1		W	
	Redbridge			
	Richmond upon Thames		W	
	<u>Southwark</u>		W	
	Sutton	limited		
	Tower Hamlets	√ Name of the state of the sta	W	
	Waltham Forest	V	W	
	Wandsworth			
	Westminster	$\sqrt{}$		
<u>Metropolitan</u>	GREATER			12
<u>districts</u>	MANCHESTER:			out of
(red)	<u>Bolton</u>			36
	Bury			
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	<u>Manchester</u>	\frac{}{\cdot}	W	
	Oldham	$\sqrt{}$	W	
	Rochdale			
	Salford			
	<u>Stockport</u>		W	
	<u>Tameside</u>		W	
	<u>Trafford</u>		F	
	<u>Wigan</u>	$\downarrow$	F	
	MERSEYSIDE:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
			W	
	Knowsley	V	VV	
	<u>Liverpool</u>		г	
	Sefton		F	
	<u>St Helens</u>			
	Wirral			
	SOUTH YORKSHIRE:			
	<u>Barnsley</u>			
	<u>Doncaster</u>			
	Rotherham			
	Sheffield			
	TYNE & WEAR:			
	Gateshead			
	Newcastle upon Tyne		W	
	North Tyneside	, v	**	
	South Tyneside			
	Sunderland			
	WEST MIDLANDS:			
	Birmingham			
	Coventry			
	Dudley			
	Sandwell			
	Solihull			
	<u>Walsall</u>			
	<u>Wolverhampton</u>		W	
	WEST YORKSHIRE:			
	Bradford			
	Calderdale		W	
	<u>Kirklees</u>			
	<u>Leeds</u>		W	
	Wakefield	,	'	
Unitary	Bath and N. E. Somerset	V	W	17
<u>authorities</u>	Bedford	<b>'</b>	''	out of
(green)	Blackburn with Darwen			55
(green)				55
	Blackpool  Bournamouth			
	Bournemouth Draghmall Forget			
	Bracknell Forest			
	Brighton and Hove			
	Bristol		W	
	<u>Central Bedfordshire</u>			
	Cheshire East			
	<u>Cheshire West and Chester</u>		W	
	<u>Cornwall</u>			
	1	1	1	ı

	County Durham		
	Derby	Derbyshire Dales	$ \mathbf{w} $
	<u>Darlington</u>	Deloyshire Dales	**
	East Riding of Yorkshire		
	Halton		
	Hartlepool		
	<u>Herefordshire</u>		
	Isle of Wight		
	Kingston upon Hull		F
	<u>Leicester</u>		F
	<u>Luton</u>		W
	Medway	V	F
	Middlesbrough	,	
	Milton Keynes		W
	North East Lincolnshire	l v	
	North Lincolnshire		
	North Somerset		$ \mathbf{w} $
	Northumberland	$\sqrt{}$	'
	Nottingham		
	Peterborough		$ \mathbf{w} $
	Plymouth		**
	Poole Poole		
	Portsmouth		
	Reading		
	Redcar and Cleveland		
	·		
	Rutland		
	Slough		337
	Southampton		W
	Southend-on-Sea		
	South Gloucestershire		
	Stockton-on-Tees		
	Stoke-on-Trent	North Shropshire	F
	<u>Shropshire</u>		
	Swindon		
	Telford and Wrekin		
	<u>Thurrock</u>		W
	<u>Torbay</u>	V	
	<u>Warrington</u>		
	West Berkshire	$\sqrt{}$	F
	<u>Wiltshire</u>		
	Windsor and Maidenhead	√ 	W
	<u>Wokingham</u>	Woking	W
	York		
Total		,	75 out of 150

# Comparison of food waste collection systems used in South West England.

In South West England, there are 40 local authorities, using a variety of approaches to deal with food waste. Of these 40, 26 Councils are Waste Collection Authorities (WCA), four are Waste Disposal Authorities (WDA) and 10 are Unitary Authorities (UA). To establish popular and good practice, food waste and green waste collection systems used by waste

collection authorities (WCA) and unitary authorities (UA) were reviewed. Current treatment of the refuse stream was also noted. Recycling and composting rates were used to gauge the effectiveness of the system.

Out of 36 WCA or UA in the South West, 24 offered a collection to divert food waste from the refuse stream, either through a separate food waste collection or combined with green waste or cardboard. 80% offered a weekly food waste collection.

# 2 How often are collections taking place? (weekly/fortnightly)

Weekly food waste collections are denoted by a W in the previous table, and fortnightly by F. Time limitations have meant I have excluded figures on two-tier shire counties.

For London boroughs for the weekly/fortnightly statistics, I have removed Hillingdon, which only does a business service, Sutton with a limited service, and Wandsworth which incinerates its food waste. I was unable to determine the frequency of Harrow and Havering from their sites. That leaves 27 London boroughs. One has a fortnightly collection (4%) and 19 have a weekly collection (70%), leaving 15% excluded and 11% with no collection.

For metropolitan districts, of the 36, 9 have a weekly collection (25%), 3 have a fortnightly collection (8%), so leaving 67% with no collection or not properly determined.

For unitary authorities, of the 55, 12 have a weekly collection (22%), 5 have a fortnightly collection (9%) and 69% have no or no discovered collection.

## 3 How do the collections tie in with other collections?

The collections available to councils in general are:

- Refuse
- Recycling
- Food Waste
- Garden Waste
- Bulk Waste
- Clinical Waste

A few councils provide some elements of a service for business waste, but rarely except for advice for industrial commercial waste.

27% of refuse is recycled in Brighton & Hove.

Councils sometimes directly support composting. Almost all councils support the Love Food Hate Waste campaign.

Brighton & Hove City Council (B&HCC) do not collect garden waste, called green waste on the B&HCC website. Grass cuttings can be included in food waste.

There is no standard model for waste collection. A sample of London borough collections is described next.

<u>Barnet</u> collections are all weekly. Waste and recycling covers 103,000 households, and garden and food waste 67,000 households.

<u>Bexley</u> recycling is weekly and waste fortnightly, including food and garden waste. One quarter of its population do home composting.

<u>Brent</u> does organic waste, that is food with garden waste, weekly and residual waste and recycling fortnightly.

Bromley has a weekly kerbside collection. Waste is divided as refuse, organic or recycling.

<u>Camden</u> collection is fortnightly. Rubbish, dry recyclables, paper, food scraps and garden cuttings have different coloured bags.

Croydon has fortnightly rubbish and weekly food waste collections.

<u>Ealing</u> has chargeable garden waste collections, and refuse on the same day as recycling, all fortnightly. Food waste and electrical goods will be recycled from summer 2013. The food waste will be anaerobically digested.

Enfield has all weekly collections, with refuse and recycling.

Hounslow has all weekly rubbish, recycling, paper and food waste collections.

<u>Islington</u> has all weekly refuse, food waste and dry recycling collections to households and businesses.

<u>Kingston upon Thames</u> has refuse, recycling, food waste and cardboard collections weekly, and paid garden waste on request.

