Agenda



AGENDA for a meeting of the COMMUNITY SAFETY AND WASTE MANAGEMENT CABINET PANEL in COMMITTEE ROOM B at County Hall, Hertford on TUESDAY 1 NOVEMBER 2016 at 10.00AM

MEMBERS OF THE PANEL (11) (Quorum 3)

M Bright, M J Cook, R J Henry, N A Hollinghurst, T Hunter (Vice- Chairman), T R Hutchings, P F J Knell, R G Prowse, A M R Searing, R A C Thake (Chairman), C B Woodward

Meetings of the Cabinet Panel are open to the public (this includes the press) and attendance is welcomed. However, there may be occasions when the public are excluded from the meeting for particular items of business. Any such items are taken at the end of the public part of the meeting and are listed under "Part II ('closed') agenda".

Committee Room B is fitted with an audio system to assist those with hearing impairment. Anyone who wishes to use this should contact main (front) reception.

Members are reminded that all equalities implications and equalities impact assessments undertaken in relation to any matter on this agenda must be rigorously considered prior to any decision being reached on that matter.

PART I (PUBLIC) AGENDA

1. MINUTES

To note the Minutes of the Community Safety and Waste Management Cabinet Panel meeting held on 6 September 2016 (attached).

2. PUBLIC PETITIONS

The opportunity for any member of the public, being resident in Hertfordshire, to present a petition relating to a matter with which the Council is concerned, which is relevant to the remit of this Cabinet Panel and which contains signatories who are either resident in or who work in Hertfordshire.

Members of the public who are considering raising an issue of concern via a petition are advised to contact their <u>local member of the Council</u>. The Council's criterion and arrangements for the receipt of petitions are set out in <u>Annex 22 - Petitions Scheme</u> of the Constitution.

If you have any queries about the petitions procedure for this meeting please contact Nicola Cahill, by telephone Pac(01992)6555554 or by e-mail to

Nicola.cahill@hertfordshire.gov.uk.

At the time of the publication of this agenda no notices of petitions have been received.

If you have any queries about the procedure please contact Nicola Cahill, by telephone on (01992) 555554 or by e-mail to Nicola.cahill@hertfordshire.gov.uk.

3. POLICE AND CRIME COMMISSIONER

Members may ask questions of the Police and Crime Commissioner for such period of time as the Panel Chairman may reasonably decide.

4. POLICE AND CRIME PANEL

- a) The Council's representative on the Police and Crime Panel (PCP) (P A Ruffles) to report on the business of the PCP
- b) Members of the Panel may ask questions to the PCP Representative thereon for such period of time as the Panel Chairman may reasonably decide.

5. LOCAL AUTHORITY COLLECTED WASTE SPATIAL STRATEGY 2016

Report to the Chief Executive & Director of Environment

6. WASTE MANAGEMENT PERFORMANCE MONITOR

Report of the Chief Executive & Director of Environment

7. OTHER PART I BUSINESS

Such Part I (public) business which, if the Chairman agrees, is of sufficient urgency to warrant consideration.

PART II ('CLOSED') AGENDA

EXCLUSION OF PRESS AND PUBLIC

Part II business has been notified. The Chairman will move:-

There are no items of Part II business on this agenda. If Part II business is notified the Chairman will move:-

"That under Section 100(A) (4) of the Local Government Act 1972, the press and public be excluded from the meeting for the following item/s of business on the grounds that it/they involve/s the likely disclosure of exempt information as defined in paragraph/s of Part 1 of Schedule 12A to the said Act and the public interest in maintaining the exemption outweighs the public interest in disclosing the information."

Agenda documents are also available antiget interior at: https://cmis.hertfordshire.gov.uk/hertfordshire/Calendarofcouncilmeetings.aspx

COMMUNITY SAFETY AND WASTE MANAGEMENT CABINET PANEL

TUESDAY 1 NOVEMBER 2016 AT 10.00 AM

UPDATE REPORT FROM DAVID LLOYD POLICE AND CRIME COMMISSIONER FOR HERTFORDSHIRE

AUTHOR Roy Wilsher,

1. Purpose of the Report

To provide a brief update on the work of the Police and Crime Commissioner for Hertfordshire and the work of the Commissioner's office.

2. Update

New Chief Constable

Charlie Hall, former Deputy Chief Constable of Norfolk Constabulary, started work as Hertfordshire's new Chief Constable on 3rd October.

Community Safety and Criminal Justice Plan for Hertfordshire

It is a legal requirement that a Police and Crime Plan be put in place as soon as practicable after the PCC has taken office. The new plan for Hertfordshire will be called the 'Community Safety and Criminal Justice Plan.' It is currently being drafted and will be out for consultation to partners, the public and victims of crime between 28th November 2016 and 9th January 2017. Details will be available here: http://www.hertscommissioner.org/public-consultation

Review of Hertfordshire's Criminal Justice Board

One of the key priorities for the PCC during his second term is to lead on a series of reforms that aims to put the interests of victims and witnesses at the heart of the Criminal Justice System in Hertfordshire. PCC Lloyd commissioned a review into the efficiency and effectiveness of Hertfordshire's Criminal Justice Board and will be publishing the findings and recommendations for change in November 2016.

Road Safety Fund

The PCC continues to seek opportunities to use the revenue paid for by offenders, to fund road safety initiatives across the county that help to change motorists' perceptions and behaviour. In the first funding round (April 2016) 19 applications were successful in supporting a range of educational projects, vehicle activated signs and feasibility surveys. Following the success of the first round, the PCC anticipates opening a second round for applications on 1st December. More information regarding eligibility and an application form can be found at: www.hertscommissioner.org/road-safety-fund

New Citizens' Crime Prevention Academy modules

Hertfordshire's Citizens' Academy crime prevention site (hertscitizensacademy.org) now features four new courses:

- <u>Rural Crime</u> is a great resource for professionals and volunteers seeking to inform their rural communities on fly-tipping, heritage crime, wildlife crime and other community safety issues that predominantly affect the countryside.
- Protecting the Vulnerable is intended to help residents recognise when someone they know may be at risk and where they can go for help if they have suspicions. It includes sections on abuse of adults, CSE, extremism and domestic abuse.
- <u>Business Crime (business owners)</u> looks at the typical threats businesses face from criminals, the steps business owners can take to protect their business and the support businesses can count on from the police and other partners.

Street Triage and support around mental health

Working with HPFT since June, Hertfordshire Constabulary have trialled a Street Triage Vehicle (expanding from one car to two during September), working late shifts to attend incidents where a person is in crisis and may require sectioning under S136 of the Mental Health Act 1983. The whole county is covered by the triage vehicles from 5pm to 2am and from 7pm to 4am.

It has recently been agreed that the service will be expanded even further. One of the cars will be replaced with an unmarked ambulance and have on board a police officer, mental health practitioner and a member of ambulance staff. Until now a mental health practitioner has co-responded with a police officer. The addition of ambulance staff, and the move to convey people in crisis in a suitable vehicle, provides a better response to the public; and reduces police waiting times that currently depend on an ambulance to move individuals to a place of safety.

New Fly tipping fund

The PCC has made £60,000 available to the Herts Waste Partnership, in order to support the development of new initiatives organised through the Fly Tipping Group (FTG). Funding will only be available to members of the FTG, including:

- Environment Agency
- all ten District / Borough Councils
- Hertfordshire County Council
- Hertfordshire Constabulary
- Hertfordshire Fire & Rescue Service

- Community Safety Partnerships
- M25 Connect
- National Farmers Union.

Key points of the fund:

- the total amount of PCC grant is £60,000 for 2016/17
- all funding granted under this process must be spent by 31 March 2017
- deadline for bid submissions will be 5pm on Friday, 18th November 2016
- projects will be funded to a maximum of 75% of the total project cost as detailed in the selection criteria - bids will need to confirm how the remaining 25% is to be funded
- bids will be evaluated by a sub group of FTG members details to be confirmed
- It is anticipated that final decisions will be made by mid-December with project roll outs anticipated from early January onwards

Any queries in relation to the fund should be directed to Duncan Jones, Chair of the Fly Tipping Group – duncan.jones@hertfordshire.gov.uk

Missing Children and Young People

The OPCC, in partnership with Hertfordshire County Council's Children Services, has commissioned an independent organisation (Missing People) to deliver a return home interview service for Hertfordshire children and young people under the age of 18. It will provide support for children who go missing from home or care. The contract with Missing People is for an initial period of eighth months until 31 March 2017 at a cost of £139,776 which will be shared between the OPCC and HCC. The aim is to provide vulnerable children and young people with access to an *independent* service that will listen to them and identify further support according to their individual needs; and work alongside existing safeguarding provision for missing and sexually exploited children to ensure that information sharing is effective. This will help to ensure that the right service provision of counselling and victim support is in place, for children who may be victims of sexual abuse and exploitation across the county, and that appropriate pathways are supported. It should also increase the ability for Hertfordshire Constabulary and safeguarding partners to identify potential offenders. On 23 September 2016 the Constabulary's 'absent' category for children was removed in order to ensure that all missing children are properly safeguarded (and treated as a missing person). A full missing report assists and improves the multiagency response by notifying partners of the circumstances around safeguarding a child.

Community Resolution

A 'community resolution' is an out of court disposal for a crime recorded under the national system, Outcome 8. It can be used with or without Restorative Justice (RJ) depending on whether the victim is a person or the State. It involves Level 1 'street' RJ as soon as there is direct or indirect communication between the victim and the offender about repairing the harm caused. In the right circumstance, it could also involve Level 2 RJ.

In September 2014 Community Remedy was introduced in Hertfordshire as a requirement under the ASB, Crime and Policing Act 2014 which sought to give victims a choice, through a 'menu of options', about how their offender is dealt with if the disposal is either a community resolution or a conditional caution. The level of crime relevant for a community remedy approach is low level in terms of seriousness as per the NPCC matrix used for conditional cautions, but not exclusively so. The level of ASB relevant is defined as where a civil injunction or criminal behaviour order would otherwise be applied for. Currently where there is a victim other than the State, the options available in Hertfordshire are:

- the offender must make financial reparation to the victim
- the offender signs an agreement such as an Acceptable Behaviour or Good Neighbour Agreement which can include prohibition from taking part in certain activities or staying away from certain places
- the offender makes a verbal or written apology to the victim
- the offender undertakes a reparative activity.

The fourth option was added on 1st October 2016. The reparative activity should seek to repair the harm done, prevent the offender committing offences in future and be agreed by a police officer as proportionate.

1,700-2,000 frontline officers (SNT and Intervention officers, Specials and PCSOs) have recently been trained in Level 1 'Street RJ' and a further 30 frontline officers have received Level 2 (RJ Conferencing).

Countywide Hate Crime Strategy

Following the publication of the commissioned research on Hate Crime by the University of Leicester in December 2015, in Partnership with the OPCC, Hertfordshire Constabulary and the County Community Safety Unit (CCSU), work will now take place to develop a Countywide Hate Crime Strategy. A full copy of the report can be downloaded here:



Volunteering Strategy

The PCC's volunteering strategy is currently being refreshed for 2016-2020. It is anticipated that the strategy will be signed off by November, and will then be open for public consultation.

HERTFORDSHIRE COUNTY COUNCIL

Agenda Item No:

5

COMMUNITY SAFETY & WASTE MANAGEMENT CABINET PANEL

TUESDAY 1 NOVEMBER 2016 AT 10:00AM

LOCAL AUTHORITY COLLECTED WASTE SPATIAL STRATEGY 2016

Report to the Chief Executive & Director of Environment

Author: Alexandra Radley, Senior Project Manager

Tel: 01992 556165

Executive Member: Richard Thake, Community Safety & Waste Management

1. Purpose of report

- 1.1. To present the Cabinet Panel with the Local Authority Collected Waste (LACW) Spatial Strategy 2016. This document has been prepared by the Waste Disposal Authority (WDA) and sets out an assessment of desirable new and improved waste management facilities required in the county over the period to 2031 to better enable the sustainable management of LACW.
- 1.2. The draft LACW Spatial Strategy 2016 is attached as Appendix 1.

2. Background

2.1. The last Spatial Strategy was produced in 2009. Although the strategy remained in draft format, it was used to inform service planning and identified representations to the Waste Planning Authority. The strategy was not shared with the Waste Collection Authorities (WCAs) or more widely and was not a public document.

3. Recommendation

3.1. The Community Safety and Waste Management Cabinet Panel are requested to note the LACW Spatial Strategy 2016 and provide comment on its content.

4. The Spatial Strategy

- 4.1. The revised LACW Spatial Strategy 2016 is not a prescriptive document or rigid blueprint for future service planning but instead sets out an informed and realigned vision of the infrastructure and allocated 'waste network' requirements in Hertfordshire to allow the WDA to be effective and efficient.
- 4.2. It is the intention of the WDA to share this strategy with the Waste Planning Authority, Development Services, WCAs, the District and Borough Councils' Planning Teams and any other relevant decision makers. This will enable other

- services to fully and accurately understand the functions and needs of the WDA and consider these as part of their planning process.
- 4.3. An annex to the strategy addressing the Household Waste Recycling Centre network will be published in summer 2017.
- 4.4. As the WDA operates within changeable parameters this strategy will be regularly reviewed to take into consideration changes to projected population growth, applicable waste legislation; local and national policies and changes to WCA services.

5. Financial Implications

5.1 There are no financial implications arising from this report.

6. Equalities implications

- 6.1 When considering proposals placed before Members it is important that they are fully aware of, and have themselves rigorously considered the equality implications of the decision that they are making.
- 6.2 Rigorous consideration will ensure that proper appreciation of any potential impact of that decision on the County Council's statutory obligations under the Public Sector Equality Duty. As a minimum this requires decision makers to read and carefully consider the content of any Equalities Impact Assessment (EQiA) produced by officers.
- 6.3 The Equality Act 2010 requires the County Council when exercising its functions to have due regard to the need to (a) eliminate discrimination, harassment, victimisation and other conduct prohibited under the Act; (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it and (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The protected characteristics under the Equality Act 2010 are age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion and belief, sex and sexual orientation.
- 6.4 No equality implications have been identified in relation to this report.

Hertfordshire County Council Local Authority Collected Waste Spatial Strategy October 2016



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Annex 1: Household Waste Recycling Centres – due to be published summer 2017

Drawings

Plan 1:	Waste Transfer Station and Waste Collection Authority Depots				
Plan 2:	Strategic locations isochrones - Areas within 20 minutes' drive of the four				
	strategic locations				
Plan 3:	Proposed Waste Transfer Station Network				
Plan 4:	Material Recovery Facilities and sites with planning permission within 30 miles				
	of Hertfordshire's centre				
Plan 5:	In Vessel Composting facilities and sites with planning permission within 30				
	miles of Hertfordshire's centre				
Plan 6:	Windrow Composting facilities and sites with planning permission within 30				
	miles of Hertfordshire's centre				
Plan 7:	Anaerobic Digestion facilities and sites with planning permission within 30 miles				
	of Hertfordshire's centre				

1 **Executive summary**

The supporting information outlined in this Waste Spatial Strategy indicates that there have been major changes in service provision in recent years that have led to improvement in performance and increased diversion from landfill.

