

## **HAMBLETON DISTRICT COUNCIL**

**Report To:** Cabinet  
17 March 2015

**Subject:** 10 YEAR WASTE STRATEGY

**All Wards**  
**Portfolio Holder for Environmental and Planning Services: Councillor B Phillips**

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### **1.0 PURPOSE AND BACKGROUND:**

- 1.1 This report seeks approval for the 10 year Waste Strategy and how dry recycle materials should be collected from the kerbside.
- 1.2 Expenditure on waste management forms a significant proportion of the Council's overall budget. The net cost of waste collection currently amounts to £1,680,000 p.a. (refuse and garden waste) and recycling (dry recycling) £265,000 p.a. net after deducting income of £1,240,000. The budget consultation survey carried out in 2014 showed that waste collection and recycling is a service that the public rate highly. Perception surveys show that the public often treat the quality of their refuse and recycling collection as an indicator of the overall performance of their Council.
- 1.3 In June 2014 Cabinet approved the preparation of a new Waste Strategy and the draft strategy is attached at Annex 'A' for approval. Procurements associated with the Strategy must be completed by January 2016 to tie in with the expiry of the present dry recycling and vehicle contracts.
- 1.4 With the current recycling system the Council will be unable to achieve an overall 50% recycling rate or meet customer expectations.

### **2.0 MODELLING OPTIONS:**

- 2.1 A range of options for future kerbside recycling have been modelled to analyse their cost and recycling performance and assessed for compliance with the Waste Regulations and health and safety requirements.
- 2.2 The choice of options was guided by Members. The outcome of the modelling is summarised in Table 1 at Annex 'B' and the full modelling report is available on request.
- 2.3 Each collection system will give differing yields, with the present system giving the lowest recycling rate and a fully co-mingled service showing the largest at 9.2% more than the present 45.3%. The options and relative yields are shown in Table 2 at Annex 'B'.
- 2.4 The modelling and associated analysis point to the choice of a two stream collection system with co-mingled paper, cardboard, mixed plastics and cans and separate glass collected by a split body refuse collection vehicle. The reasons are summarised below.
  - **Recycling rate.**  
The present system achieves 45.3% recycling overall. While a fully co-mingled system could increase the rate to 54.5% it does not meet the Waste Regulations. Keeping glass separate will achieve a rate of 52.6%, so shows a significant increase and it is believed it complies with the regulations.

- **Cost.**  
The costs of each option is set out in Table 3 in Annex 'B', and a co-mingled system with separate glass will show an annual revenue saving of £78,000 when compared to the present system at current contract prices in 2015/16. This will rise to £130,000 in 2022/23. This is illustrated at Table 4 in Annex 'B'.
- **Waste Regulations.**  
It is believed that the proposed system complies with the Waste Regulations (England and Wales) 2011 where four target materials (glass, plastics, metals and paper) are required to be collected separately, unless it can be proved that to do so is not Technically, Environmentally or Economically Practicable (The TEEP test). The proposed system complies because it increases the recycling rate to over 50% and maintains high quality material by keeping glass out of the mix.
- **Health and safety**  
The present system involves a lot of lifting and general manual handling with operatives required to sort through boxes by hand which may contain broken glass or sharp edges. Due to the side loading of the vehicles there are areas where the operatives must work in the road exposed to traffic. The proposed system reduces much of the manual handling, as well as the need to sort through boxes by hand. The present system requires operatives to load at the side of the vehicle, as the proposed vehicles are rear loading there is a reduced need for operatives to work in the centre of road.
- **Customer Service**  
The present system is confusing for customers, who fail to understand why a wider range of plastics cannot be collected and are unsure of which grades of paper and card can be left in the blue bag for collection. The proposed system seeks to address this by co-mingling as much as possible of the dry recyclate and increasing the range of plastics and types of card that can be collected. This gives customers a broader range of materials which they have requested.