<u>Lambeth</u> has weekly recycling and rubbish, and fortnightly chargeable garden waste.

Merton has weekly rubbish and food waste collections. Garden waste is fortnightly by subscription.

<u>Richmond upon Thames</u> has weekly refuse, recycling and food waste collections and fortnightly garden waste collections.

<u>Tower Hamlets</u> has refuse fortnightly, all other weekly – food, recycling and garden waste.

# 4A What is happening to the food waste?

The following uses an edited version of Investigation of food waste management in France and the UK, given in <a href="www.actiondechets.fr/upload/medias/group">www.actiondechets.fr/upload/medias/group</a> b report com.

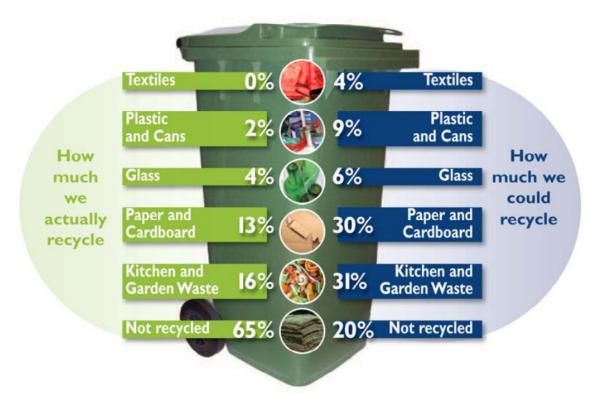
Food waste can be classified as

- **Avoidable** food and drink thrown away because it is no longer wanted or has been allowed to go past its best. 64% of food and drink waste is avoidable in the UK.
- **Possibly avoidable** food and drink that some people eat and others do not (e.g. bread crusts), or that can be eaten when prepared in one way but not in another (e.g. potato skins). 18% of food and drink waste is possibly avoidable.
- Unavoidable waste arising from food and drink preparation that is not, and has not been, edible under normal circumstances. This includes pineapple skin, apple cores, meat bones and tea bags. 18% of food and drink waste is unavoidable in the UK.

Eight million tonnes (18%) of unavoidable food waste remains in the household waste stream, which is either managed at home or by a local authority.\_In 2002, food waste made up 17% of the household waste stream in England. In 2009, 31% of kerbside residual waste was estimated to be food waste.

In the UK, each household generates approximately 330kg per year or 6kg per week of food and drink waste. Brighton & Hove, with 115,000 households, would then generate 38,000 tonnes of food waste per year, although on adoption of food waste collection, food waste is reduced. It is currently incinerated.

Here is a depiction of recycling in Bexley, London



# 4B What are the options for food waste?

If weekly refuse collection and fortnightly recycling collections are retained, the first two options are

- 1. Weekly food waste collection.
- 2. Fortnightly food waste collection.
- 3. A third option, given that food waste collection reduces other refuse, might be weekly food waste and fortnightly refuse and recycling collections.
- 4. If in-vessel composting is adopted, food waste could be included with green waste.
- 5. Do nothing.

It seems all councils with food waste collections first implement pilot schemes.

Options 1, 2 and 3 imply the food will be anaerobically digested. An alternative is in-vessel composting. Anaerobic Digestion (AD) is the process where plant and animal material, biomass, is converted into useful products by micro-organisms in the absence of air. Biomass is put inside sealed tanks and naturally occurring micro-organisms digest it, either at 35°C or 55°C, releasing methane that can be used to provide clean renewable energy. This means AD can help reduce fossil fuel use and reduce greenhouse gas emissions. The material left over at the end of the process is rich in nutrients so it can be used as fertiliser.

Almost any biomass can be used in AD, including food waste, energy crops, crop residues, slurry and manure. AD can accept waste from our homes, supermarkets, industry and farms, meaning less waste goes to landfill. However, woody biomass cannot be used in AD because the micro-organisms can't break down the lignin, the compound that gives wood its strength.

The products of AD are referred to as biogas and digestate. Biogas is a mixture of 60% methane, 40% carbon dioxide and traces of other contaminant gases. The exact composition of biogas depends on the type of feedstock being digested.

Biogas can be combusted to provide heat, electricity or both. Alternatively, the biogas can be 'upgraded' to pure methane, often called biomethane, by removing other gases and injected into the mains gas grid, say sold to Shoreham power station, or used as a road fuel.

In-vessel composting using aerobic digestion (in the presence of oxygen), can also be used, but does not trap methane, a potent greenhouse gas. In-vessel composting using anaerobic digestion is possible. For the economics involved in in-vessel composting, see Chapter II.

Anaerobic digesters in the case of Brighton & Hove would have to be large industrial-sized facilities, so they of course have to go through the planning process and it is desirable to consult at an early stage. The official information portal on anaerobic digestion indicates in the map that there is a deficit of AD facilities in E. Sussex. The large amount of food waste generated in a year means that either food waste would have to be transported over large distances, and it is problematical whether the necessary AD infrastructure is currently available to cope with such large volumes, or one or more AD facilities would have to be constructed. The Veolia PFI contract contains options for the developments of anaerobic digestion facilities. These facilities require finance to build them, there is the question of whether they should be owned by Veolia or, say, CityClean, their management and what happens to the profits generated from fertiliser and biogas.

If option 3 is chosen, consultation with Trade Unions on changes to working practices need to take place. The total service would not reduce and would expand a bit.

If one of these options is chosen, the impact of food waste collection on the economics of the Veolia incinerator at Newhaven needs to be evaluated. It is important to know whether the contract with Veolia enables a cost saving on reduction of input to the incinerator. A freedom of information request has gone out on the contract, and this topic is discussed in Chapter II.

Different councils have different contracts with this incinerator. I have been told that the Veolia incinerator must always be kept operational and does not receive sufficient waste from its suppliers. The contract ties in the councils with the incinerator, but does not currently allow commercial waste to be incinerated.

I have been told that Veolia wishes to renegotiate the contract to allow commercial waste. A comment is that a renegotiation might enable a reduction of waste to the incinerator from Brighton & Hove City Council, in order to increase recycling and change the economics to facilitate food waste collection. A renegotiation might also allow a more favourable regime to the Councils in respect of profits from the generation of electricity from the incinerator.

The do nothing option, which means recycling targets would be missed, where I am unaware of the consequences, implies the food waste is incinerated. An enhancement of this option is to encourage households to compost their own food.

The EU Landfill Directive (1999/31/EC) aims to significantly reduce negative environmental impacts. It imposes national strategies for recycling, composting, biogas production and the recovery of biodegradable municipal waste (BMW).

The National Waste Strategy for England states "there are strong arguments for encouraging more separate collection of food waste", favouring treatment via anaerobic digestion which provides energy, and supporting food waste trials in England.

Local authorities must reach a recycling and composting rate of 45% by 2015 and 50% by 2020. For many local authorities, introducing a food waste collection provides a realistic solution for meeting legislative targets.

In Bournemouth, food waste makes up 38% of the refuse stream, while green waste made up 11% (ResourceFutures, 2009). Implementing a separate food waste collection would have a significant impact on the quantity and quality of material remaining in the refuse stream and ultimately its cost of disposal.