Consideration of the existing arrangements for waste management highlights a need for improved infrastructure to sustain service delivery, meet the disposal needs of planned household growth in Hertfordshire, mitigate the increasing costs of waste transfer and treatment, provide resilience in service provision and further improve performance. Future arrangements will need to include facilities that are appropriately sized and capable of managing fluctuations in waste composition and volume.

A network of infrastructure is necessary to manage waste efficiently and effectively for the future. The optimal waste management facility requirements are considered to be:

1.1 A facility to treat residual Local Authority Collected Waste (LACW)

A long term ambition for the Waste Disposal Authority (WDA) is to be able to treat/dispose of residual LACW within Hertfordshire. Currently Hertfordshire County Council (HCC) is in contract with Veolia Environmental Services to deliver an Energy Recovery Facility (ERF). A single, in-County ERF affords the WDA surety of proximate, long term treatment for waste that is not separated for reuse, recycling and/or composting.

1.2 A supporting network of Waste Transfer Stations (WTSs)

Dependent on the location of a facility or facilities to treat residual LACW, a network of WTSs are required to effectively serve Hertfordshire's requirements. A WTS is a facility where waste is bulked ready for onward transport to a recycling facility or disposal facility.

A network of WTSs would enable the further segregation of waste types. Once waste types are segregated they can be sent to specialist treatment facilities for processing/treatment and/or disposal using the most economical option. Strategically positioned WTSs close to the major road network will enable more Agenda Pack 12 of 76

efficient WCA collection rounds by providing a location for unloading close to the point of waste production prior to onward bulk transportation to treatment/disposal facilities. This Waste Spatial Strategy indicates a clear preference for co-location of WTSs with, for example, WCA depots and/or HWRCs.

In addition to residual LACW, the WTSs should be designed to be flexible, that is, capable of accommodating a range of separately collected materials e.g. street sweepings, organic wastes and dry recycling.

1.3 A strategic network of improved Household Waste Recycling Centres (HWRCs)

The current network of 17 HWRCs is largely not expected to be fit for purpose and/or be capable of sustaining service delivery for the plan period. An analysis of centre capacity, linked to the planned introduction of Automatic Number Plate Recognition (ANPR) cameras across the network in late 2016, will inform the development of an Annex to this waste spatial strategy (anticipated to be available in summer 2017).

The existing operation suggests that an improved network of more fit-for-purpose and strategically located Household Waste Recycling Centres (HWRCs), designed to serve larger catchment areas, could provide a more effective and efficient service. The HWRCs should be easy to travel to, be larger and more flexible than the existing centres, enable increased segregation of waste types and provide an improved customer experience including meeting improved reuse ambitions.

2 Introduction and purpose

- 2.1 This Hertfordshire County Council (HCC) Local Authority Collected Waste (LACW) Spatial Strategy has been prepared by the Waste Disposal Authority (WDA). It is a 'live' document and will be periodically reviewed and updated to reflect influencing factors that affect the composition and total volume of LACW in Hertfordshire. Influencing factors include population and housing growth within Hertfordshire, the strength of the economy, waste legislation and local and national waste management policies (at Appendix 1).
- 2.2 Under Section 30(2)(a) of the Environmental Protection Act 1990, HCC is required to perform the statutory functions of the WDA for Hertfordshire. As WDA, the county council is responsible for the treatment and/or disposal of LACW arising in the county.
- 2.3 This document sets out an assessment of desirable new and improved waste management facilities required in the county over the period to 2031 and beyond to better enable the sustainable management and disposal of LACW.
- 2.4 When identifying waste management requirements, a holistic view of the LACW management process has been considered, taking into consideration the separate roles of the WDA and Waste Collection Authorities (WCAs).
- 2.5 The spatial strategy is set out by material stream i.e. residual, dry recycling and organic with each stream considered to require differing solutions to provide appropriate infrastructure and arrangements.
- 2.6 It should be recognised that the WDA operates within changeable parameters. Projected population growth, applicable waste legislation; local and national policies and known changes to WCA services have all been considered.
- 2.7 This strategy does not represent a formal policy position but seeks to provide context and direction for relevant decision makers when considering the activities and functions of the WDA. It is not a prescriptive document or a rigid blueprint for future service planning but instead sets out an informed and up to date vision of the infrastructure considered by the WDA to be required in Hertfordshire to provide a deliverable, effective and efficient 'waste network'.

Local Authority Collected Waste

- 2.8 Local Authority Collected Waste is defined as all waste collected by the local authority including commercial and industrial waste.
- 2.9 Hertfordshire's LACW is typically made up of the following types of waste:
 - Household waste collected by the ten Borough and District Councils as the WCA's for Hertfordshire.
 - Commercial and industrial waste collected in association with the above.
 - Waste collected at the county's Household Waste Recycling Centres (HWRCs).
 - Specialised forms of LACW waste e.g. clinical waste, asbestos and chemicals
- 2.10 It should be noted that, whilst there are currently no performance targets for local authorities, National targets are set out in applicable legislation. As set out within Appendix 1, these National targets can relate to LACW or household waste, for example, the targets for levels of recycling relate to household waste only whereas, diversion from landfill targets concern the wider definition of LACW or 'municipal' waste.
- 2.11 Unless otherwise indicated, all figures in this report relate to LACW and its component parts.

Vision Statement

2.12 The Waste Disposal Authority aims to provide effective and value for money services for the compliant treatment of waste arising in Hertfordshire. These services will be robust but flexible to accommodate changes in arrangements, waste volumes and waste composition and will be developed with consideration of the reasonable expectations of partner authorities and residents in the County.

3 Residual waste

Summary

The amount of residual waste has steadily decreased since 2004/05 due to legislative and financial drivers and the associated WCA and WDA service improvements. However, population growth is expected to result in waste growth during the period to 2031.

In 2015/16 the primary means of disposing of residual waste was by using regional ERFs. Within the county disposal facilities are limited to the Westmill landfill site which has permission to operate to the end of 2017 (at the time of writing).

The WDAs residual waste strategy is to promote/enable the provision of a major new ERF in the county, supported by strategically located Waste Transfer Stations.

- 3.1 Residual waste comprises of the waste left over after materials have been separated for reuse, recycling and organic waste treatment. Table 1 and figure 1 demonstrate that the amount of residual waste has steadily decreased since 2004/05. The introduction of landfill tax increased the cost of disposing of residual waste using landfill facilities. In response to this and the HWP aspiration to increase recycling rates both the WCAs and WDA made investments to increase recycling and composting at the kerbside and at HWRCs. These service improvements coupled with a weaker economic climate have resulted in reduced residual waste.
- 3.2 However, this downward trend is not considered likely to continue with population growth likely to result in waste growth. Service changes introduced by WCAs in recent years are known to have masked underlying waste growth. For example, although overall residual waste reduced in 2015/16 compared with the previous year, six of the ten of the WCAs (those that did not implement service changes) experienced residual LACW growth.

Table 1: Residual waste disposal tonnages

Year	Landfill (Tonnes)	% of total	Energy Recovery (Tonnes)	% of total	Total Residual LACW	Residual LACW as % of all LACW
2004/05	381,863	68.7%	32,852	5.9%	414,715	74.6%
2005/06	353,784	62.5%	34,627	6.1%	388,411	68.6%
2006/07 ¹	359,942	60.5%	36,862	6.2%	396,804	66.7%
2007/08	318,697	56.3%	40,767	7.2%	359,464	63.5%
2008/09	290,172	52.0%	36,743	6.6%	326,915	58.6%
2009/10	275,159	50.6%	26,839	4.9%	301,998	55.5%
2010/11	242,384	45.1%	41,304	7.7%	283,688	52.8%
2011/12 ¹	200,725	37.3%	73,365	13.6%	274,090	50.9%
2012/13	190,558	36.2%	100,283	19.0%	290,841	55.2%
2013/14	191,926	35.6%	86,464	16%	278,390	51.6%
2014/15	140,115	26.2%	134,482	25.1%	274,597	51.3%
2015/16	98,076	18.6%	167,589	31.7%	265,665	50.3%

¹ To ensure accurate provision of data and payment of contracts an annual accounting schedule consisting of either 52 or 53 weeks is developed each year. 2006/07 and 2011/12 were '53 week years'

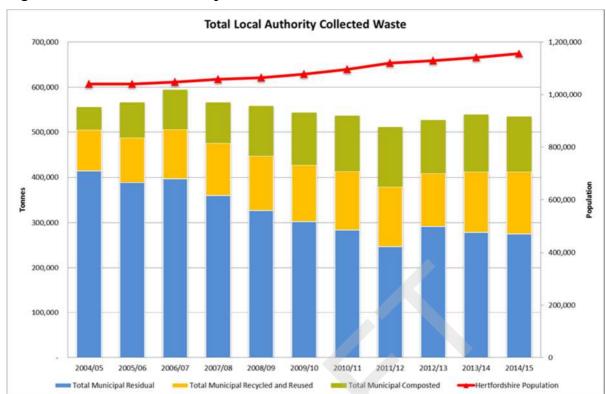


Figure 1: Total Local Authority Collected Waste

- 3.3 Residual waste in Hertfordshire is primarily disposed of using two methods; Energy Recovery and Landfill. The use of ERFs as a method of disposing of Hertfordshire's residual waste has increased in recent years as regional facilities have been developed and available landfill capacity has reduced. Hertfordshire has been able to utilise these facilities in the short term but treatment capacity cannot be guaranteed and the locations of the facilities leads to increasing transport costs. Furthermore, there currently remains a need to utilise some landfill capacity for items unsuitable for current ERFs. Therefore, more suitable and sustainable long term arrangements are required for the treatment of residual LACW.
- 3.4 The proportion of residual LACW sent to landfill and to ERFs over an 11 year period, from April 2004 to March 2016 has changed as shown in table 1 and figure 2. This is due to a reduction in landfill capacity close to Hertfordshire and the procurement of regional disposal contracts with ERFs. The volume of LACW sent to landfill has decreased steadily to a level around a quarter of that in 2004/5.

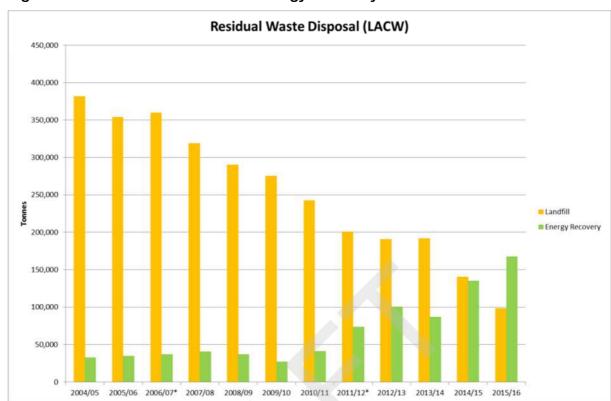


Figure 2: LACW sent to landfill and Energy Recovery Facilities

Landfill sites

3.5 In 2015/16, 98,076 tonnes (18.6%) of all LACW was principally disposed of at three landfill sites, see table 2 below. In addition to facilities procured by the WDA (listed below) other facilities were used by contracted suppliers for the disposal of non-recyclable residues.

Table 2: LACW sent to landfill sites

Site	Tonnes
Bletchley, Buckinghamshire	48,416
Milton, Cambridgeshire	2,979
Westmill, Ware, Hertfordshire	41,029
Other sites	5,652
Total	98,076

Energy Recovery Facilities

3.6 In 2015/16, 167,589 tonnes (31.7%) of all LACW was disposed of at ERFs, see table 3 below. In addition to facilities procured by the WDA (listed below) other facilities outside of Hertfordshire were also used to dispose of clinical, street cleansing and chemical wastes.

Table 3: LACW sent to Energy Recovery Facilities

Site	Tonnes
Edmonton, Enfield, London	64,858
Ardley, Oxfordshire	84,537
Greatmoor, Buckinghamshire	12,813
Lakeside, Buckinghamshire	577
Other	4,803
Total	167,589

3.7 The information from tables 2 and 3 shows that almost 85% of the residual LACW in Hertfordshire is exported out of the County attracting significant transfer and haulage costs.

Appraisal of current provision

3.8 Current arrangements for disposal include direct delivery into landfill sites and Energy Recovery Facilities, supplemented with transfer facilities allowing for WCAs to deliver their waste within a reasonable distance for onward bulk transportation to landfill sites and the regional ERFs. A summary is shown as map 1 below.

Milton, Residual Waste Arrangements 2015/16 Cambridgeshire Bletchley, Buckinghamshire Greatmoor, Buckinghamshire Oxfordshire Westmill, Ware HCC owned transfer station Key Commercial transfer station Waste Waste bulked delivered & transferred directly Final Disposal Facility Energy Recovery Edmonton. Landfill Facility London

Map 1: Waste disposal routes

Waste treatment facility

- 3.9 A feasibility study to consider the procurement of a major waste treatment facility was undertaken in 2007 and an outline business case for the provision of a new waste treatment facility was approved by the county council Cabinet on 20 October 2008.
- 3.10 Following a detailed procurement process, the WDA entered into a contract with Veolia ES Hertfordshire Limited (VES) in July 2011 for the provision of a solution for the treatment of Hertfordshire's residual LACW. VES's chosen site for an ERF was New Barnfield, Welham Green, a site close to the A1/A414 junction in the centre of the county.
- 3.11 The site is allocated as Green Belt within the Welwyn Hatfield Local Development Plan and in July 2015 the Secretary of State refused planning permission for the development of an ERF at New Barnfield.

- 3.12 The Revised Project Plan (RPP) mechanism in the contract allows VES to propose an alternative site and/or design and other consequential changes to the contract. The council invited VES to submit a RPP and following evaluation the council accepted VES's RPP in March 2015.
- 3.13 The RPP submitted by VES details their proposal to develop a high efficiency ERF based on modern technology, and designed to meet R1 "recovery" status under the Waste Framework Directive. The facility would be Combined Heat & Power ("CHP") "ready" and with recovery/reprocessing of Incinerator Bottom Ash ("IBA") derived from the processing of residual waste streams.
- 3.14 The location of the proposed facility is Ratty's Lane, Rye House, Hoddesdon.
- 3.15 The proposed facility would have a nominal capacity to accept 320k tonnes per annum of waste (based on normal calorific values and plant availability) and is expected to generate 33.5 Megawatt electric (MWe) gross of power (30.2MWe nett). This can be considered as the equivalent electricity input into the National Grid for 69,000 typical households.
- 3.16 Should planning permission be obtained in line with VES's expectations, the planned services commencement date for the facility is estimated to be the 31 December 2020.
- 3.17 The proposed operational period of the contract is 30 years following planning and construction of the facility.