2.5 Some options perform better against the above considerations individually. However, when looked at overall, the option of the mixed materials collected in a third wheeled bin with glass collected separately provides the best option. For example:

- A fully co-mingled system would give a recycling rate of 54.5% and reduce costs by £66,000 (2015/16 prices), however it would not meet the requirements of the Waste Regulations and would leave the Council exposed to the risk of challenge which if successful would have a severe financial impact.
- Enhanced separate collections would provide a higher quality of dry recyclate but remain confusing for the customer and only increase the recycling rate to 48.5%.

### **3.0 CONTAINMENT**

3.1 The choice of the recycling system has a major influence on the type of containers which are needed. To achieve the full benefits of the two stream system as set out above, a wheeled bin is required. It is recommended that the same size and colour of bin is used as for residual waste but with a blue lid. This is cheaper than a coloured bin and has less impact on storage of bins in the depot, as only lids would need to be kept, with the body of the bin being the same as presently used. This allows smaller numbers of stock to be held.

3.2 There is a choice regarding containment for glass between using an internal caddy that sits inside the top of the bin and using the blue box already in use by residents.

- 3.3 The internal caddy would come at an additional cost of £120,000. It also has the disadvantage of reducing the size of the aperture where recycle can be put into the bin. This may leave residents with a problem when trying to insert large pieces of cardboard into the bin. It does however have the advantage of reducing the area required for storage at people's homes and is tidier.
- 3.4 Using the existing box avoids the additional expense of purchasing caddies. It has the advantage of being stored separately, therefore maximising the storage capacity of the wheeled bin. This is especially important at peak times of year such as Christmas. There would be slightly more manual handling than if a caddy was used, as the refuse collector will have to lift it from the floor.
- 3.5 Where the proposed system has been implemented only 23 Waste Collection Authorities use the caddy, with 153 choosing to use a separate box. This is due to the advantages described above.

#### **4.0 THE WASTE STRATEGY:**

- 4.1 The draft Waste Strategy for 2015- 2025 is set out in Annex 'A'. The Strategy assumes the choice of the two stream collection system described above. Overall the strategy aims to:
- provide a comprehensive waste and recycling service to all households.
  - deliver services in a safe, legal, economic and environment-friendly manner.
  - positively and proactively engage with residents to achieve the high level objectives and targets as set out in the strategy.
  - promote the waste hierarchy (Reduce, Re-use, Recycle) by:
    - Limiting the volumes of residual waste.
    - Promoting home composting.
    - Reusing bulky waste.
  - expand the range of dry materials collected for recycling and increase kerbside yields per household.
  - collect dry recyclables in a way that complies with the Waste Regulations 2011 (England & Wales, Amendment 2012).
  - collect garden waste separately.
  - not collect food waste separately, but to gain recovery via the Allerton Waste Recovery Park (AWRP) facility.
- 4.2 The Strategy sets targets for the objectives and describes the actions the Council will take to achieve the targets. These actions will be worked up in more detail in an Action Plan which will be reviewed annually and used for operational purposes. Some key targets from the Strategy are set out in Table 1 below:

Table 1: High level Strategy Objectives

High Level Objective	Target
To provide a high quality service that is efficient, effective and easy to understand and that meets the needs of our customers.	To achieve a customer satisfaction rating of 95%.
To provide a comprehensive waste and recycling service to all households.	All existing households (100%) to receive a service by the end of 2016.
To deliver services which are safe to use and operate.	To reduce the levels of sickness for collection crews to the corporate target of 6.25 days per FTE.

High Level Objective	Target
To deliver services which are economic and cost-effective.	Cost of waste management services to be benchmarked with comparator authorities at £X per household. (Benchmarking exercise to be completed 2015/16)
To promote the waste hierarchy by limiting the volumes of residual waste.	Reduce annual kerbside collected residual waste to 400kg per household by 2017.
To promote the waste hierarchy by promoting home composting.	Minimum of one home composting sales event each year.
To expand the range of dry materials collected for recycling and increase kerbside yields per household.	<ul style="list-style-type: none"> <li>To achieve a minimum combined recycling / composting rate of 50% by 2017; and</li> <li>53% by 2021/22.</li> <li>To achieve a minimum dry recycling rate of 24% by 2017.</li> </ul>

4.3 The Strategy will be reviewed periodically to ensure that further opportunities to increase savings, maximise income, or improve customer satisfaction are given due consideration.