Food waste collections can also benefit local authorities for the treatment of the refuse stream, such as Mechanical Biological Treatment (MBT) Energy from Waste (EfW) by:

- Improving recycling rates.
- Producing high quality compost and liquid fertilisers for use as a soil improver.
- Generation of heat and power through anaerobic digestion linked to combined heat and power plant or through use as a direct fuel.
- Creating a greater public acceptance for alternate weekly collections (AWC) of refuse by collecting the odours fraction weekly (Friends of the Earth, 2007).

- Reducing nuisance from rats, vermin and flies attracted to food in the refuse stream.
- The benefits will vary in different areas, depending on the local authority's current performance and collection systems already in place.

The text taken from 4A states: "In the current economic situation, a separate food waste collection is unlikely to be justified without an alternate week collection (AWC) for refuse. In the UK, AWC are becoming increasingly popular as residents are encourage to participate in the alternative collection to refuse and fewer vehicles and staff are required (ACR+, 2009). However, AWCs are often controversial as less frequent refuse collections are associated with odours, flies and sanitary problems.

If politically AWCs are not acceptable, then a separate food waste collection is also unlikely to be implemented. In these scenarios, adding food waste to current green waste collections is likely to be more feasible and financially viable than a weekly refuse and weekly food waste collection, although not if a chargeable green waste scheme operates".

# **Collection Options Considerations**

To comply with the Animal By-Products Regulations, food waste must be treated in an enclosed unit via anaerobic digestion (AD) or in-vessel composting (IVC), whereas garden waste can be composted externally in windrows (these are tubes). As a result green waste requires simpler, less costly treatment infrastructure then food waste (ACR+, 2009).

Separate food waste collection and treatment are increasingly more cost effective than mixed collection and treatment (Eunomia, 2008).

Material type will affect value and the available markets of end products may be dictated by treatment facilities available locally.

Residents using a single stream food waste collection are more likely to separate out their food waste compared to households offered a mixed food and garden waste collection (Friends of the Earth, 2007).

Participation for biowaste collections is higher than separate food waste collections; however the quantity of food waste is greater in separate collections (Brook Lyndhurst, 2009).

Recycling of cardboard is environmentally preferable to composting or digestion (WRAP, 2009d).

If a free green waste scheme is already running, local authorities may consider including food waste with current operations as containers, rounds, communications etc are established thus saving costs. However ABPR compliant (i.e. leak proof) vehicles are required for food waste transportation.

Food waste cannot be included in a chargeable green waste collection. The Controlled Waste Regulations 1992 Schedule 2 allows local authorities to charge for garden waste collection; but not for food waste collection.

Alternatively the cost of a separate food waste collection could be successfully offset by levying a charge on the green waste collection (Eunomia, 2008).

# **Collection System Parameters**

#### Door-to-door

Drop-off systems allow collections from areas with high population density, where space is limited or in collective housing.

Higher participation and yields are found using door-Drop-off/Bring-to-door collection (WRAP, 2009a).

#### **Container options**

Wheeled bin size is dependent on material types collected (a larger container is required if including green waste/cardboard), frequency of collection and expected yields.

The cost of biodegradable liners are 25p per unit and each participating household requires 2.5 per week (WRAP, 2009d).

The cost is increased by providing caddy liners but makes this more publicly acceptable, cleaner for collection crews and slightly higher yields may result (WRAP, 2009c).

Vented/unvented caddy.

Compostable caddy liners.

#### Coverage options

Opt- in.

Opt-in may lead to disjointed rounds, but all participants want collection.

Number included is likely to be dependent on required yields and available budgets.

Phasing allows more time and resources to be targeted at problem areas, but may incur further cost in communications, delivery expenses etc.

Flat properties are more likely to experience contamination issues and may produce lower yields (WRAP, 2009c).

Including schools may provide useful education tool and communications route back to parents for household collections.

Local businesses may also be targeted to generate revenue from the collection.

All properties

Phased approach i.e.

10,000 per year

Flats

Schools

Businesses.

#### Frequency options

Bi-weekly.

Weekly produces higher yields of food waste and offers a higher level of householder satisfaction especially when introducing alternate week collections (WRAP, 2009c).

More frequent collections maybe required in over the summer period to avoid odours and hygiene problems (ACR+, 2009).

Weekly collections may allow frequency of refuse collections to be reduced to alternate week collections.

Weekly.

Fortnightly.

# Vehicle options

New specialised vehicles. Dependent on demographics, property types, current collection fleet, health and safety factors, cost.

Vehicles used must be ABPR compliant, therefore refuse or green waste vehicles would need adapting to ensure leak proof and the apertures close when not loading.

Significant cost associated with vehicle purchasing/leasing and larger vehicles tend to have very low fuel efficiency.

Small collection vehicles (gvW of 7.5 tonnes with a 2.5-3 tonnes payload) have proven highly effective in a UK setting for collecting food waste (WRAP, 2009a).

Double-shifting vehicles may significantly reduce the cost, however smaller vehicles could not be used and may result in more disruptions to service if vehicle maintenance is required. Doubleshifting refuse vehicles.

Combine with current set-up i.e. green waste rounds.

Local authorities are likely to prefer different options depending on the current operational set-up, required yields, financial cost, proximity of treatment facilities, quality of output material and political acceptability.

#### **Treatment Facilities**

Separate food waste collection and treatment are becoming increasingly more cost effective than mixed collection and treatment (Eunomia, 2008). The cost of a separate food waste collection can be successfully offset by levying a charge on the green waste collection or by implementing an alternate week collection for refuse. Furthermore separate food waste collections provide a higher quality end product that can draw higher value and be utilised in a greater variety of end markets.

The official information portal on anaerobic digestion.

The official AD Portal at <a href="http://www.biogas-info.co.uk/index.php/local-government">http://www.biogas-info.co.uk/index.php/local-government</a> is a comprehensive resource for local government users.

"You can use the menu to find how AD can benefit your region, current legislation and funding opportunities.

The Waste Strategy for England 2007 encourages local authorities and businesses to consider using anaerobic digestion. It sets out the important contribution which anaerobic digestion can make to achieving our waste management goals, with this being a particularly beneficial technology for treating separately collected food waste.

Anaerobic digestion is an important technology for producing energy from waste. At the same time, it recovers valuable nutrients for recycling back to land".

The portal contains information on the following topics:

#### Government

- Home
- What is AD?
- Who can benefit from AD?
- Feedstocks
- Funding
- Incentives
- Regulations
- Planning
- AD networks
- Case studies

For In-vessel composting, see Chapter II.

#### **Tools**

- Biogas map
- Suppliers directory
- AD calendar
- Investor checklist
- Reports
- Glossary

# Chapter II

# Finance and funding

For Chapter II we consider

- (1) The history of Veolia Environnment
- (2) What constraints are imposed by the Veolia incinerator (ERF) contract?
- (3) What is the cost of constructing an anaerobic digestion facility?
- (4) What are the costs of constructing an in-vessel composting facility?
- (5) What are the operating costs?
- (6) What are the financial aspects?
- (7) What sources of funding are available?