Interim arrangements

- 3.18 Interim arrangements have been put in place while a long term solution for the treatment/disposal of Hertfordshire's residual LACW is being considered.
- 3.19 The interim arrangements are a combination of landfill and ERF destinations and will be in place until 2018, there is an option to extend the contracts until 2021 albeit that any extension is subject to capacity requirements and cost being agreed.
- 3.20 These arrangements have resulted in a shift from predominantly using landfill facilities to dispose of residual LACW to ERFs. The interim arrangements are with the following facilities:

Energy Recovery

- Ardley, Oxfordshire
- Greatmoor, Buckinghamshire

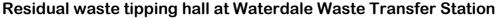
Landfill

- Bletchley, Buckinghamshire
- Milton, Cambridgeshire
- Westmill, Hertfordshire
- 3.21 In addition to the existing interim arrangements, the WDA sends waste to the Edmonton ERF in North London although the longstanding arrangement is due to expire in the short term which would increase the cost of waste transfer and treatment.

Waterdale Waste Transfer Station

- 3.22 Residual LACW generated in the southern, western and central parts of the county (Dacorum, Hertsmere, St Albans, Stevenage, Watford, Welwyn Hatfield and Three Rivers district and borough councils) is currently directed to the county council's WTS at Waterdale in Three Rivers.
- 3.23 The Waterdale WTS was built in 1982, is owned by the county council and is currently operated by FCC Environment. It receives in the region of 190,000 tonnes of LACW per annum.
- 3.24 The Waterdale WTS currently receives residual waste regularly from 11 of the county's HWRCs. The facility is also used to bulk co-mingled recycling collected by two WCAs, street sweepings collected by three WCAs and clinical waste collected by all ten of the WCAs.
- 3.25 At the station, residual waste material is transferred from waste collection vehicles to 20-tonne container vehicles for transportation to Bletchley Landfill, Buckinghamshire and ERFs at Ardley in Oxfordshire, Greatmoor in Buckinghamshire and Edmonton in North London. The collection of co-mingled recycling is coordinated by the WCAs contractor, Pearce Recycling based in St

Albans. Street sweepings are collected for reprocessing by Eastern Waste Disposal in Essex. Clinical waste is collected by Healthcare Environmental Services and sent to Rainham and Sandwich for processing.





3.26 The reliance on the Waterdale WTS for such a large proportion of the County's residual waste is less than ideal in business continuity and resilience terms and a clear preference for increased options is required. This may be direct delivery to an in-County facility or, failing provision of a direct delivery option(s), an increased number of strategically placed WTSs.

Bury Mead Road

3.27 The Bury Mead Road transfer station is used to transfer residual LACW from North Hertfordshire. The depot is owned by North Hertfordshire District Council and is operated by FCC Environment under contract to the WDA until 2018. The site handles circa 21,000 tonnes of Hertfordshire's LACW per annum and also receives commercial waste. This waste is transferred to 20-tonne container vehicles for transportation to the Greatmoor ERF and/or the Bletchley Landfill,

- Buckinghamshire. Street sweepings are also bulked at this site ready for collection and reprocessing by Eastern Waste Disposal in Essex.
- 3.28 The facility has limited capacity and is not capable of accommodating future waste growth. The restrictive nature of the site also restricts the separate bulking of waste materials.
- 3.29 Plan 1 identifies the location of existing WCA owned and managed depots in the county and also the Waterdale WTS. Broxbourne, Dacorum, Hertsmere, St Albans and Stevenage WCAs have bulking capacity at their depots for waste types such as street sweepings.

Private (commercial or 'merchant') facilities

- 3.30 Waste bulking and transfer facilities within the county are limited. The only direct delivery disposal option for residual waste is the Westmill landfill site which has planning permission until the end of 2017, even with extension of permission (decision outstanding at the time of writing), this site will only be available for WCAs to directly deliver to in the short term. The current practise of transferring the majority of Hertfordshire's residual waste outside of the county and for WCAs to travel a reasonable time to a point of treatment/disposal highlights the need for a more sustainable in-County solution or, should that not come to fruition, additional bulking and transfer facilities.
- 3.31 Plan 1 illustrates the limited provision of private bulking and transfer facilities with appropriate capacity within the county.

Residual Waste Projections 2031

3.32 The latest projection of LACW in Hertfordshire over the period to 2031 was carried out by the WDA in August 2016 and is shown in table 4. Waste growth projections suggest an increase in residual waste of 11% between 2016/17 to 2030/31, an increase of 31,916 tonnes.

Table 4: Projected residual waste growth

	Household	Achievement of	Proposal for a
Year	growth of	60% recycling	national recycling
	15.18%	rate	rate of 65%
	(Tonnes)	(Tonnes)	(Tonnes)
2016/17	262,240	262,240	262,240
2017/18	262,223	260,613	258,475
2018/19	263,825	258,986	254,710
2019/20	266,176	257,358	250,944
2020/21	269,515	255,731	247,179
2021/22	271,874	254,103	243,413
2022/23	274,307	252,476	239,648
2023/24	276,788	250,849	235,882
2024/25	279,269	249,221	232,117
2025/26	281,750	247,594	228,352
2026/27	284,231	245,966	224,586
2027/28	286,712	244,339	220,821
2028/29	289,193	242,712	217,055
2029/30	291,675	241,084	213,290
2030/31	294,156	239,457	209,525

- 3.33 A simple sensitivity test which assumes that the amount of recycled, reused and composted LACW will gradually increase to 60% and residual LACW will decrease to 40% of the total LACW by 2031 confirms that, the volume of residual LACW at 2030/31 would remain significant at in the region 239,457 tonnes.
- 3.34 Although there is currently a high level of uncertainty over the impact, if any, of new legislation for waste following the decision of the UK to leave the European Union, consideration can be given to the potential introduction of national and/or local recycling targets as have been proposed during the EU Circular Economy Strategy discussions in recent years. Applying a 65% recycling, reuse and composting rate for LACW is still projected to result in 209,525 tonnes of residual LACW by 2031.

3.35 As is shown by figure 3 below, improvements in reducing the percentage of residual LACW is evident but so is the 'plateau' in recent years at around the 50% level of all waste received. With consideration that comprehensive services are already in place across the County, this might be considered to represent the level of activity residents currently feel is acceptable in separation of their waste at the kerbside and HWRCs given current service provision. It also demonstrates the challenges faced in capturing this material through changing services, behaviour and/or enforcement.

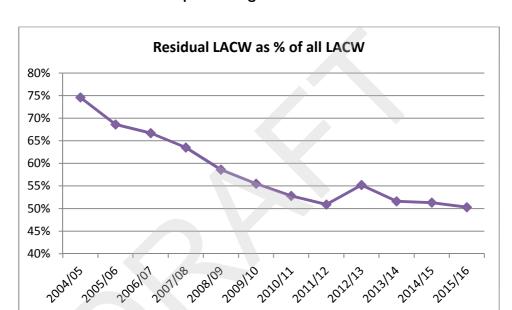


Figure 3: Residual LACW as a percentage of all LACW

3.36 Although the challenge of further separation is acknowledged, waste compositional analysis in 2015 (see Appendix 2) identified that 51.2% of waste placed into residual bins at the kerbside could have been recycled at the kerbside. At HWRCs 49.1% of waste deposited in the residual waste stream could have been placed into alternative collection points within the HWRC. This shows that even without the introduction of new recycling targets, there is significant potential to reduce the quantity of residual waste being produced and this should remain a priority with further consideration given by the Hertfordshire Waste Partnership to reduced receptacle sizes and/or less frequent collections for residual LACW.

Residual waste infrastructure requirements

- 3.37 The provision of privately owned facilities for the treatment/disposal of residual LACW within Hertfordshire is limited to the Westmill landfill site which, even with extension of permission (decision outstanding at the time of writing) is only available for part way through the planned term. Privately operated facilities located outside of the county are too far for the direct delivery of residual waste by the WCAs.
- 3.38 Development of a residual waste treatment facility within Hertfordshire or within close proximity to the county is preferred in order to treat waste in line with the proximity principle championed in the National Planning Policy for Waste 2014 (see Appendix 1). A facility within or close to Hertfordshire would also provide surety for the necessary treatment of residual wastes remaining after increased efforts to prevent waste and direct material for reuse, recycling and organic waste treatment.
- 3.39 The residual LACW arrangements will need to be flexible enough to manage changes in composition and volume. Work to provide significant improvement in the reduction of residual LACW should remain a priority but arrangements have to be capable of effectively handling increased volumes should improvements not be made. The provision of too little capacity for disposal would cause significant problems and increase costs.
- 3.40 A network of residual LACW options i.e. direct delivery and/or WTSs that reduce the travel time of WCA vehicles to the point of disposal is required. This network would enable collection vehicles to spend the majority of their time on collection rounds instead of travelling to and from a remote point of disposal. It would also reduce the environmental and financial impact of transporting waste.

Residual Waste Spatial Strategy

- 3.41 The WDAs spatial strategy for treating/disposing of residual LACW reflects the specific needs of Hertfordshire. In developing a spatial strategy the WDA has considered a wide range of government guidance and information.
- 3.42 As a WDA the council must take all such measures available to it as are reasonable in the circumstances to apply the waste hierarchy. Locally this policy was mirrored

in the Hertfordshire Joint Municipal Waste Management Strategy 2007 which contains a commitment to move away from a reliance on landfill for the disposal of residual waste and, in the longer term, to ensure that residual waste treatment by energy recovery is in place.

- 3.43 The National Planning Policy for Waste 2014 states that positive planning plays a pivotal role in delivering the county's waste ambitions through ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport. Sites within Hertfordshire have been safeguarded for the management of waste within the Minerals and Waste Development framework for Hertfordshire, although the size and location of identified sites may not lend themselves to the development of an efficient and strategic waste management network. It is recognised that the predominantly residential and light industrial nature of development within the county combined with limited availability of land not allocated as Green Belt within district and borough Local Development Plans presents challenges in identifying waste management sites.
- 3.44 Given the needs and characteristics of Hertfordshire and the appropriate requirement to strongly support a solution that is deliverable in commercial and planning terms, the WDA's residual waste strategy is to promote/enable the provision of a major new waste treatment facility in the county, supported by strategically located WTSs.
- 3.45 In terms of the potential locations for new waste treatment and/or transfer facilities, the WDA has identified four strategic locations in the county. Facilities within easy travelling distance of the identified locations would be close to the major road network and accessible to WCA vehicles.
 - Land in the vicinity of the M1 / A405 junction in the west of the county.
 - Land in the vicinity of the A1 / A414 junction in the centre of the county.
 - Land in the vicinity of the A10 / A602 junction in the east of the county.
 - Land in the vicinity of the A1 / A505 junction in the north of the county.

- 3.46 The county council's Waterdale WTS lies close to the M1 / A405 junction in the west of the county and is a strategically important and efficient facility and as such is safeguarded and allocated within the adopted Waste Local Plan. As a result, a new facility is not required in this location.
- 3.47 Whilst the WDA has no particular preference as to which of the three remaining strategic locations should be the chosen location for the Waste Treatment Facility and recognises that this will be market driven though an alternative site assessment waste planning process, provision of a facility in or within easy travelling distance from one of the identified locations would likely still require a need for at least one new WTS to enable efficient waste collection rounds across Hertfordshire.

Rationale

- 3.48 For waste under the WDA's control, it has a statutory power to direct WCAs to whatever point of disposal the WDA has arranged. Theoretically this means that WCAs could be asked by the WDA to deliver their residual LACW directly to any given waste disposal facility or WTS. However the WDA would need to make a 'reasonable' payment to the WCAs and therefore, the distance to a waste disposal facility or WTS is important for both tier authorities in Hertfordshire.
- 3.49 The residual waste strategy seeks to strike a balance between:
 - The cost and environmental benefits of providing a small number of relatively large waste treatment/transfer facilities to meet the county's residual waste requirements and;
 - The benefits of limiting the overall distance that waste vehicles have to travel to dispose of their load at a waste treatment and/or transfer facility. In order to promote efficient WCA rounds and reduce the environmental impact of transporting waste.
- 3.50 The WDA believes that the VES proposal represents a deliverable and appropriate solution to safeguard the treatment of Hertfordshire's residual LACW. The technology proposed is efficient and flexible and the contract terms represent a

- value for money solution and do not restrict the authority's ability to improve residual LACW minimisation or inhibit reuse, recycling and composting ambitions.
- 3.51 All of the county's major centres of population lie within approximately 20 minutes' drive time of at least one of the four strategic locations (see plan 2). Through providing waste treatment / transfer facilities in strategic locations that are no more than 20 minutes' drive time from the county's main population centres, the strategy will mean that waste collection vehicles will not have to spend more than an hour delivering their load to a facility (assuming a 20 minute drive there and back plus 20 minutes 'tipping time' at the facility). This will enable collection vehicles to spend the majority of their working day on their rounds rather than travelling to and from a waste treatment/transfer facility, thereby enabling more efficient waste collection rounds.
- 3.52 Whilst the 20 minute isochrones can only be a 'rule of thumb' in this respect, it generally accords with the distances travelled by those WCAs that travel to the Waterdale WTS and the Westmill landfill site.

Landfill facilities

- 3.53 The Westmill landfill site in Ware is the only landfill site operating in Hertfordshire. The site has planning permission until 2017. Continued availability of this site is subject to an extension of planning permission (decision outstanding at the time of writing) and dependant on remaining void capacity.
- 3.54 Notwithstanding the provision of new waste treatment and waste transfer facilities, the WDA accepts that there may be a requirement for some landfill capacity to accommodate certain 'untreatable' wastes. Whilst this would in the main fall to VES to provide should the Ratty's Lane, Hoddesdon ERF be delivered (exceptions would include asbestos, chemicals and some clinical wastes), if it is not, the requirement for landfill and/or pre-treatment capacity increases.
- 3.55 Whilst quantifying the amount of untreatable waste is difficult as it is often collected alongside other residual LACW such as litter and street cleansing activities, it is also likely that some landfill capacity within, or within reach of Hertfordshire is

necessary in order to dispose of wastes which are unsuitable for disposal through ERFs, such as bulky wastes e.g. mattresses.