We discuss a synopsis of the Veolia contract, the economics and costs of which are crucial to evaluating food waste collection. I will ask the SERA meeting whether it wants me to set in process requests for information which lead at the last stage to an injunction to obtain full information under the Freedom of Information Act.

The meeting will be asked whether it wants a chapter on the cost of construction of anaerobic digestion or in-vessel composting facilities, and of operating costs for a service, which is currently deferred.

We discuss what sources of funding are available, but a section connecting this with finances of the council budget is deferred until authorised.

# 1 The history of Veolia Environnement.

In what follows, an approximate exchange rate is £1 = 0.85.

Financial information on Veolia has been almost entirely excised by Veolia from its own websites. Veolia's accounts are consolidated, except where national legislation stipulates otherwise, and the financial report for 2011 is obtainable from: <a href="www.veolia-environmentalservices.com/veolia/ressources/files/1/2322,Financial-report-VP-2011.pdf">www.veolia-environmentalservices.com/veolia/ressources/files/1/2322,Financial-report-VP-2011.pdf</a>.

On December 14, 1853, a water company named Compagnie Générale des Eaux (CGE) was created by an Imperial decree of Napoleon III. In 1998, CGE changed its name to Vivendi, and sold off its property and construction divisions the following year.

In July 2000, Vivendi spun off its water and waste companies—once its core business—along with interests in other public service sectors such as transport into Vivendi Environnement.

Vivendi Universal disclosed a corporate loss of €23.3 billion in its 2002 annual report. It responded with financial reshuffling, trying to shore up media holdings while selling off shares in its spin-off companies. Amid intense media scrutiny, its chairman and CEO, Jean-Marie Messier (who had overseen the most dramatic phase of the company's diversification), was subsequently replaced by Jean-René Fourtou. Messier was found guilty of embezzlement in 2011, but not before he was paid over \$20 million as part of his severance package. In 2002 the company reduced its stake in Vivendi Environnement to 40%. The company then began reorganizing to stave off bankruptcy. It also sold 20.4% of Vivendi Environnement's capital to a group of investors.

In 2003, Vivendi Environnement became Veolia Environnement. In 2005, the name "Veolia" was established as an umbrella brand for all of the Group's divisions (water, environmental services, energy services and transport).

In November 2009, Antoine Frérot (salary €1,739,819, plus pension agreements) became the Chairman and the CEO of the Group after succeeding Henri Proglio who has been appointed CEO of Électricité de France. The change has been part of a huge politico-financial scandal in France as Proglio kept executive positions - and subsequent salary - in both companies until public criticism forced him to give up his Veolia revenues.

In July 2011, Veolia issued two profit warnings. The disappointing financial results included a €52 million fraud in the US and voluntary liquidation of a Veolia incinerator subsidiary, TEC, in Italy, following litigation with impairment losses of €48 million. The Financial Times described Veolia as "struggling". In 2011Veolia's shares were the worst performing in France's CAC 40 index for the Paris Bourse, falling 60%. Veolia's net financial debt is €5,000 million.

Veolia announced the launch of new restructuring plans and redeployment of assets and businesses. In December 2011, Veolia announced a €5bn divestment program over 2012-2013. The company would comprise only three divisions (Water, Environmental Services and Energy Services).

Revenue in the UK totalled €1,600 million in 2011, rising 6.7%. This growth was driven mainly by more PFI contracts and an increase in asset utilisation, despite a difficult economic environment.

# 2 What constraints are imposed by the Veolia incinerator (ERF) contract?

In April 2003 a 25-year Integrated Waste Management Services Contract, worth approximately £1 billion, was awarded to Onyx South Downs Ltd – now known as Veolia Environmental Services South Downs Ltd – by the lead authority East Sussex County Council (ESCC) and Brighton & Hove City Council (B&HCC). The authorities tendered the contract after being awarded £114 million in government PFI credits.

A five year extension has been agreed and the contract will now end in March 2033.

Brighton and Hove City Council have an "Integrated Waste Management Contract and Schedules" page on the Council's website which provides details of the contract that was awarded to Veolia Environmental Services in March 2003; the link to this page is below:

#### http://www.brighton-hove.gov.uk/index.cfm?request=c1147524

The full contract can be found within the "how we manage our waste" section of East Sussex County Council's website. The link to which is below:

http://www.eastsussex.gov.uk/environment/rubbishandrecycling/managingwaste/download2.htm"

This contract concerns the following installations:

- Newhaven ERF (energy recovery facility), that is, Newhaven incinerator
- MRF (materials recovery facility)
- Western Transfer Station (B&HCC)
- Eastern Transfer Station
- Northern Transfer Station
- HWRS (Household waste recycling sites)

The following schemes are also listed:

- Pebsham NTP (new technology plant)
- Anaerobic digestion plant
- Compost plants.

The value of the Newhaven ERF construction contract was £125 million.

HOCHTIEF AG worked in consortium with Swiss Process Engineering company von Roll Inova, to design and construct the Energy Recovery Facility (ERF) in Newhaven, East Sussex. The ERF takes receipt of some 210,000 tonnes of municipal solid waste each year, to be incinerated in two conventional moving grate incinerators. The heat generated, harnessed in two vertical boilers, generates steam to drive a turbine. Power generated runs the plant with the net surplus of approximately 16.5MW being exported to the National Grid. The site presented very particular challenges for the design and construction of the civil engineering works.

This means that taxpayers do not have to foot a bill of up to £80 for every tonne sent to the landfill.

The baseline prices for the following weight bands are specified in the contract:

Weight band 1	-300,000	tonnes contract waste/year
Weight band 2	300,000 - 360,000	tonnes contract waste/year
Weight band 3	360,000 - 420,000	tonnes contract waste/year
Weight band 4	420,000 - 480,000	tonnes contract waste/year
Weight band 5	550,000 -	tonnes contract waste/year,

where the price schedule and annual contract price are contained in the document www.eastsussex.gov.uk/NR/rdonlyres/5DF54AE8-39ED-403D-B2FD-

EE810C976F23/0/06PRICESCHEDULEANDANNUALCONTRACTPRICEREVIEW.pdf

The 2004 deed of variation, Schedule 12, Payment and performance, states:

"This schedule sets out the processes and formulae for payment of the contractor against Contract performance. The information contained in Schedule 12 is protected from disclosure for reasons of commercial sensitivity."

The contract also cites recycling targets for B&HCC:

20% from 2004

30% from 2005

33% from 2015.

The rate for 2012 was 27%, so this is not being met.

- 3 What is the cost of constructing an anaerobic digestion facility?
- 4 What are the costs of constructing an in-vessel composting facility?
- 5 What are the operating costs?
- 6 What are the financial aspects for B&HCC?

# 7 What sources of funding are available?

Local councils are funded by a combination of central government grants, Council Tax (a locally set tax based on house value), Business Rates, and fees and charges from certain services including decriminalised parking enforcement. The proportion of revenue that comes from Council Tax is low, meaning that if a council wishes to increase its funding modestly, it has to put up Council Tax by a large amount. Central government retains the right to "cap" Council Tax if it deems it to be too much.

Council Tax is collected by the district-level council. Authorities such as the GLA, parish councils, county councils, passenger transport authorities, fire authorities, police authorities and national parks authorities can make a precept. This shows up as an independent element on council tax bills, but is collected by the district and funnelled to the precepting authority. Some joint ventures are instead funded by levy.

Aggregate External Finance (AEF) refers to the total amount of money given by central government to local government. It consists of the Revenue Support Grant (RSG), ringfenced and other specific grants, and redistributed business rates. A portion of the RSG money paid to each authority is diverted to fund organisations that provide improvement and research services to local government (this is referred to as the RSG top-slice). The majority of these organisations are those that form the Local Government Group.

Although it is the only tax which is set by local government in Great Britain, the Council Tax contributes only a small proportion (25%, on average) of local government revenue. The majority comes from central government grants and from business rates which are collected centrally and redistributed to local authorities.

Local government provide services such as police, fire, recycling, refuse collection and removal, schools, leisure centres, park and ride schemes, parks and open spaces, street cleaning, subsidising of public transport, tourism, museums, social housing grants, housing and council tax benefits, environmental health and food safety in pubs, restaurants and shops, planning services, support for voluntary groups, meals on wheels, facilities for young people, adapting homes for disabled people, play centres for children, cctv installation, sports facilities, issuing taxi licences, flood defences, and many others.

A significant proportion of local government services are stipulated by central government in the form of statutory provision. Local councils are obliged by law to provide these services. The remainder of services are discretionary and are determined by the local council.

"England's local government finance system is one of the most centralised in the world. This means that local authorities don't have the autonomy and flexibility they need to make sure public money is spent on the things that matter in their area. The government believes that local authorities are better placed to make decisions about the needs of their local communities than central government.

Central government funding for local councils is announced each year in the annual local government finance settlement, and they approve applications from parish and town councils to borrow money for capital projects. The action taken on the local services support grant is that from 2013, local councils will be able to decide how most of their grants from central government should be spent in their area. The only exceptions are schools funding and the new public health grant. This new grant is a single grant paid by central government to individual councils to help support and protect local services. Councils can decide themselves how they wish to use it. The settlement for 2013 - 2014 was announced on 4 February 2013, (http://www.local.communities.gov.uk/finance/1314/settle.htm)".

"Local Authorities are currently facing huge financial pressures in the wake of the Comprehensive Spending Review and the announcement of large cuts in funding. As Local Authorities plan for the future and attempt to safeguard frontline services within reduced budgets, it is also possible to explore avenues for additional income – one of these is external grant funding.

BDO have a team devoted to accessing grant funding for local government clients to enable them to:

- support core budgets and activities
- diversify activities into new areas of opportunity and demand
- act as a source of revenue to underpin other budgets and activities.

They provide advice on where to apply, when to apply, and how to apply for these grants.

#### WHAT IS AVAILABLE?

There are billions of pounds available each year, through non-repayable grants, from both UK Government and European Union sources that can be accessed through open and competitive tendering by local government. This funding can support a variety of key local government target areas including:

- Education and Training
- Community Development
- Regeneration and Economic Development
- Business Support and Economic Development

# WHICH PROGRAMMES DELIVER THIS?

There are many programmes appropriate to local government needs that are currently delivering across the UK. These include:

- Training programmes through The Skills Funding Agency, Skills Development Scotland and The Welsh Assembly government funding to train adults to enable them to do their jobs better, to get new jobs, or to progress in their careers.
- European Regional Development Fund (ERDF) a fund aimed at economic regeneration projects. ERDF funding requires match funding support as it only ever provides an element (usually up to 50%) of the cost of the project this is causing Local Authorities issues in these times of budget cuts. However, there are ways to generate match funding from sources other than department budgets this can include 'in kind' support and match funding from the private sector. Such funding will bring benefits to local government Economic Development, Regeneration and Business Support functions.
- Regional Growth Fund (RGF) a new £1.4 billion three-year fund to support private sector investment and growth in England, particularly in areas of high unemployment and high levels of deprivation that are currently dependent on the public sector.

Although it is envisaged that bidding partnerships will include a combination of large private sector players, SMEs and social enterprises, local authorities will play a key part in this process. Local Enterprise Partnerships will play a role in coordinating across areas and communities, and in bidding for the Fund, but again local government will be a key player in this process.

BDO have drawn together a team to deliver grant advisory services to local government. This team comprises members of BDO's dedicated Local Government Team, complemented by additional grant specialists. BDO team members have been successfully accessing funding since 2003 and have, to date, secured over £150m of grant funding. They have excellent links into the appropriate funding agencies. They provide our clients with a full package of grant funding services that:

- strategically identify the appropriate grant funding opportunities that exist and link them directly to clients priorities
- provide full project development and bid writing facilities that maximise chances of success through open and competitive tendering
- support their clients after bidding with project management activity.

The process to access these grants is very competitive – each is oversubscribed and many bids are unsuccessful. The BDO team has a history of successful grant applications driven by their detailed knowledge of the sector.

A contact is: JONATHAN DAVIES Director, Government & Infrastructure BDO t 0161 817 7660 m 07771 541 094 e jonathan.davies@bdo.co.uk"

On PFI contracts, by October 2007 the total capital value of PFI contracts signed throughout the UK was £68bn, committing the British taxpayer to future spending of £215bn over the life of the contracts. The global financial crisis which began in 2007 presented PFI with difficulties because many sources of private capital had dried up. Nevertheless PFI remained the UK government's preferred method for public sector procurement under both Labour and the present coalition. In January 2009 the Labour Secretary of State for Health, Alan Johnson, reaffirmed this commitment with regard to the health sector, stating that "PFIs have always been the NHS's 'plan A' for building new hospitals ... There was never a 'plan B'".

However, because of banks' unwillingness to lend money for PFI projects, the UK government now had to fund the so-called 'private' finance initiative itself. In March 2009 it was announced that the Treasury would lend £2bn of public money to private firms building schools and other projects under PFI. Labour's Chief Secretary to the Treasury, Yvette Cooper, claimed the loans should ensure that projects worth £13bn — including waste treatment projects, environmental schemes and schools — would not be delayed or cancelled. She also promised that the loans would be temporary and would be repaid at a commercial rate. But, at the time, Vince Cable, of the Liberal Democrats, subsequently Secretary of State for Business in the coalition, argued in favour of traditional public financing structures instead of propping up PFI with public money:

"The whole thing has become terribly opaque and dishonest and it's a way of hiding obligations. PFI has now largely broken down and we are in the ludicrous situation where the government is having to provide the funds for the private finance initiative."

In opposition at the time, even the Conservative Party considered that, with the taxpayer now funding it directly, PFI had become "ridiculous". Philip Hammond, subsequently Secretary of State for Transport in the coalition, said:

"If you take the private finance out of PFI, you haven't got much left . . . if you transfer the financial risk back to the public sector, then that has to be reflected in the structure of the contracts. The public sector cannot simply step in and lend the money to itself, taking more risk so that the PFI structure can be maintained while leaving the private sector with the high returns these projects can bring. That seems to us fairly ridiculous."