Transfer facilities

- 3.56 The WDA considers the following WTS requirements, in addition to the Waterdale Transfer Station, are necessary to support the residual waste spatial strategy:
 - Provision of a Waste Transfer Facility in the eastern part of the county to serve Broxbourne Borough Council, East Hertfordshire District Council and potentially Welwyn Hatfield District Council with capacity for circa 140,000 tonnes of waste and located close to the strategic road network. A preferred location is in the vicinity of the A10/A602 junction see plan 2. A transfer station for residual LACW to serve the east of Hertfordshire may not be necessary if planning permission for the proposed ERF at Ratty's Lane, Rye House, Hoddesdon is achieved as this is considered by the WDA to be 'easy travelling distance' for the proximate WCAs.
 - Provision of a WTS in the northern part of the county to serve North Hertfordshire District Council and Stevenage Borough Council with capacity of at least 100,000 tonnes. A preferred location is in the vicinity of the A1 / A505 junction, see plan 3. The WDA considers the Bury Mead Road depot to be unsuitable for development as the site is constrained by its size and layout. Also, increased operations at the site may impact the local highway and the safe operation of the site.
- 3.57 The proposed ERF at Ratty's Lane, Hoddesdon and/or a new WTS network would reduce the travel time for WCAs to the point of disposal and reduce transport subsidies paid by the WDA to the WCAs as an increased collection area would be closer to the defined 'reasonable' travelling distance within the Hertfordshire Waste Partnership Agreement.
- 3.58 In line with the Waste Local Plans, this spatial strategy promotes the co-location of WCA depots, WDA transfer facilities and HWRCs. Co-location could offer service delivery benefits such as decreased travel for refuse collection vehicles and better value for money when developing a site. Current co-location opportunities include:

- A WTS facility and HWRC to serve the north of the county potentially colocated with a new depot for North Hertfordshire District Council.
- A WTS facility to serve the east of the county combined with an improved HWRC at the Ware HWRC site, potentially co-located with a WCA depot. Should the proposed Ratty's Lane, Hoddesdon ERF be delivered, this site may still provide co-located waste management uses such as a WCA depot, privately owned transfer station, street sweeping facility and/or a Materials Recovery Facility.
- A new HWRC to replace the Turnford HWRC co-located with a replacement depot for Broxbourne Borough Council should land at Brookfield, west of the A10 be developed.

4 Recycled waste

Summary

The amount of recycled and reused waste has increased to 27% of all LACW in 2015/16, combined with treated organic waste, a recycling rate of 49% was achieved in 2015/16.

The WCAs may at any time introduce service changes that affect the quantity of recyclables collected at the kerbside. The market for recyclables fluctuates, in 2015/16 the average annual price per tonne for the majority of materials decreased. Only one commercial Material Recovery Facility (MRF) is located within Hertfordshire.

Whilst it is recommended that development of an in-County MRF for Hertfordshire is explored through the Hertfordshire Waste Partnership, future needs can be also be met by increased flexibility within a network of WDA transfer stations and WCA depots.

Increased options would also improve the WCA's and WDA's resilience to market fluctuations and ability to use MRFs outside of the county, thereby increasing competition for provision of the services.

- 4.1 The total amount of LACW recycled and reused in 2004/5 was 16% of all LACW and this figure has steadily increased to 27% in 2015/16 as demonstrated in table 5. Recyclable waste is separated through facilities at HWRCs and at the kerbside in the form of either co-mingled recycling collections or pre-sorted collections.
- 4.2 HWRCs provide facilities for residents to dispose of waste such as large amounts of green garden waste, bulky wastes, domestic electrical appliances and wood waste. At the point of disposal, waste is segregated into recyclables and items for reuse and recovery. A total of up to 33 different materials can be diverted from the residual waste stream and in 2015/16; the HWRCs handled 53,553 tonnes of recyclable LACW with a recycling rate of 68%. All materials recycled and

recovered are sent to a wide range of privately owned facilities for reprocessing. Items for reuse are sold at the HWRCs (a total of 998 tonnes in 2015/16).

4.3 A detailed analysis of the HWRC network is underway (linked to the introduction of ANPR and CCTV to assist in capacity assessments) and will inform the development of an Annex to this waste spatial strategy (anticipated to be available in summer 2017). This will include detailed consideration of reuse across the network.

Table 5: LACW recycling rates

Year	LACW Recycled and Reused (Tonnes)	% of total LACW Recycled and Reused
2004/05	90,999	16.4%
2005/06	99,887	17.6%
2006/07 ¹	109,328	18.4%
2007/08	115,754	20.5%
2008/09	120,359	21.5%
2009/10	125,393	23.1%

Year	LACW Recycled and Reused (Tonnes)	% of total LACW Recycled and Reused
2010/11	129,688	24.2%
2011/12 ¹	131,874	24.5%
2012/13	118,730	22.5%
2013/14	134,069	24.8%
2014/15	138,037	25.8%
2015/16	144,153	27.3%

- 4.4 Kerbside collected recyclables predominantly consist of waste discarded on a daily basis such as card, paper, plastic, cans and glass packaging. In 2015/16 104,242 tonnes of recyclable materials were retained by the WCAs who make their own arrangements with privately operated facilities and/or waste brokers for the sorting and reprocessing of these materials.
- 4.5 The market for recyclables fluctuates as shown in figure 4. Depending on the strength of the market the WCAs/WDA will either receive an income for recyclable material or pay for its treatment. The average annual price per tonne for the majority of materials decreased in 2015/16. Recent procurements for recycling services across the county reflect a trend of a net payment for treatment of material once transport costs and bulking arrangements are taken into consideration.

4.6 The majority of the WCAs now provide comprehensive kerbside recycling schemes and therefore, whilst continued high increases in recycling volumes are not anticipated, the waste composition data (see Appendix 2) suggests that LACW recycling rates could significantly improve at the kerbside. This indicates the aspirational HWP recycling rate of 60% and proposal for a potential national recycling rate of 65% is an achievable but challenging prospect.

Recyclable Materials Average Annual Price per Tonne 350 300 250 Textiles 200 Price per tonne Ferrous **Plastic Bottles** 150 Glass 100 Paper Card 50 0 -50 2008/09 2009/10 2010/11 2011/12 2012/13 2013/14 2014/15 2015/16

Figure 4: Recyclable materials average annual price per tonne

Appraisal of current provision

- 4.7 Only one Material Recovery Facility (MRF) is located within Hertfordshire, this is located in St Albans. This privately owned facility receives the majority of Hertfordshire's LACW recycling from the HWRCs and seven WCAs.
- 4.8 Whilst some recyclable materials collected by the WCAs are taken directly to waste treatment facilities, the majority is taken first to intermediate bulking facilities such as depots and waste transfer stations. These include:-

- The Waterdale Waste Transfer Station, Watford
- The North Hertfordshire contractor provided Radwell Barn, Nr. Baldock
- WCA Depots e.g. Cavendish Road, Stevenage and Cupid Green, Dacorum
- 4.9 Depots owned and managed by the WCAs perform an important role in the bulking of recyclable materials such as street sweepings, paper and Waste Electrical and Electronic Equipment (WEEE). Stevenage Borough Council and Dacorum Borough Council bulk dry recyclable materials at their depots and send them directly to nationwide reprocessing facilities.
- 4.10 To accommodate the increase in co-mingled recyclables collected by the WCAs a structure for the bulking of recyclable materials was built at Waterdale in 2013. This facility is used to bulk dry recyclable materials from two WCAs and street sweepings from three WCAs.





Recycling projections to 2031

- 4.11 Three models have been used to project recycling levels until 2031 (shown in table 6 below):
 - a) Current level of recycling with household growth of 15.18% until 2031
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- b) Achievement of a 60% recycling rate by 2031 (sensitivity test)
- c) Proposals for a national recycling rate target of 65%

Table 6: Recycling projections

Year	Household growth of 15.18% (Tonnes)	Achievement of 60% recycling rate (Tonnes)	Proposal for a national recycling rate of 65% (Tonnes)
2016/17	147,762	147,762	147,762
2017/18	149,654	151,209	152,376
2018/19	151,211	154,656	156,990
2019/20	152,611	158,103	161,603
2020/21	154,561	161,550	166,217
2021/22	155,953	164,997	170,831
2022/23	157,357	168,444	175,445
2023/24	158,750	171,891	180,059
2024/25	160,038	175,338	184,672
2025/26	161,327	178,785	189,286
2026/27	162,615	182,232	193,900
2027/28	163,903	185,679	198,514
2028/29	165,191	189,126	203,128
2029/30	166,479	192,573	207,742
2030/31	167,767	196,020	212,355

Analysis of influencing factors

4.12 WCAs may at any time introduce service changes that affect the amount of recyclables collected at the kerbside. Co-mingled collections have demonstrated a greater participation rate in Hertfordshire and have increased the amount of waste recycled. However, under the Waste (England and Wales) Regulations 2012 the separate collection of recyclables by WCAs may be required unless it is not technically, environmentally or economically practicable (TEEP) as detailed in

Appendix 1. These separate collection requirements are designed to promote high quality recycling but they could have an adverse effect on recycling rates through reduced participation and impact the ability of the UK to achieve the current 50% recycling rate target by 2020 for household waste.

Recycling infrastructure requirements

- 4.13 Plan 4, identifies existing Material Recovery Facilities (MRF) and facilities with planning permission within 30 miles from the centre of Hertfordshire. Only one MRF is located within Hertfordshire.
- 4.14 The WDA considers that increased provision of privately operated MRF(s) within Hertfordshire would increase competition and reduce the WDA and WCAs reliance on a single service provider. Alternatively, more assurance and secure arrangements could be provided through the development of a WDA and/or WCA owned MRF within Hertfordshire. Support should be given to further privately owned provision of MRF in the County by the WDA.
- 4.15 In the absence of increased direct delivery options, the infrastructure requirement is for flexibility in a network of WTSs as a minimum. This would need to provide sufficient capacity to bulk recyclable materials in co-mingled and/or separated forms. Should recycling rates remain at the current level, despite proposals for a 65% recycling rate, waste levels are still projected to grow and additional capacity to treat/bulk recyclables is required.
- 4.16 In the absence of direct delivery options for recyclable waste, a network of WTSs and depots that reduces the travel time of WCA vehicles to the point of tipping would be beneficial. As is the case with residual LACW proximity to arisings, this WTS network would enable collection vehicles to spend the majority of their time on collection rounds instead of travelling to and from a remote point of disposal.
- 4.17 Furthermore, co-location of WCA depots and WDA transfer stations could deliver operational efficiencies and increase bulking capacity. The WDA considers there is a need to work closely with the WCAs over the period to 2031 to maximise this potential. This could also advance thinking in areas such as bulky waste reuse and consolidate tipping locations in a joined up manner.

5 Organic waste

Summary

The amount of organic waste treated in 2015/16 was 22% of LACW. To reflect the different practices in the collection of organic wastes, a range of technologies are used to treat the waste including Windrow Composting, In-Vessel Composting and Anaerobic Digestion.

The WCAs may introduce service changes at any stage throughout the plan period and the separate collection of food waste and green garden waste has the potential to increase, although an emerging trend for WCAs to introduce charges for the collection of green garden waste may affect the volume of organic waste collected at the kerbside and perhaps at the HWRCs.

The number of organic waste treatment facilities within the county has improved but they are not equally dispersed and there is a lack of facilities in the west of the county. To facilitate the use of organic waste facilities by the WCAs and to increase resilience against contract failure/enforcement, compliant bulking facilities would be beneficial.

In consideration of the likely risks in changes to service provision at the kerbside it is not thought that privately owned long term organic waste treatment facilities in the County are required.

5.1 Organic waste comprises green garden waste and food waste. The amount of organic waste treated in 2004/5 was 9% of all LACW. This figure has steadily increased to 22% in 2015/16, as noted in table 7. The amount of waste treated through composting rapidly increased due to the roll-out of kerbside collections across Hertfordshire in the early years of this period and fluctuations are generally associated with differing growing seasons.

Table 7: LACW recycling and composting rates

Year	LACW Composted (Tonnes)	% of total LACW Composted
2004/05	49,886	9.0%
2005/06	78,319	13.8%
2006/07 ³	88,873	14.9%
2007/08	90,718	16.0%
2008/09	111,009	19.9%
2009/10	116,310	21.4%

Year	LACW Composted (Tonnes)	% of total LACW Composted
2010/11	123,706	23.0%
2011/12 ³	132,555	24.6%
2012/13	117,580	22.3%
2013/14	127,126	23.6%
2014/15	122,308	22.9%
2015/16	118,474	22.4%

- 5.2 Organic waste is separated through facilities at the HWRCs and at the kerbside in the form of either a green garden waste bin and a separate food caddy or a comingled green garden waste and food waste collection. To reflect the different methods used to collect organic waste three processes are used for its treatment; Windrow Composting, In Vessel Composting (IVC) and Anaerobic Digestion.
 - Windrow composting organic material is shredded and constructed into elongated open-air piles called windrows, each typically 1.5 to 3 metres high. The windrows are turned periodically to introduce fresh air and watered to maintain ideal conditions for composting.
 - In Vessel Composting (IVC) similar to windrow composting but is carried
 out in an enclosed vessel or building. This allows a greater degree of
 control of the process temperature, oxygen and moisture. This is necessary
 to treat food waste collected with green garden waste.
 - Anaerobic Digestion (AD) a process by which micro-organisms break down biodegradable material, such as food waste, in the absence of

oxygen. Methane gas captured in the digester tank is used to produce energy and a stabilised residue known as leachate is used as fertiliser.

Appraisal of Current Provision

- 5.3 In 2015/16 118,474 tonnes of organic waste was treated. All facilities used for the treatment of organic waste are privately operated facilities.
- 5.4 The WDA procured contracts until 2025 for the provision of IVC, see table 8. These contracts were procured at a time when best practice guidance identified the joint collection of green garden waste, cardboard and food waste as the best way of diverting biodegradable waste away from the residual waste stream. Contracts are also in place for the short term provision of windrow composting and Anaerobic Digestion.