In an interview in November 2009, Conservative George Osborne, subsequently Chancellor of the Exchequer in the coalition, sought to distance his party from the excesses of PFI by blaming Labour for its misuse, despite it still bearing all the hallmarks of the policy devised by his own party. At the time, Osborne proposed a modified PFI which would preserve the arrangement of private sector investment for public infrastructure projects in return for part-privatisation, but would ensure proper risk transfer to the private sector along with transparent accounting:

"The government's use of PFI has become totally discredited, so we need new ways to leverage private-sector investment . . . Labour's PFI model is flawed and must be replaced. We need a new system that doesn't pretend that risks have been transferred to the private sector when they can't be, and that genuinely transfers risks when they can be . . . On PFI, we are drawing up alternative models that are more transparent and better value for taxpayers. The first step is transparent accounting, to remove the perverse incentives that result in PFI simply being used to keep liabilities off the balance sheet. The government has been using the same approach as the banks did, with disastrous consequences. We need a more honest and flexible approach to building the hospitals and schools the country needs. For projects such as major transport infrastructure we are developing alternative models that shift risk on to the private sector. The current system – heads the contractor wins, tails the taxpayer loses – will end."

Despite being so critical of PFI while in opposition and promising reform, once in power George Osborne progressed 61 PFI schemes worth a total of £6.9bn in his first year as Chancellor. According to Mark Hellowell from the University of Edinburgh:

"The truth is the coalition government have made a decision that they want to expand PFI at a time when the value for money credentials of the system have never been weaker. The government is very concerned to keep the headline rates of deficit and debt down, so it's looking to use an increasingly expensive form of borrowing through an intermediary knowing the investment costs won't immediately show up on their budgets.

The high cost of PFI deals is a major issue, particularly in this time of economic hardship. There are arguments for renegotiating PFI deals in the face of reduced public sector budgets, or even for refusing to pay PFI charges on the grounds that they are a form of odious debt."

Critics such as Peter Dixon argue that PFI is fundamentally the wrong model for infrastructure investment, saying that public sector funding is the way forward.

In November 2010 the UK government released spending figures showing that the current total payment obligation for PFI contracts in the UK is £267 billion. Also, research has shown that in 2009 the Treasury failed to negotiate decent PFI deals with publicly owned banks, resulting in £1bn of unnecessary costs. This failure is particularly grave given the coalition's own admission in their national infrastructure plan that a 1% reduction in the cost of capital for infrastructure investment could save the taxpayer £5bn a year.

In February 2011 the Treasury announced a project to examine the £835m Queen's Hospital PFI deal. Once savings and efficiencies are identified, the hope - as yet unproven - is that the PFI consortium can be persuaded to modify its contract. The same process could potentially be applied across a range of PFI projects.

#### APPENDIX 1

The document is obtainable as <a href="http://www.lewes.gov.uk/news/20726.asp">http://www.lewes.gov.uk/news/20726.asp</a>.

I have been informed that Lewes District Council has a different contract with the Veolia incinerator in Newhaven than E. Sussex or Brighton & Hove, which has meant that cost considerations are different.

# Food Waste Collection Partnership

Residents across Lewes District will benefit from a new food waste collection service starting in June 2013.

To deliver this new service and continue to provide refuse and recycling collections Lewes District Council has partnered up with Brighton & Hove City Council.

The agreement, brokered by Lewes District Council, is designed to ensure that the council has the capacity to deliver its existing refuse and recycling collections as it gears up to introduce its £2m food waste recycling scheme, which aims to double recycling rates.

Leader of Lewes District Council, Cllr James Page, said: "We wanted to partner up with Brighton & Hove City Council to ensure we had the capacity to deliver the new food waste recycling scheme as well as continue to run our existing waste collection operations".

"We want residents to benefit from the new service while continuing to receive the highly valued regular weekly refuse collections. By sharing resources we are making the best use of public money, which is a common sense and pragmatic solution".

"This is an exciting new partnership for both councils. It will enable us to share good practice in running value-for-money local services", added Cllr Page.

Brighton and Hove City Council will also share expertise in terms of management resources in an effort to share good practice and learn from one another.

Leader of Brighton & Hove City Council, Cllr Jason Kitkat, said "I'm really delighted that we're partnering up with Lewes District Council. As a council we're also focused on delivering better services to the public and we feel that genuine savings can be delivered through closer partnerships with neighbouring authorities".

"This is a good example of local councils collaborating rather than outsourcing, and sharing both resources and knowledge that can deliver better services to our residents".

The partnership is expected to begin in March this year and run for one year.

Brighton & Hove City Council and Lewes District Council also announced this week that they are working together on a "City Deal" bid to Government to help unlock new powers and investment in the region.

# **Collection Questions**

#### What are the benefits?

This is about sharing expertise, ideas and experience at the time Lewes District Council is preparing and planning to introduce a new food waste collection service.

#### What are the benefits to residents?

Residents will receive the new food collection service in June 2013 while continuing to receive their regular weekly refuse and fortnightly recycling collections.

#### How will it work in practice?

There will be an Operational manager from B&HCC supported by senior management team at B&HCC working in partnership with Lewes District Council.

# How long will it run for?

Up to 1 year.

# Published 25 January 2013

# APPENDIX 2

This extract from <a href="http://www.letsrecycle.com/councils/government-policy">http://www.letsrecycle.com/councils/government-policy</a> outlines the Scottish Government's and Welsh Assembly Government's policy on Waste Recycling. The Scottish legislation will come into force on 1<sup>st</sup> January 2014, including that on food waste, which will make food waste recycling mandatory for Scottish Councils.

#### **Scotland**

The Scottish Government published "Scotland's Zero Waste Plan" in June 2010.

This document sets out the Scottish Government's vision for a zero waste society, where waste is treated as a resource. The plan includes landfill bans for specific waste types, separate collections of waste such as food, restrictions on energy-from-waste feedstock and measures to cut the carbon impact of waste. A 70% recycling target, with a minimum of 5% sent to landfill, has also been set for 2025.

#### Wales

The Welsh Assembly Government published its long-term waste strategy "Towards Zero Waste"

(http://wales.gov.uk/topics/environmentcontryside/epq/waste\_recycling/publication/towardszero/?lang=en) in June 2010.

This sets out a framework for improving resource efficiency in Wales from now until 2050. Measures promoted in the strategy include waste prevention, the separate collection of food waste and kerbside recycling for dry recyclables.

Alongside the strategy, the WAG is developing sector plans to cover municipal waste, collection, markets and infrastructure; wholesale and retail waste; and construction and demolition waste. The municipal waste sector plan is the first to be developed...

As outlined in the strategy, Wales became the only part of the UK to set statutory waste and recycling targets in December 2010 ...

Under this law, every local authority in Wales must meet a 52% recycling target in 2012-2013, rising gradually to 70% by 2025 or face fines. The Measure also gives ministers the power to introduce landfill bans and charge for single use carrier bags ...

#### APPENDIX 3

#### These transcriptions from

www.maidstone.gov.uk/environment and planning/recycling rubbish and waste/food wast e\_recycling.aspx and www.maidstone.gov.uk/pdf/Caddy%20Leaflet.pdf outline food waste collection in Maidstone. Food waste collection in Maidstone is weekly, but refuse collection is fortnightly.

#### Food waste recycling

Thank you for using the food waste service, we are now collecting over 100 tonnes each week for composting!

You may notice the lid of your food waste bin has been left open after collection. Following a resident's suggestion, we are trialling this on some of our collection rounds to help identify the food bins that have been emptied, therefore reducing the chance of missing a bin.

#### Separate weekly food waste collections and fortnightly refuse collections

All households (excluding those with communal collection arrangements and those who are on black sack refuse collections) now receive separate food waste collections.

We accept all cooked and uncooked food waste including meat, fish and bones. The food waste is collected every week on your current collection day in a small food waste bin (23L) with a lockable lid.

With a weekly collection of food waste, there is no need to collect the remainder of your waste so often, so the grey wheeled rubbish bins are now collecting fortnightly.

The food waste is taken to a local composting facility where it is treated at high temperatures to kill any bacteria, it is then used on farmers fields as a soil improver to grow new crops.

External funding has been identified which means that the changes will be cost neutral to the council and by introducing weekly food collections and fortnightly refuse collections we aim to increase our recycling rate to 45% by 2015.

#### **Compostable Caddy Liners**

You can use compostable caddy liners if you wish, however you do not have to line your caddy or you can use newspaper or kitchen roll instead.

Maidstone Borough Council does not endorse any particular brand or supplier of compostable liner, if you are intending to purchase caddy liners please check they are **100% compostable**, these are generally made out of corn starch, potato starch or paper and are certified as BS EN 13432:2000.

Some plastic bags are sold as biodegradable, but this does not mean they are compostable and will not break down quickly enough during the composting process, some may take many years and leave fragments of plastic.

Compostable caddy liners are available to purchase from supermarkets such as **Tesco**, **Morrisons**, **Sainsbury's** and **Waitrose** and many other local retailers are now stocking them ... (a list of 18 further outlets is given).

Compostable caddy liners can also be purchased on-line from various suppliers, (as long as they meet the standards above), just use your search engine.

If you are a local retailer and stock compostable liners and would like to be included in this list, please email <a href="maidstone.gov.uk">waste@maidstone.gov.uk</a> or telephone ...

If you haven't received a food bin, please let us know by requesting a kitchen caddy.

To check the details of your refuse and recycling collections, please put your postcode in the box below and click on the 'search' button.

#### THE LEAFLET

#### ... 1 What we will provide

To enable you to separate your food waste easily from the rest of your rubbish, we will provide you with

A food caddy to collect the waste in your kitchen

A roll of compostable liners to line your kitchen caddy

An outdoor food waste bin which we will empty weekly

# 2 How do I use my food caddy?

1 Line your kitchen food caddy with a compostable liner and fill it with your food waste. DO NOT USE PLASTIC BAGS even if they are biodegradable.

You can purchase compostable liners at most local supermarkets – further details are at www.maidstone.gov.uk.

If you don't want to buy liners, you can use newspapers or kitchen roll to line your food caddy or simply put your food waste in loose. Your kitchen caddy is dishwasher safe.

- 2 When your food caddy is full, tie the compostable liner and put it in your outside food waste bin. You may also put loose food directly in your outside waste bin.
- 3 Keep your food waste bin outside and out of direct sunlight. To stop spills, lock the outside bin by moving the handle forward.

# 3 What can I put in my caddy?

You can put any raw or cooked food in your caddy. You can even scrape uneaten food straight into your caddy.

- $\sqrt{\text{Meat}}$  and fish raw and cooked including bones
- √ Fruit and vegetables raw and cooked
- $\sqrt{\text{All dairy products such as cheese}}$
- √ Eggs
- $\sqrt{\text{Bread}}$ , cakes and pastries
- $\sqrt{\text{Rice}}$ , pasta and beans
- $\sqrt{\text{Uneaten food from your plates and dishes}}$
- $\sqrt{\text{Tea bags and coffee grounds}}$
- √ Takeaway leftovers

#### **NO THANKS**

Please do not put any of these materials in your caddy

- × Packaging of any sort
- × Plastic bags
- × Liquids
- × Oil or liquid fat

**Please remember** – if you already compost at home, please keep composting your uncooked vegetable and fruit peelings in your compost bin or heap. For more information visit www.maidstone.gov.uk.

#### 4 Tips for recycling food waste

Please keep for reference

- 1 Please put out your food waste bin on the correct day by 7am on the edge of your property, where it is clearly visible from the road.
- 2 If you use a compostable liner, tie it up to keep your food waste bin clean. Remember to keep good hygiene by washing hands, caddies and surfaces with soap and hot water.
- 3 For practical advice on how to reduce food waste, and save up to £50 per month on your food bill, visit www.lovefoodhatewaste.com
  - Remember to measure portions to reduce the food you waste.
  - Make sure you store your food at the right temperature to make it last longer (fridges should be at 1-5°C).

#### Don't forget

- Your food waste bin is collected every week and your grey rubbish wheelie bin is collected every other week. Please check your waste and recycling calendar for details
- Plastic bags or packaging cannot be composted so please do not put them in your food
  waste bin. If you put plastic bags or packaging in with your food waste we will be
  unable to collect it. If you decide to use liners they must be compostable not
  biodegradable as these will still contain plastic.

# This leaflet is available in alternative formats and can be translated into other languages.

Printed on recycled paper. Please recycle this leaflet.

#### APPENDIX 4

South Shropshire was an innovator in early trials in food waste collection, including in anaerobic digestion. Here are two articles indicating what is happening now in this area. Part of the economies was due to going from a weekly to a fortnightly collection.

# Shropshire to scrap separate food waste collections

1 September 2010

by Chris Sloley

Shropshire council has outlined its plans to withdraw the separate weekly collections of household food waste it runs in three areas in the south of the county - a move it claims will save it £225,000 in operational and disposal costs.

At a time when the council needs to make savings, while still providing the best possible services, these changes will allow us to continue to provide an excellent, though more cost-effective, food waste collection service.

Cllr Mike Owen, cabinet member for economy and waste, Shropshire council:

The unitary authority last week (August 23) began alerting residents in Ludlow, Church Stretton and Craven Arms to the planned change, which will take place in the week starting October 4 2010 and brings the areas into line with the rest of the county.

The council instead plans to collect the material in green wheeled bins which are currently used for green waste and cardboard, while residents who currently have their green waste collected in a sack will be issued with stronger sacks to take into account the additional element of the food waste.

The separated food waste had been sent to the anaerobic digestion facility at Ludlow operated by BiogenGreenfinch, but is now set to be sent to Vital Earth's in-vessel composting facility at Market Drayton for reprocessing.