Table 8: Organic Waste Treatment in 2015/16

Facility Type	Site	Location	Contract end Date
In Vessel	Cumberlow Green	North Hertfordshire	April 2025
Composting	Agrivert	South Mimms	April 2024
	Envar	St Ives, Cambs	April 2018
Windrow	West London Composting	Harefield, Hillingdon	April 2018
Composting	D Williams	Enfield	April 2018
Anaerobic Digestion	Agrivert	Chertsey	April 2018

Organic waste projections 2031

- 5.5 Three models have been used to project organic waste arisings until 2031 (shown in table 9 below):-:
 - a) Current level of composting with household growth of 15.18% until 2031
 - b) Achievement of a 60% recycling rate by 2031 (sensitivity test)
 - c) Proposals for a national recycling rate target of 65%

Table 9: Treated organic waste stream projections

	Household growth of	Achievement of 60% recycling	Proposal for a national recycling
Year	15.18%	rate	rate of 65%
	(Tonnes)	(Tonnes)	(Tonnes)
2016/17	118,697	118,697	118,697
2017/18	121,675	121,873	122,844
2018/19	123,428	125,049	126,992
2019/20	124,593	128,225	131,139
2020/21	126,191	131,402	135,287
2021/22	127,378	134,578	139,434
2022/23	128,566	137,754	143,582
2023/24	129,727	140,931	147,729
2024/25	130,726	144,107	151,877
2025/26	131,725	147,283	156,024
2026/27	132,724	150,460	160,172
2027/28	133,722	153,636	164,319
2028/29	134,721	156,812	168,467
2029/30	135,720	159,988	172,614
2030/31	136,719	163,165	176,762

Analysis of influencing factors

- 5.6 The waste composition analysis, see appendix 2, identified 32.8% of waste placed into residual bins was food waste. This suggests that LACW recycling and organic waste treatment rates could significantly improve at the kerbside. This indicates the aspirational HWP recycling rate of 60% and proposal for a potential national recycling rate of 65% could best be met with comprehensive provision of food waste services at the kerbside.
- 5.7 The separate collection of food waste and green garden waste by the WCAs has the potential to increase as WCAs identify further ways to divert organic material

- away from the residual waste stream. Evidence from WCAs in Hertfordshire clearly demonstrates that a weekly food waste collection service results in the most food waste being diverted from the residual waste stream.
- 5.8 WCAs can unilaterally introduce service changes that affect the composition of organic waste kerbside collections. Currently two WCAs collect green garden waste and food waste separately at the kerbside; this is set to rise to three authorities from spring 2017. The number of WCAs collecting organic waste using this method has the potential to further increase as WCAs do not have a statutory duty to provide a free collection service for green garden waste.
- 5.9 There is an emerging national trend for WCAs to introduce charges for the collection of green garden waste. This approach has recently been taken by one WCA in Hertfordshire with a further authority set to introduce a charging scheme from spring 2017.
- 5.10 This approach has the potential to reduce the amount of green garden waste collected by the WCAs but could increase the amount of residual waste collected if a separate food waste collection is not offered. Potential additional effects include an increase the amount of green garden waste taken to HWRCs and an increase in home composting.
- 5.11 Nationally, charging for the collection of green garden waste may also impact the ability of the UK to achieve the 50% recycling rate target by 2020 for household waste.
- 5.12 Currently nine of the ten WCAs directly deliver green garden waste to treatment facilities. Only Cupid Green, Dacorum's depot, is used to bulk green garden waste and food waste. St Albans are able to bulk food waste at their Sandridge depot prior to transferring this to the Cupid Green depot for collection by the reprocessing contractor.
- 5.13 Nine of the WCAs are unable to bulk large quantities of green garden waste, separate food waste and combined green garden waste and food waste at their depots.

Organic infrastructure requirements

- 5.14 While significant in its own right, the cost of developing organic waste treatment facilities such as IVC, windrow composting and AD is considerably less expensive than developing residual waste facilities. This means the WDA considers it more viable for the treatment of organic waste to occur in multiple locations and as close as possible to the origins of the waste (the proximity principle). Although it is recognised that this is not always achievable as:
 - Treatment facilities are not equally dispersed throughout the county and
 - The type of facility required will depend on the organic waste collection method used by the WCA.
- 5.15 Plans 5, 6 and 7 identify existing privately owned organic waste treatment facilities and sites with planning permission that are within 30 miles of the centre of Hertfordshire. The plans demonstrate a lack of privately owned facilities in the west of the county but generally adequate provision elsewhere.
- 5.16 Where suitable facilities are not close to the point of origin it will be necessary to bulk mixed organic waste and organic waste in the separate forms of green garden waste and food waste. Plan 2 identifies depots and bulking facilities within the county and demonstrates a lack of privately owned facilities, especially in central and eastern Hertfordshire.
- 5.17 At the present time, WCAs are moving away from the joint collection of green garden waste and food waste therefore it is possible that IVC facilities may adapt to meet the needs of the market and introduce windrow composting and AD to their facilities. If this does not occur provision for the disposal of separated green garden waste and food waste will be required along with bulking facilities to accommodate WCAs not located within a reasonable distance of a treatment facility. As a result the development of a network of waste facilities capable of bulking a range of wastes in fluctuating quantities is again key to meeting future needs. This network includes the full utilisation of WCA depots and the development of Waste Transfer Stations.

5.18 The current number of facilities and facilities with planning permission suggests there is adequate privately owned capacity, as demonstrated in table 10, within Hertfordshire for the 136,719 tonnes of organic waste projected in 2030/31.

Table 10: Organic waste treatment capacity in Hertfordshire

Method	Capacity (tonnage)
Aerobic Digestion	182,000
Windrow	164,000
IVC	115,000

- 5.19 Whilst there may be sufficient capacity to meet the WDAs projected needs, it should be noted that there is competition for use of the facilities from other authority areas and the commercial waste sector. The capacity is provided by a small number of reasonably sized facilities and as such, should one or more become unavailable, capacity would quickly reduce.
- 5.20 An expansion of existing capacity and new privately owned organic waste facilities in the County would increase competition and bolster resilience and should therefore be supported by the WDA.
- 5.21 The methods used by the WCAs to collect organic waste are expected to continue to evolve in the short and medium term so, in response to these changes, shorter, more flexible contracting arrangements are currently preferred for the treatment of organic waste. This would enable the WDA to respond to changes and for the most appropriate and best value method of organic waste treatment to be procured without the need to invest in long term contracts for the development of new infrastructure for direct delivery in-County treatment of organic LACW.

6 Summary and conclusions

- 6.1 The WDA considers that the existing waste management infrastructure within the County requires improvement over the period to 2031 in order to address:
 - The local management of waste generated in Hertfordshire
 - Population and housing growth
 - Flexibility within the waste management network
 - Efficiency savings
 - Improvements and resilience to service delivery
- 6.2 A new waste treatment facility that replaces existing landfill use and enables residual waste to be treated within the county is desired. Such a facility will significantly reduce the distance residual waste currently needs to travel in order to be treated and/or disposed of and reduce the pressures of increasing costs for waste management haulage and treatment/disposal.
- 6.3 Should planning permission for an ERF at Hoddesdon <u>not</u> be granted two new WTSs to complement the existing Waterdale WTS will be required, one to serve the north of the county and another to serve the east of the county. These combined with fully utilised WCA depots, will introduce flexibility within the waste management network. WTSs will enable best value for money to be achieved by accessing the cheapest available disposal points when sending waste for treatment/disposal.
- 6.4 Flexibility in design of the WTS will facilitate the bulking and separation of waste types, allowing the WDA and WCAs to respond to changes in legislation and developments in waste treatment technologies. Should the ERF gain planning permission it will not be necessary to develop a WTS to serve the east of the county's residual LACW needs, as WCAs in this area would be able to directly deliver residual waste to the facility, although there would remain huge potential for use of the site as an asset for the authority and/or alternate waste management needs such as more efficient in-County street sweeping or MRF provision or a colocation opportunity for a WCA depot.

- 6.5 The WDA considers that there is adequate capacity provided by existing privately owned facilities and facilities with planning permission to treat projected organic waste levels up to 2030/31 but applications for expansion of existing and/or further provision of privately owned windrow facilities, especially in the West of the County, should be encouraged.
- 6.6 The development of co-located WCA depots WTS/HWRC and/or other local authority functions will enable better value for money to be achieved when developing sites. Land, infrastructure and machinery can be fully utilised when facilities are shared. There is also the potential for the cost of development to be reduced through co-funding.
- 6.7 Many of the existing HWRCs are not fit to sustain service delivery over the plan period and investment in more modern, larger 'super sites' is required. These could be fewer in number but would need to improve service delivery, promote visible reuse and reduce residual waste levels by enabling more waste to be sorted and redirected for reuse/recycling, composting and recovery. A detailed analysis of the HWRC network and associated WDA reuse improvements in line with the waste hierarchy will be set out in an Annex to the Waste Spatial Strategy once complete.
- 6.8 These requirements will be kept under review with representations made at appropriate stages of the Waste Local Plans process.

7 Glossary

Anaerobic Digestion is a collection of processes by which

microorganisms break down biodegradable material in the absence of oxygen. The process is used for industrial or domestic purposes to manage waste and/or to

produce fuels;

Bulk / Bulking the gathering and loading of LACW ready

for onward transportation to a treatment or

disposal facility.

Bulking Facility a facility where LACW is delivered and

bulked for onward transportation to a

treatment or disposal facility.

Co-mingled collections Mixed dry recyclables (cans, card, glass,

papers and plastics) collected together for sorting at a Materials Recycling Facility

Commercial Waste Waste from premises used wholly or mainly

for the purposes of a trade or business or for the purpose of sport, recreation, education or entertainment, but excluding

household, agricultural or industrial waste.

Composting means a biological process in which

biodegradable wastes, such as garden and food wastes, are decomposed in the presence of air to produce compost or soil

conditioner:

Disposal means any waste management operation

serving or carrying out the final treatment

and disposal of waste:

EPA means the Environmental Protection Act

1990;

Food Waste biodegradable waste derived from food

materials typically consisting of cooked and uncooked fruit and vegetables, meat and fish scraps, excess or spoiled prepared food, and other discards from domestic

kitchens;

Green Waste biodegradable waste such as green

catering waste (i.e. raw fruit and

vegetables), vegetation and plant matter (includes trimmings, leaves, shrubs, plants,

grass, and trees etc.) from household gardens, local authority parks and gardens,

and commercial landscaping;

Household Waste as defined in the Controlled Waste

Regulations 1992 and includes wastes from household collection rounds, street cleansing, bulky household waste

collections, household hazardous waste

and clinical waste;

HWRCs Household Waste Recycling Centres;

HWRS Household Waste Recycling Service;

In Vessel Composting generally describes a group of methods

that which confine the composting materials within a building, container, or vessel. In-vessel composting systems can consist of metal or plastic tanks or concrete bunkers in which air flow and temperature can be controlled, using the principles of a "bioreactor". Generally the air circulation is metered in via buried tubes that allow fresh air to be injected under pressure, with the exhaust being extracted through a biofilter, with temperature and moisture conditions monitored using probes in the mass to allow maintenance of optimum aerobic

decomposition conditions.

Joint Municipal Waste Management means the Joint Municipal Waste Strategy / JMWMS Management Strategy for Hertford

Strategy / JMWMS Management Strategy for Hertfordshire agreed by the Partners in 2007;

Landfill a landfill (also known as a tip, dump,

rubbish dump or dumping ground) is a site for the disposal of waste materials by burial and is the oldest form of waste treatment;

Local Authority Collected Waste (LACW) All waste collected by the local authority

including commercial and industrial

waste:

Materials Recycling Facility a materials recycling facility is a specialized

plant that receives, separates and prepares recyclable materials for marketing to end-

users;

Municipal Waste household waste and that from other

sources which is similar in nature and composition, which will include a significant

proportion of waste generated by businesses and not collected by Local

Authorities

Open Windrow Composting is the production of compost by piling

organic matter or biodegradable waste, such as animal manure and crop residues, in long rows (windrows). This method is suited to producing large volumes of compost. These rows are generally turned to improve porosity and oxygen content, mix in or remove moisture, and redistribute cooler and hotter portions of the pile. Windrow composting is a commonly used

farm scale composting method.

Organic Waste and / or green waste collected

by the WCAs pursuant to section 45 of the

EPA;

Recovery means (i) the recovery of waste by means

of recycling or, reuse or any other process with a view to extracting secondary raw materials; or (ii) the use of waste as a

source of energy;

Recycling means the collection and separation of

selected materials and subsequent processing to produce marketable

products;

Reduce means the reduction of waste at source, by

understanding and changing processes to

reduce and prevent waste;

Residual Waste waste other than that collected for reuse,

composting or recycling;

Reuse the use of waste items for their original or

Revised Waste Framework Directive

for another purpose without reprocessing;

means EU Directive 2008/98/EC which sets a framework for waste management in the

EU, promoting both reuse and recycling, including energy recovery as a recovery activity within the revised waste hierarchy;

Energy Recovery Facility generates a usable form of energy which

also reduce the solid volume of residual

waste

Waste Collection Authority or WCA means a waste collection authority

pursuant to section 30(3)(a) of the EPA;

Waste Disposal Authority or WDA means a waste disposal authority pursuant

to section 30(2)(a) of the EPA;

Waste Transfer Station a facility where waste is bulked ready for

onward transport to a recycling facility or

disposal facility.

Appendix 1 - National and Local Policy

Summary

How the Waste Disposal Authority manages LACW is shaped by European Directives and national policies and strategies. The European Union referendum result is likely to affect how the WDA manages LACW in the future.

The general direction of law and strategy is one which aims to create a society that concentrates on prevention, reuse, recycling and energy recovery based on the notion that waste is a resource, especially under the context of the circular economy².

The EU referendum result adds uncertainty to current and future waste disposal arrangements, as well as potential recycling targets. The WDA will monitor proposals for potential national recycling targets which may impact at local level. Within the waste industry there is a general consensus of opinion that the current legislation within which the industry operates will remain broadly similar.

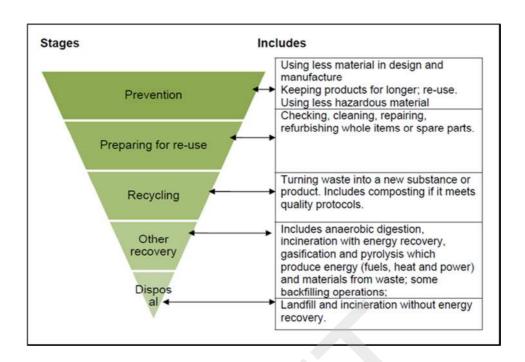
The following national and local policies have been considered, this is not an exhaustive list.

The (revised) Waste Framework Directive (WFD)

A guiding principle of both European and national waste management is the concept of the waste hierarchy. In general terms the hierarchy identifies that the best way to manage waste is not to generate it in the first place (prevention), followed by reusing and then recycling / composting and recovering energy where practicable. Generally the disposal of waste to landfill is considered to be the least preferred option. The revised WFD amended the waste hierarchy as shown below:

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² An economy in which we keep resources in use for as long as possible.



The revised hierarchy draws a distinction between the reuse of materials which do not require preparation and those which do. It also confirms that waste to energy recovery processes is preferential to disposal e.g. landfill, especially when considered under the context of carbon reduction requirements.