Shropshire council claims that the move, which was originally agreed at a budget setting meeting on February 25 2010, is being taken to ensure that food waste is still collected but is done so "in the most cost effective way".

The council hopes that the move will save it around £225,000 - with £191,863 of savings being made from operational costs to run the service and £33,438 on disposal costs.

Councillor Mike Owen, Shropshire council's cabinet member for economy and waste, said: "At a time when the council needs to make savings, while still providing the best possible services, these changes will allow us to continue to provide an excellent, though more cost-effective, food waste collection service to residents in Ludlow, Church Stretton and Craven Arms."

The method set to be employed in south Shropshire echoes the experience for householders in the north of the county, who have a fortnightly green waste and cardboard collection - which includes food waste.

Separate food waste collections had been introduced to the three south Shropshire areas following a government-funded trial of the scheme in October 2007. The collections were carried out by the council's waste collection contractor Veolia Environmental Services.

The three areas receiving the separate food waste collections comprised South Shropshire district council before it became part of the new unitary Shropshire council in April 2009 as part of a major local government shake-up.

# Study looks at innovative ways to tackle food waste

December 11, 2012

An exciting new national study has been launched in Shrewsbury as part of the Local Government Association's Waste Innovation Programme. The project will investigate the impact of Food Waste Disposers (FWD), which are being fitted in all the homes in the new David Wilson Homes development, Riverside Meadows.

As Philippa Roberts, Managing Director from Low and Behold, who are managing the project on behalf of the LGA, explained:

"Waste water treatment works use anaerobic digestion to process their sewage. This is the same technology that is used to process food waste; producing renewable energy in the process. By allowing the householders at Riverside Meadows to put their food waste down their sinks, we are hoping to see a cost saving for Shropshire Council."

She explained:-

"Much of the project monitoring and evaluation will be involve the sewer network and waste water treatment works, so the impacts on the sewer network and any cost implications of this are a critical element of the pilot project.

Councillor Peter Fleming, the Chair of the LGA Improvement Board who funded this project, said:

"Local government has long been recognised as the most efficient part of the public sector. But at a time of immense budget pressure – and with the prospect of further severe funding cuts at the next spending review – councils face their greatest challenge yet to reshape services in a way that meets the needs of local residents, while operating within the new financial realities. This is why exploring innovative solutions to waste management is crucial. By exploring new ways of dealing with waste we open the door to vast potential savings."

The Waste Innovation Programme will trial the use of Food Waste Disposers in kitchen sinks; these will enable householders to send their food waste for anaerobic digestion without the need for it to be collected. As well as making it simple for the residents to minimise what ends up in the bin, this will help produce renewable energy, reduce waste to landfill, whilst also opening up potentially huge savings for local councils.

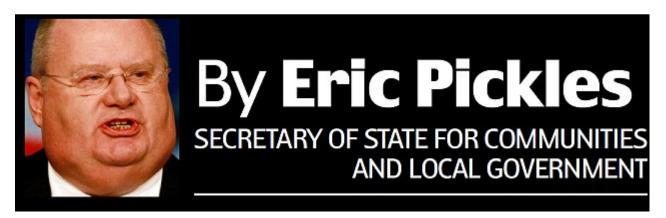
John Hurst-Knight, Shropshire Council's deputy Cabinet member responsible for waste, was enthusiastic about the project:

"It costs Shropshire Council millions of pounds each year to dispose of household waste. Around a fifth of all household waste is food waste, and so we are keen to do all we can to reduce this. By keeping waste out of landfill, this technology could deliver considerable cost savings to the council."

The project will start monitoring the impact of FWD in the New Year, once the first homeowners have moved into their new properties. The project will run for 12 months, funded by the LGA, but there are discussions underway with the wider water industry to continue this for longer.

#### APPENDIX 5

# It's a human right to have your rubbish taken away



Today I'm making it absolutely clear that it's wholly unreasonable to expect Government grants to go, in the long term, to councils that are operating fortnightly bin collections.

That support is designed to provide weekly collections on the grounds of public health. This is a basic service that people expect.

I'm not going to do this immediately because I recognise councils have contracts that they may be bound into for some time.

But councils should be in no doubt that we will change the way this funding works.

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The public pay a lot of money in council tax – the typical bill is £120 a month.

I believe that people deserve proper frontline services in return and there is nothing more essential than regular rubbish and recycling collections.

Under Labour, council tax doubled and bin collections halved.

Town hall bureaucrats spied on residents and fined them if they made a simple mistake of breaking barmy and complex rules and regulations.

Fortnightly collections weren't a local choice - Labour politicians and Whitehall pen-pushers cajoled and bullied councils into cutting collections.

The Government's bin quango, WRAP, told councils to make the cuts after local elections - to avoid democratic opposition.

Another quango, the Audit Commission, marked down councils in their Whitehall inspections if they didn't adopt fortnightly collections.

It was Disraeli's Public Health Act 1875 which introduced a duty on local authorities to collect rubbish.

This was enhanced by the Conservative-led Government's Public Health Act 1936, obliging councils to collect household waste weekly.

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Then, in a 2001 Whitehall restructuring, Tony Blair split waste policy away from local government services – and cuts to services began.

For all of Labour's talk on human rights, I believe it's a fundamental right for every Englishman and woman to be able to put the remnants of their chicken tikka masala in their bin without having to wait two weeks for it to be collected.

So, back in 2008, David Cameron pledged to Daily Mail readers that we sack Labour's trash policy of imposing fortnightly rubbish collections for one and all.

We have delivered on that pledge, as well as scrapping Labour's plans for new bin taxes, and are changing the law to ban unfair bin fines.

We have also now delivered a quarter-of-a-billion-pound fund which will help councils support weekly collections.

This cash comes on top of the standard funding councils already get from us and from £23billion of taxpayers' money raised via council tax.

Our Weekly Collection Support Scheme will help more than 6million households across England receive a weekly collection, and champion innovation and new technology.

# 'I've little doubt that, without our decisive action, the weekly bin collection in England would have gone for good by the end of this Parliament'

There are a further 4 million households continuing to receive weekly collections outside this scheme.

I've little doubt that, without our decisive action, the weekly bin collection in England would have gone for good by the end of this Parliament, looking at the experience of Northern Ireland, Wales and Scotland.

The usual suspects have been out in force to say we can't have weekly bins – Industry bin barons who smell the whiff of easy money in fortnightly collections and municipal bin bullies.

They want you to believe the fortnightly collection is the only way. In reality, it was their failure to negotiate decent contracts that lead to unnecessary expense.

Weekly collections can actually be cheaper. So this scheme has bagged the Labour myth that fortnightly rubbish collections are needed to increase recycling or save money.

I will now be working with Owen Paterson, the new Environment Secretary, to spread best practice on weekly collections, change dyed-in-the-wool attitudes and challenge shoddy and shady municipal practices.

Despite the need to tackle Labour's deficit, councils across England this year will still be spending £114billion – roughly £5,000 per household. I will be asking why councils can't provide a weekly collection in return for their central government funding.