The WFD originally provided guidance on the effective management of wastes throughout the EU. It was and remains one of the main European legislative drivers requiring the production of national strategies to encourage waste prevention and reuse along with appropriate recovery and disposal technologies supported by regulatory frameworks that protect the environment and public health.

The EU adopted a revised WFD on the 12 December 2008 which was subsequently transposed into UK law through the Waste (England and Wales) Regulations 2011. Significant updates in the revised WFD include targets as noted below:

- Recycling 50% of <u>household</u> waste by 2020
- Recycling and / or reusing 70% of non-hazardous construction and demolition waste
 by 2020
- Separate collections for paper, metal, plastic and glass by January 2015
- Implementation of waste prevention programmes by December 2013.

(revised) Waste Framework Directive - targets

The revised Waste Framework Directive (rWFD) sets a <u>household</u> waste recycling target for member states of 50% by 2020. This is reflected in a similar national target versus the Hertfordshire Waste Partnership Joint Municipal Waste Management Strategy that set a 50% target by March 2013.

Whilst the Hertfordshire Waste Partnership (HWP) achieved 50% recycling by March 2012 subsequent issues with non-compostable material in the organic waste stream saw recycling drop to 45.5% in 2012/13 before climbing to 49.3% in 2013/14 and 49.4% in 2014/15. The household waste outturn for 2015/16 is 50.4% and the LACW outturn 49.7%.

EU targets are national level targets with Member states free to decide how such targets are translated into national law. The response in Northern Ireland, Scotland and Wales has been to set statutory targets for local authorities designed to exceed the 50% target by 2020. However, considering that over 80% of the tonnage relevant to the UK target arises in England, based on current trajectories, the UK as a whole is required to significantly improve from its current 'flat-lining' position to achieve 50% by 2020.

The situation is compounded by the fact that English local authorities have not had statutory targets since 2007/08. This was highlighted by a House of Commons Environment, Food & Rural Affairs Committee report into the state of waste management in England. In assessing barriers to achieving 50% recycling by 2020 the report raises the prospect of reintroducing statutory targets for local authorities and noted that fiscal pressures on local authorities could lead to changes such as charged green garden waste services which could negatively affect the rates achieved.

The National Waste Strategy 2007 / The Defra Waste Review 2011

The National Waste Strategy was last properly revised in 2007 with new national recycling targets set at 40% by 2010 and 50% by 2020 in line with the European 50% recycling target also to be achieved by 2020.

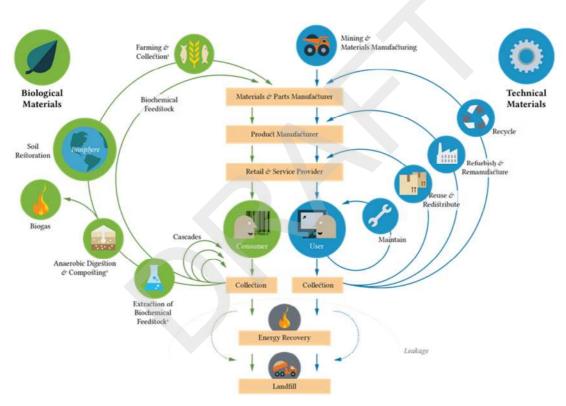
However since then, despite the Government undertaking a waste policy review in 2011, other than the removal of statutory targets for English local authorities, no fundamental

changes have been made to national policy that significantly impact local waste management services.

EU Circular Economy Strategy

A circular economy is an alternative to a traditional 'linear' economy (i.e. make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

The circular economy. Source: Ellen MacArthur Foundation



Published on 2 December 2015, the Strategy aims to transform Europe into a more competitive resource-efficient economy, addressing a range of economic sectors, including waste.

The new strategy set out in its EU Action Plan for the Circular Economy and accompanying Annex, includes a proposal to impose legally binding targets on most member states to recycle 65% of all <u>municipal</u> waste by 2030. Currently the UK has a

<u>household</u> waste recycling rate of 44% and is already struggling to meet the current target of 50% by 2020.

The key provisions of the Strategy are as follows;

- A common EU target for recycling 65% of municipal waste by 2030;
- A common EU target for recycling 75% of packaging waste by 2030;
- A binding landfill target to reduce landfill to maximum of 10% of all waste by 2030;
- A ban on landfilling separately collected waste;
- Promotion of economic instruments to discourage landfilling;
- Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;
- Concrete measures to promote reuse and stimulate industrial symbiosis turning one industry's by-product into another industry's raw material;
- Economic incentives for producers to put 'greener' products on the market, i.e. support recovery and recycling schemes such as, for packaging, batteries, electrical and electronic equipment and vehicles.

In order to achieve a 65% recycling target, Hertfordshire authorities, through the Hertfordshire Waste Partnership (HWP), would need to 'capture' significant amounts of material currently within the residual waste stream. The size of the challenge may require the following list of issues to be considered:

- Weekly recycling perhaps one of the last significant operational changes still
 available across the UK is to increase kerbside recycling to a weekly service to
 prioritise efforts to divert waste from landfill.
- Reductions in residual waste capacity WCAs could consider further reductions in residual waste capacity either through reducing bin sizes in line with the approaches in North Hertfordshire and Three Rivers or through further frequency reductions as implemented elsewhere in the UK. A smaller residual waste bin encourages behavioural change by encouraging people to recycle and reuse more and reduce the amount of waste they produce.
- Weekly food waste collections recent waste compositional analysis indicates that food waste continues to make up approximately 30% of the residual waste bin in

Hertfordshire. If this could be effectively captured it could make one of the biggest contributions to closing the gap between current performance and 65% recycling by 2030. Currently three WCAs provide a separate food waste collection service and another WCA is due to start in 2017.

- Commercial Waste Recycling The revised Waste Framework Directive, which applied from January 2015 onwards, requires the separate collection of paper, metals, plastics and glass of commercial waste. The clear intention is that all commercial waste service providers should now be providing recycling services. That said the overall level of commercial waste handled by Hertfordshire authorities is not currently significant and therefore any recycling extracted from this waste stream is likely to make a minimal contribution to meeting future targets.
- Legislative tools to support such efforts waste authorities may need to consider
 whether the current suite of legislative tools available are sufficient or whether
 additional powers such as being able to ban food waste from residual waste bins
 with subsequent enforcement, is needed.
- WasteAware³ an important part of any future service in Hertfordshire will be the continued and enhanced promotion of services that support efforts to prevent, reduce and recycle on the part of residents and local businesses.

Waste (England and Wales) (Amendment) Regulations 2012

The regulations require that separate kerbside collections must be deemed to be practical in each of the assessment areas, i.e. technically, environmentally and economically practicable (TEEP). If separate collections fail in any one of these areas then they are not required.

Based on the TEEP tests conducted across the country so far it would appear that whilst technical practicality does not present any issues the majority of the time economical practicality cannot be established when aspects such as vehicle costs are taken into account, i.e. greater income through keeping materials separate does not usually

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³ WasteAware is a partnership between the 10 District and Borough Councils and the County Council working together to promote waste issues.

compensate for higher collection costs. A situation exacerbated by recent significant falls in prices for a number of recyclates.

In addition it should be considered that fully commingled collections also tend to outperform sorting wastes into separate containers at the kerbside in terms of tonnage capture reflecting their ease for residents. Therefore even taking into account higher contamination levels, it is increasingly being argued that separate collections also fail the environmental practicability test as a result of diverting less material from landfill whilst using additional vehicle resources.

The Landfill Directive 1999

The Directive sets targets for the reduction of biodegradable municipal wastes (BMW) such as green garden waste and food waste sent to landfill. Transposition of the Directive into UK law took advantage of a 4 year exemption available to a number of member states with historic reliance on landfill. The relevant targets for the UK were / are to have reduced the amount of BMW going to landfill by:-

- 75% of that produced in 1995 by 2010
- 50% of that produced in 1995 by 2013
- 35% of that produced in 1995 by 2020

National Planning Policy for Waste 2014

The National Planning Policy for Waste (NPPW) 2014 seeks to enable local authorities to put planning strategies in place through their local development plans which shape the type of waste facilities in their area and where they should go. The NPPW states that positive planning plays a pivotal role in delivering the country's waste ambitions through:

 delivery of sustainable development and resource efficiency, including provision of modern infrastructure, local employment opportunities and wider climate change benefits, by driving waste up the waste hierarchy;

- ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities;
- providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle;
- helping to secure the reuse, recovery or disposal of waste without endangering human health and without harming the environment; and
- ensuring the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.

The policy requires that a proportionate evidence base flowing from a robust analysis of the best available data and information is used to plan provision.

The policy states that when identifying a need for waste management facilities local authorities should work collaboratively, through the statutory duty to co-operate, to provide a sustainable network of facilities to develop sustainable waste management.

It states the disposal of waste and recovery of mixed municipal waste should be planned for in line with the proximity principle. With opportunities for the co-location of waste management facilities considered.

It also states that priority should be given to the reuse of previously developed land and sites identified for employment use and that the capacity of existing and potential transport infrastructure to support the sustainable movement of waste be assessed.

Minerals and Waste Local Plans for Hertfordshire

The Minerals and Waste Local Plans for Hertfordshire is written by the Spatial Planning and Economy Unit of HCC and identifies the strategy for the future of minerals and waste planning in the county.

The Waste Development Framework is made up of the Waste Core Strategy and Development Management Policies Development Plan Document. The Waste Core Strategy sets out the vision, objectives and spatial strategy for waste planning in Hertfordshire up to 2026 providing the basis for a longer term spatial strategy that complements the Hertfordshire Waste Partnership Joint Municipal Waste Management Strategy 2007.

The vision for waste management in 2026 is:

Through engagement with the community and working with partners, by 2026, Hertfordshire will be waste aware and responsible, and the county council and its partners will lead the county in its adoption, promotion and implementation of the waste hierarchy. Members of the general community, industry, local councils and the county council alike will place significant emphasis on waste prevention, reduction, reuse and recycling, with waste disposal to landfill minimised. A mix of established, newer emerging technologies and waste recycling markets that maximise recovery value are being embraced to ensure that waste is innovatively and effectively managed within Hertfordshire.

Waste management facilities will be well designed, appropriately sized and sensitively located so that they reduce the environmental and social impacts, meet the needs of communities and businesses, and seek enhancement of the locality. Sufficient waste management facilities (to reduce, reuse, recycle) will be located as close as practicable to the origin of waste, making use of sustainable transport links, where practicable, to ensure existing and new communities deal with their own waste, especially in relation to areas where future growth is likely to occur.

To achieve the vision Hertfordshire specific objectives and strategic policies have been developed, including the safeguarding of land and sites where planning permission exists but is not yet implemented; or land and sites on which planning permission is subsequently granted for waste management facilities. The Waste Planning Authority (HCC) may oppose development proposals which are likely to prevent or prejudice the use

of land identified or safeguarded for waste management purposes unless alternative or enhanced provision is made.

Hertfordshire Joint Municipal Waste Management Strategy 2007

The WDA and the WCAs in Hertfordshire work jointly in the collection and disposal of waste through the Hertfordshire Waste Partnership (HWP).

In 2002, the Partnership endorsed a Joint Municipal Waste Management Strategy (JMWMS 2002). This strategy was reviewed in 2007, taking on board developments since 2002 including changes in Government policy, changes in recycling and composting and changes in the growth of waste. A further review of the strategy commenced in 2015.

The JMWMS 2007 and accompanying Action Plan set out how the Partnership intends to manage LACW over the period to 2020 and beyond. Central to the Strategy and Action Plan is a commitment to recycle at least 50% of household waste by 2012 and reduce residual household waste to less than 285 kg per person by that time.

The JMWMS 2007 identified a core objective 'to manage a growing proportion of Hertfordshire's residual waste within the county and manage all other waste at the nearest appropriate facility by the most appropriate method or technology'. It acknowledged that there would always be some waste material that cannot be reused or recycled but contained a commitment to moving away from a reliance on landfill for the disposal of this waste. It set out the following objectives

- To ensure a minimum of 60-80,000 tonnes per annum of residual waste treatment capacity is in place by 2011/12.
- In the longer term (to 2020), to ensure that additional residual waste treatment capacity is in place.

It was recommended in the JMWMS 2007 that capacity decisions be reviewed at the appropriate juncture in line with growth rates and recycling/composting performance.

A review of the JMWMS is currently underway. This section of the spatial strategy will be updated to reflect any notable changes to the JMWMS.

Appendix 2 - Waste Composition Analysis

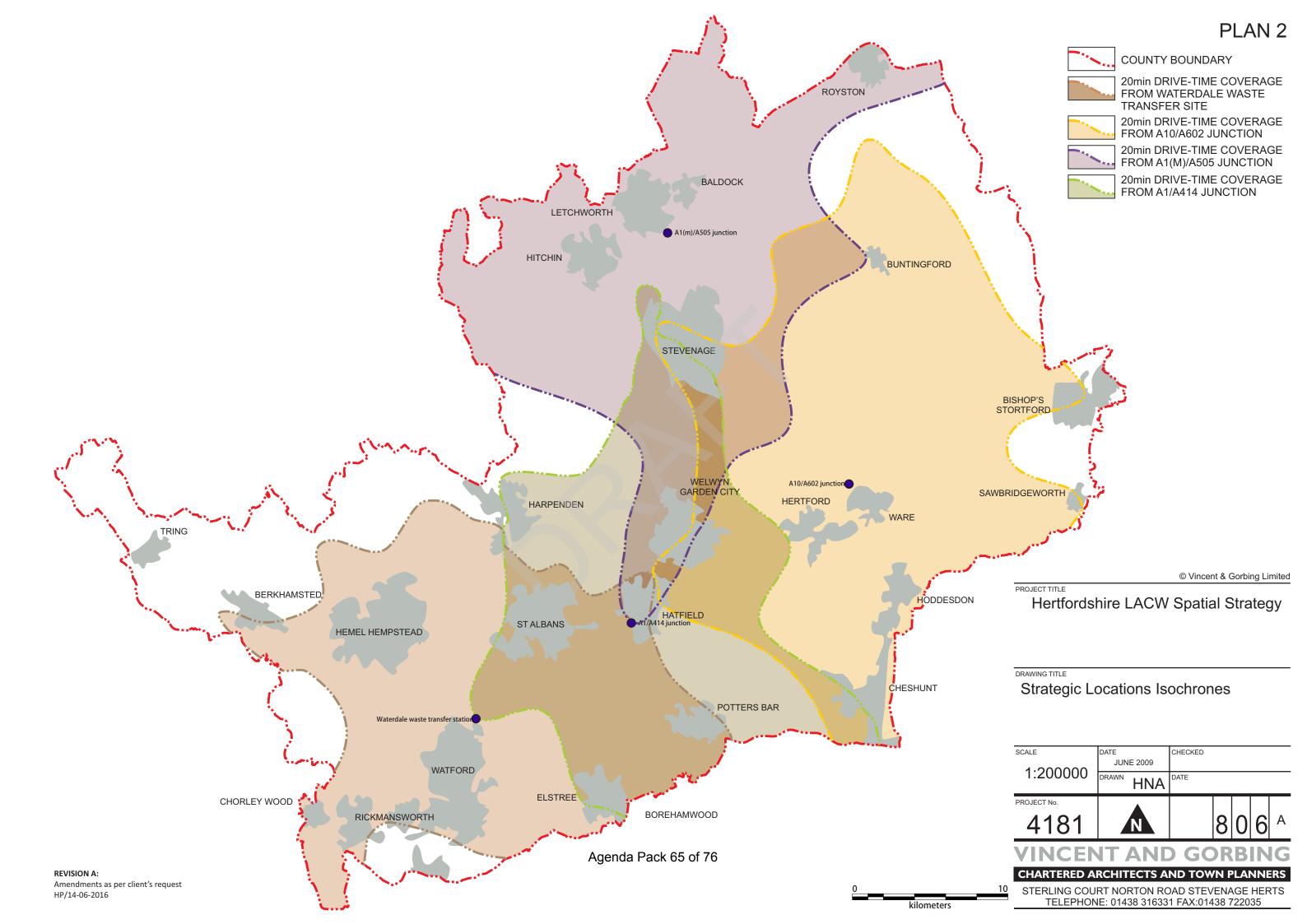
A waste composition analysis was completed in May 2015. Waste from eight HWRCs and domestic kerbside collections of residual and recycled waste streams from nine WCAs were analysed. The main findings were:

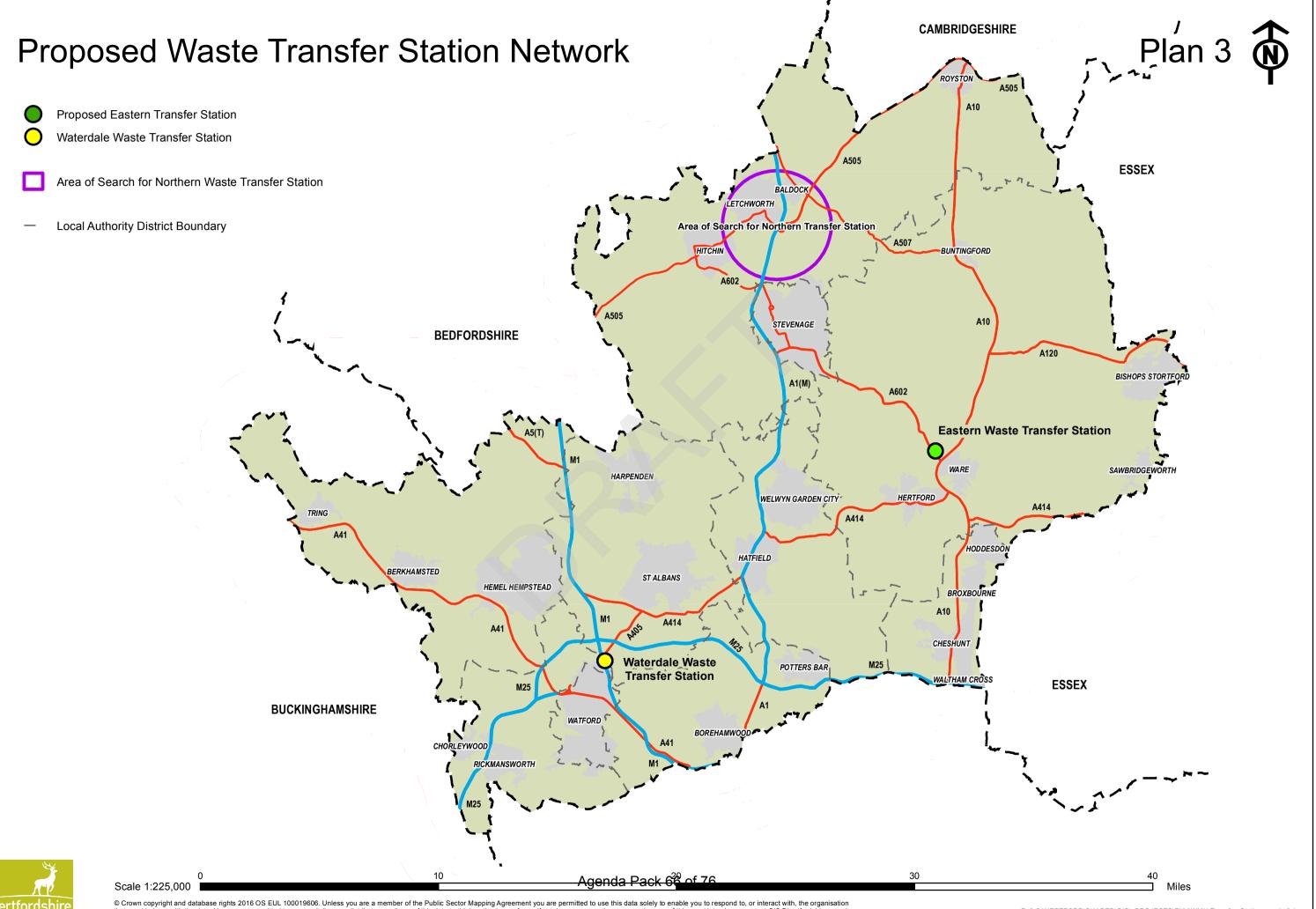
Waste from HWRCs

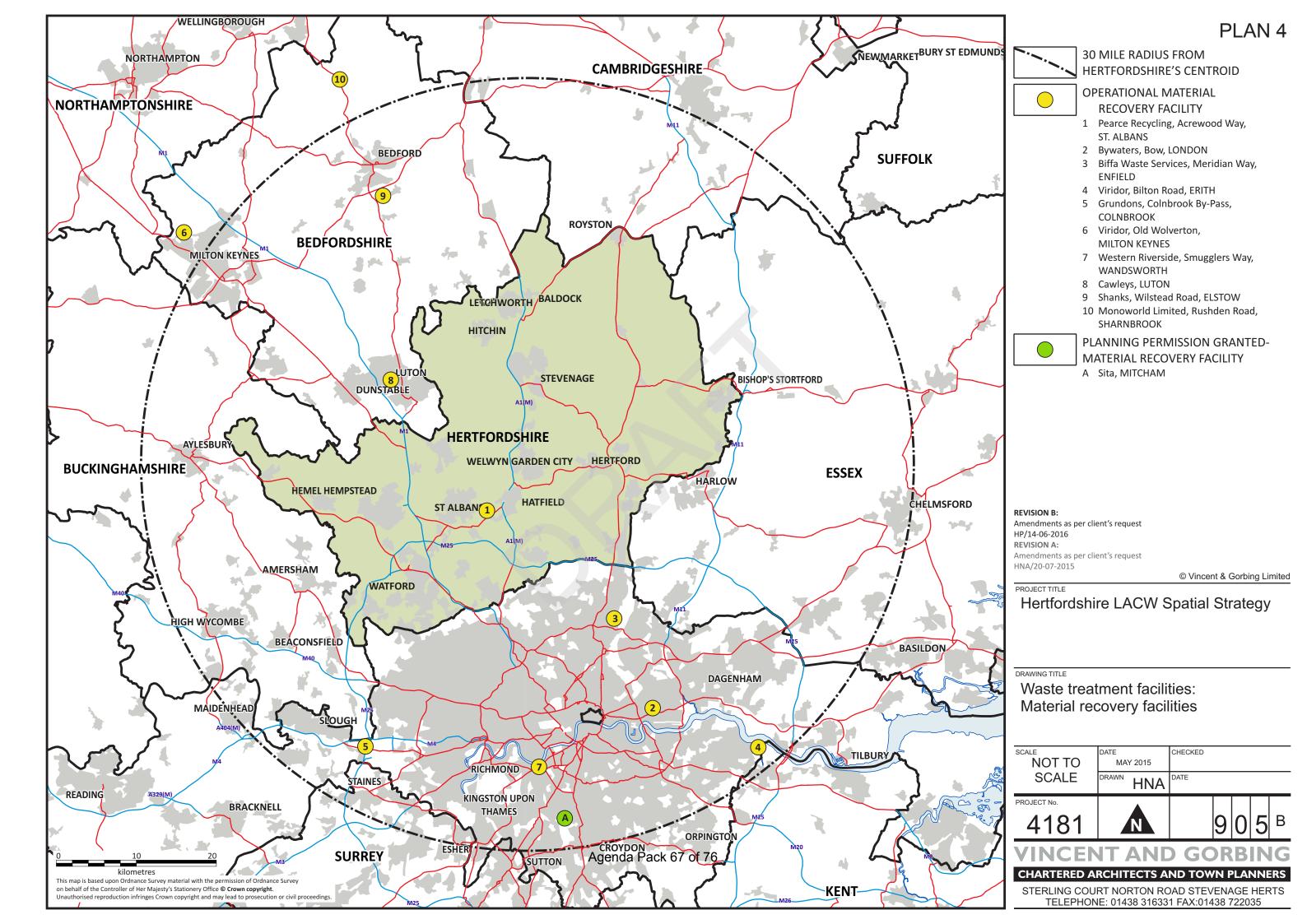
- Overall 13.3% of the waste being disposed of could have been recycled at the kerbside.
- 49.1% of waste deposited in the residual waste stream could have been placed into alternative collection points within an HWRC.

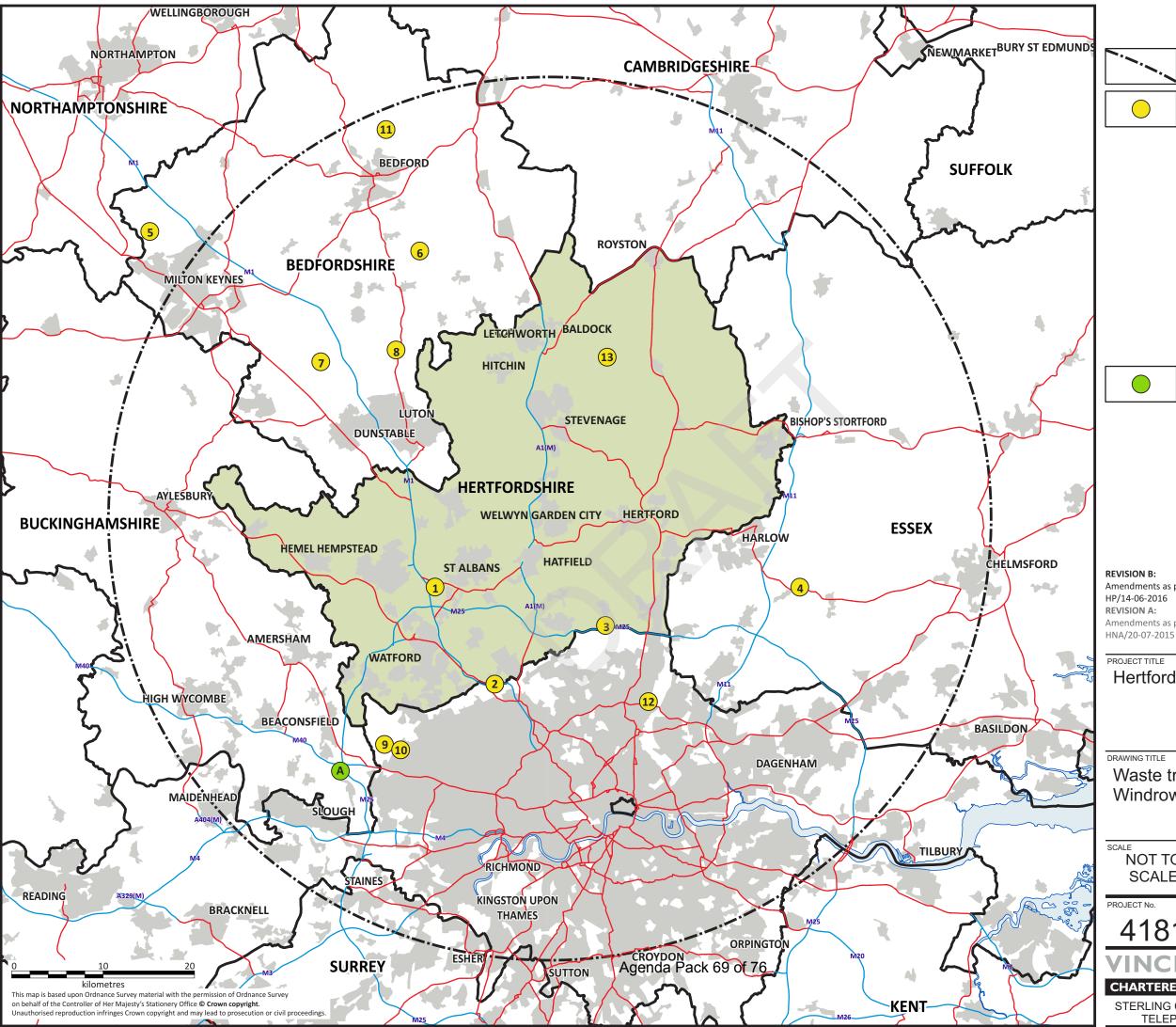
Waste from Kerbside

- Food waste was seen to be the major component of residual waste forming 32.8% of the total.
- 10% of the residual waste was paper items 63.2% of this was recyclable at the kerbside.
- 2.9% of the residual waste was metallic 47.6% of this was recyclable at the kerbside.
- 3% of the residual waste was glass 89.7% of this was due to glass bottles and jars which can be recycled at the kerbside.
- Overall 15.4% of collected residual waste could have been placed into the mixed dry recycling containers.
- Overall 35.8% of collected residual waste could have been placed into the organic recycling containers.
- In total 51.2% of residual waste collected could have been recycled at the kerbside.









30 MILE RADIUS FROM HERTFORDSHIRE'S CENTROID



OPERATIONAL WINDROW

- 2 Elstree Hill South, ELSTREE
- 3 Cattlegate Farm, ENFIELD
- 4 Ashlyn's Organic Farm, ONGAR
- Home Farm, CASTLETHORPE

- 10 High View Farm, HAREFIELD
- 11 Ravensden Composting Facility, **RAVENSDEN**
- 12 London Waste EcoPark, ENFIELD



PLANNING PERMISSION GRANTED -

A Alderbourne Farm, IVER

REVISION B:

Amendments as per client's request HP/14-06-2016

REVISION A:

Amendments as per client's request

Hertfordshire LACW Spatial Strategy

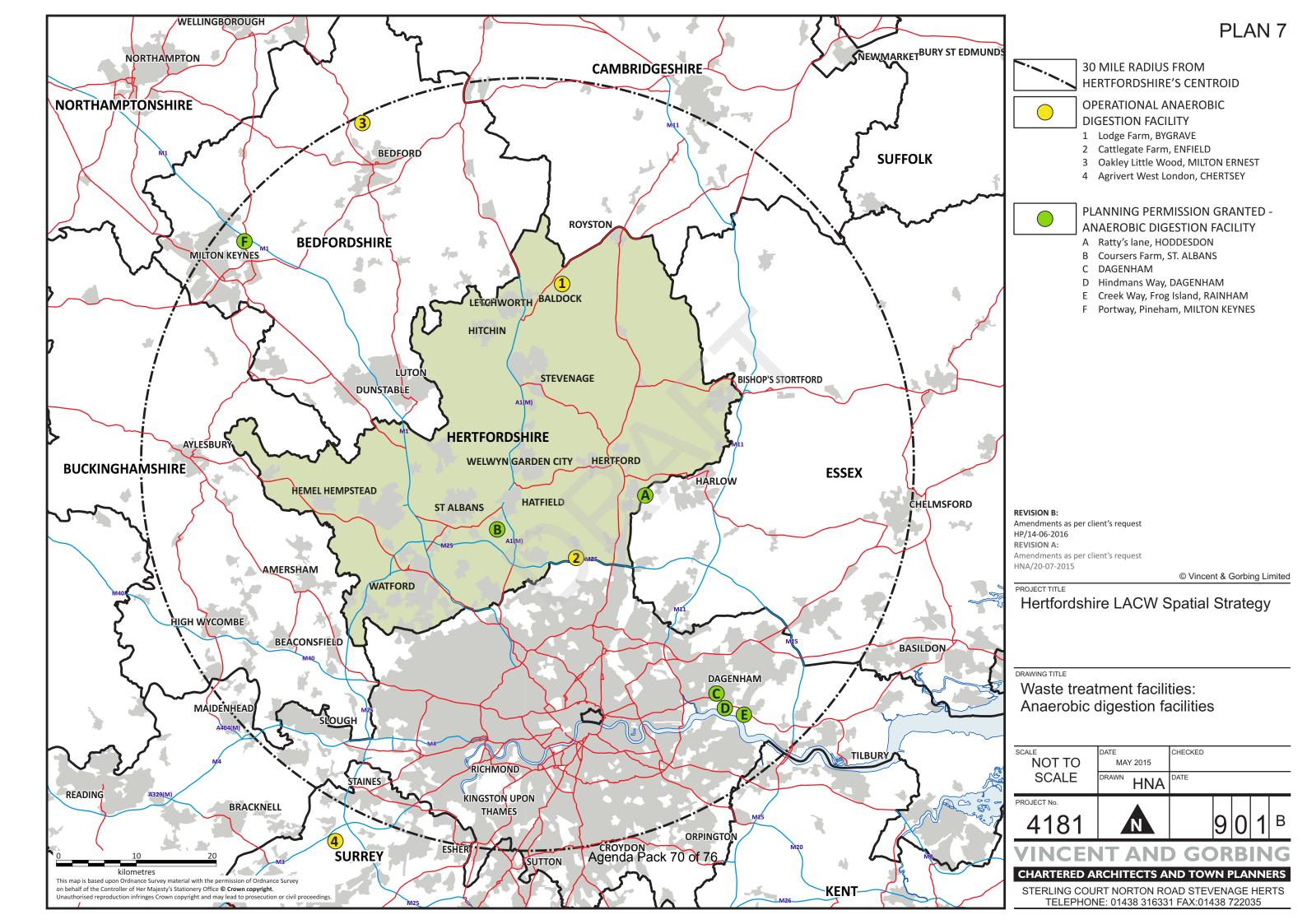
DRAWING TITLE

Waste treatment facilities: Windrow composting facilities

100 m	SCALE PROJECT No.	DRAWN HNA	DATE			
1	1121			_		_

CHARTERED ARCHITECTS AND TOWN PLANNERS

STERLING COURT NORTON ROAD STEVENAGE HERTS TELEPHONE: 01438 316331 FAX:01438 722035



HERTFORDSHIRE COUNTY COUNCIL

COMMUNITY SAFETY & WASTE MANAGEMENT CABINET PANEL

TUESDAY 1 NOVEMBER 2016 at 10.00AM

COMMITTEE ROOM B

WASTE MANAGEMENT PERFORMANCE MONITOR

Report of the Chief Executive & Director of Environment

Author: Simon Aries, Assistant Director Transport, Waste &

Environmental Management Environment (Tel: 01992 555255)

Executive Member: Richard Thake, Community Safety & Waste

Management

1. Purpose of report

1.1 To allow the Cabinet Panel to review the performance of Waste Management for the second quarter of this year (July – September 2016) against the Environment Department Service Plan 2016-2020 including key performance indicators, major projects, contracts and identified risks.

2. Service Performance Summary

2.1 Waste Management

The Waste Management Unit provides three separate quarterly monitoring reports to update on the service specific Household Waste Recycling Centre (HWRC) contract, the high profile Residual Waste Treatment Programme (RWTP) and an overall assessment of the statutory Waste Disposal Authority (WDA) function of the county council in the form of three performance indicators.

3. Recommendation

3.1 The Cabinet Panel is invited to note the report and comment on the performance monitor for Quarter 2 2016-17.

4. Strategic Performance Indicators

4.1 The Waste Management strategic performance indicators, contracts and projects are listed below along with their data for Quarter 2 2016/17.

4.2 Hertfordshire Residual Waste Treatment Programme Project

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RAG Status - Red

At this stage in the programme a number of risks have been reduced due to the control measures in place. However, overall, the status remains as red due to the high profile nature and high value of the programme.

The Council entered into a contract with Veolia ES Hertfordshire Ltd (VES) in July 2011 for the provision of residual waste treatment services including the design, construction, financing and operation of a Recycling and Energy Recovery Facility (RERF). Following a successful challenge to the initial decision on 16 July 2015 the Secretary of State turned down the planning application. Following Member approval a Revised Project Plan RPP was requested from VES, who submitted their draft RPP on 7 July 2015. Following a lengthy and detailed evaluation, a report was taken to the 4th March Community Safety and Waste Management Panel. The decision was taken by Cabinet on the 14th March to accept the RPP in principle (subject to the conclusion of the formal legal drafting). VES are currently working on their planning application which they intend to submit in late autumn 2016.

Key Achievements and Progress in Qtr 2 (July – September 2016)

 Officers are in the process of reviewing planning documentation from the contractor, known as Reviewable Design Data under the Contract, to ensure that it meets the requirements of the Authority and is consistent with the submitted RPP prior to submission to the Waste Planning Authority.

Key Issues, Risks & Risk Mitigations:

- The risk that the RPP no longer provides best value for money has been investigated by further financial modelling and sensitivity testing that confirms the RPP remains the best option for Hertfordshire.
- There is a risk that VES will not achieve planning permission for the RPP. Should this happen the County Council may terminate the contract and pay the capped sums (c. £1.2m).
- The key issues for the County Council at this stage are limited as VES bear the responsibility of planning risk. Risks and mitigations are captured in the risks and mitigation section above. It is important to note that the County Council has Interim disposal Contracts which are in place until 2018, with possible extension to 2021.

4.3 Waste Disposal Authority (WDA) function (excluding RWTP) indicators

Performance indicators are reported annually and, therefore, this update confirms the final outcome for 2015/16.

To ensure a compliant, high performing, economical and environmentally sound suite of waste disposal arrangements for Hertfordshire, the Authority uses the performance indicators shown in sections 4.4 to 4.6. Comparison data for each indicator for the Eastern Region Ave. will be provided when it is available, expected to be in December 2016.

4.4 <u>Total household waste per household in kilograms (the lower the better)</u>

The total amount of household waste per household in 2015/16 was 1,038 kg. This is an improvement on the figure of 1,046 kg in 2014/15. This improvement reflects a reduction in organic waste primarily due to service changes implemented by Three Rivers (collection frequency reduced from weekly to fortnightly) and Dacorum (introduced a green waste winter break in December and January). Residual waste levels were lower although recycling increased as a result of a number of authorities moving to commingled collections. Comparison of the waste streams between 2014/15 and 2015/16 are shown below:

- Residual waste: reduced by circa 9,500 tonnes (HWRCs circa 6,900 tonnes less, WCAs circa 2,600 tonnes less)
- Organic waste: reduced by circa 4,800 tonnes
- Recycling, recovery and reuse: increased by circa 5,600 tonnes
- Overall waste: reduced by circa 8,700 tonnes

Continued monitoring of all waste streams is required and a coordinated approach with the WCAs through the Hertfordshire Waste Partnership to reinforce the key messages, drive waste up the waste hierarchy and safe guard against unilateral action that may impact negatively on any Partner Authority of the HWP.

4.5 <u>Based on NI 192 – Percentage of Household Waste Recycled, Composted or Re-used (the higher the better)</u>

The percentage of household waste recycled, composted or reused continued to improve in 2015/16 to 50.4%, an increase on the 2014/15 total of 49.8% and exceeding the 50.0% target.

The 2015/16 outturn has improved as a result of the full year effect of kerbside changes in Dacorum and Three Rivers noted above, new service changes introduced by Broxbourne (reduced residual waste capacity) and improvements in wood waste separation at the household waste recycling centres.

This improvement is despite 2015/16 seeing a reduction in the amount of organic waste collected, continuing the trend of the last few years. Service improvements introduced by a number of Waste Collection Authorities have resulted in the level of non-compostable material in the organic waste reducing and dry recycling rates increasing (introduction of comingled recycling collections and diversion of cardboard from the organic to the dry recycling stream).

4.6 Based on NI 193: % of Local authority collected waste landfilled (the lower the better)

• The proportion of Local Authority Collected Waste (LACW) landfilled in 2015/16 was 17.5%, a significant decrease (positive direction) on the 2014/15 total of 25.04%. This reflects the new suite of interim disposal contracts which focuses more on Energy from Waste (EfW) as opposed to landfill. This has also improved due to the new Greatmoor EfW facility which came online in the autumn of 2015.

Key Achievements and Progress in Qtr 2 (July to September 2016)

The procurement process for a fire suppression system for Waterdale
 Transfer Station was completed during this period. Subject to achieving
 planning permission the system will be installed in early 2017
 increasing the resilience of this business critical facility.

Key Issues, Risks & Risk Mitigations:

 Existing organic waste disposal contract commitments for guaranteed minimum tonnage are not met, particularly with WCAs considering garden waste charging in response to their own savings targets. The WMU continues to work with all WCAs and contractors to ensure contractual arrangements are met. Key dates relate to the end of current contracts in 2018, 2024 and 2025.

4.7 Hertfordshire Household Waste Recycling Centre (HWRC) Service

HCC has a statutory obligation as a Waste Disposal Authority under the Environmental Protection Act 1990 to provide a HWRC service. AmeyCespa Ltd (Amey) took over the running of this service on 6th October 2014.

Amey operates the County Council's 17 HWRCs under contract. They are delivering all aspects of the contract in accordance with their bid and are providing an improved customer focused service.

Key Achievements and Progress in Qtr 2 (July – September 2016)

 Re-use options are now operating throughout the network. Scoping work is underway through pre-procurement market engagement exercises for re-use operational models and for the construction of improved re-use centres at the Waterdale, Rickmansworth and Harpenden centres.

- A policy to deal with aggressive and antisocial behavior at the HWRCs was endorsed at the CSWM Panel on 1st July 2016 and has now been applied across the network.
- New haulage arrangements for the service commenced in June 2016 and Amey are working with their contractor to reduce the need for unscheduled closures (i.e. during the advertised opening hours) wherever possible.
- 72% of the waste managed by the HWRS for 2015/16 was diverted from disposal (e.g. landfill) which reflects a modest improvement on the same period last year.

Key Issues, Risks & Risk Mitigations:

- Amey and the St. Albans District Council collection contractor have reached agreement to continue with the commercial waste service trial at the St Albans HWRC.
- A communications plan, including a poster campaign at the HWRCs, is underway to encourage a change in resident's use of the centres, e.g. avoiding peak times and separating waste prior to arrival.
- Enhanced high level signage to assist residents in the separation of their waste is on target to be in place before Christmas.
- The condition of a number of the centres and their restrictive nature in terms of size and/or accessibility highlights the need to relocate and or redevelop sites identified as not fit for purpose to sustain service delivery for the future. The Hertfordshire Property section continues to search for options for replacement sites for the Hemel Hempstead, Cole Green and Bishops Stortford HWRCs.
- The imminent installation of Automatic Number Plate Recognition (ANPR) and Closed Circuit Television Systems (CCTV) systems at the HWRCs will assist in analysing the capacity of the current network and will support the existing permit scheme for commercial vehicles and trailer use.

5. Risks

Waste Management has one corporate level risk which is as follows:

5.1 Residual Waste Treatment (Risk ENV0104)

Following Veolia ES Hertfordshire's failure to achieve a planning permission for their New Barnfield proposals, the Council requested and evaluated a Revised Project Plan for a facility at Ratty's Lane,

Hoddesdon. A report was taken to the 4th March Community Safety and Waste Management Panel and a decision was taken by Cabinet on the 14th March to accept the RPP in principle (subject to the conclusion of the formal legal drafting). VES are currently working on their planning application which they intend to submit in late autumn 2016.

The overall risk score remains at 32 based on the control measures in place including the interim disposal arrangements and capped termination provisions in the contract (however the risk remains 'red' due to its high profile nature and value)

6. Financial Implications

6.1 There are no financial implications arising from this report.

7. Equalities implications

- 7.1 When considering proposals placed before Members it is important that they are fully aware of, and have themselves rigorously considered the equality implications of the decision that they are making.
- 7.2 Rigorous consideration will ensure that proper appreciation of any potential impact of that decision on the County Council's statutory obligations under the Public Sector Equality Duty. As a minimum this requires decision makers to read and carefully consider the content of any Equalities Impact Assessment (EQiA) produced by officers.
- 7.3 The Equality Act 2010 requires the County Council when exercising its functions to have due regard to the need to (a) eliminate discrimination, harassment, victimisation and other conduct prohibited under the Act; (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it and (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The protected characteristics under the Equality Act 2010 are age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion and belief, sex and sexual orientation.
- 7.4 No equality implications have been identified in relation to this report although Panel will not make a decision in respect of its contents.

8. Internal Audit

8.1 There were no internal audit reports received in Q2.

9. Background

9.1 None