#### 5.0 **LINK TO COUNCIL PRIORITIES:**

5.1 The proposal links to the Council Priorities by supporting the following aims and objectives in the Council's Business Plan:

- To put our customers first and provide access to high quality, value for money services that meet the needs of our communities.
- To minimise the impact of waste on the environment by increasing the amount of household waste that is recycled.

#### 6.0 **RISK ASSESSMENT:**

6.1 There are no significant risks in choosing the recommendation.

6.2 The key risks in not approving the recommendation are set out below:

Risk	Implication	Prob*	Imp*	Total	Preventative action
Increased cost of the service.	The fall in market prices is not addressed by increasing the tonnage and range of materials collected at the kerbside. Potential to seriously affect the Council budget for waste from 2016-17 onwards.	5	4	20	Jointly procure dry recycle contracts. Seek efficiencies in other areas.
Not meeting customer expectations.	Customer dissatisfaction and confusion remains. Range of materials collected at the kerbside is low, reputation of Council suffers.	5	3	15	Communication and publicity.

<b>Risk</b>	<b>Implication</b>	<b>Prob*</b>	<b>Imp*</b>	<b>Total</b>	<b>Preventative action</b>
Health and safety issues not addressed.	Musculo-skeletal injuries, compounded by an ageing workforce, vulnerability to compensation claims. Risks of accidents due to working in the road.	5	4	20	Training and PPE.
Choosing a system not compliant with Waste Regulations.	Challenge leads to serious financial issues due to having to revert to a compliant scheme.	4	5	20	Choose a compliant system.

Prob = Probability, Imp = Impact, Score range is Low = 1, High = 5

## **7.0 FINANCIAL IMPLICATIONS:**

### **Revenue costs**

7.1 The revenue cost of the recommended system compared to the existing budget is shown in the table below. The table compares the current cost and income of the recycling service against the cost and income of the recommended collection methodology. This shows an annual saving of £78,000 in 2015/16. This rises to £130,000 in 2022/23.

Collection System (£)	Staff Costs (£)	Vehicle Costs (£)	Fuel Costs (£)	Bring Site Costs (£)	Income (£)	Total (£)
Current Service: Yorwaste prices for recyclates	1,149,547	809,906	302,369	56,000	-884,894	1,432,928
Two-stream: co-mingled with separate glass collection using split back vehicles	990,086	778,668	343,230	0	-756,687	1,355,297

7.2 There may be a further opportunity to make savings in future years by restructuring the rounds and the working patterns of the crews. This could be achieved by extending the working day of the crews and reducing number of vehicles used. This can be returned to in the future if savings are necessary.

### **Capital costs**

7.3 A third 240 litre wheeled bin will be required for each household (or an alternative container where a bin is not practical).

7.4 The one-off capital cost of the bins and delivery is estimated at £834,000. In order to select the most cost effective funding option, an option appraisal has been carried out. The table below shows the 4 different methods of financing the capital expenditure over a 10 year period using discounted cash flow to show present value of future costs.

Financing Option	Present Value of Future cost
Capital Receipts	834,000
Finance Lease	853,219
External Borrowing	782,076
Council's Funds (Internal Borrowing)	712,816

7.5 The most beneficial funding method is if the capital expenditure is funded from the Council's funds (internal borrowing) whereby the Council funds are used in the first instance and then a revenue contribution repays the expenditure over a 10 year period. This would cost £85,711 each year on a current cash basis. (This is greater than the cost of the bins as additional costs would be incurred for the delivery of the bins and the opportunity lost of investing the Council's surplus funds). These payments can be covered by the savings from the new collection system.

7.6 To determine a budget for the additional revenue contribution over 10 years to finance the capital expenditure for the 240 litre wheeled bin, a comparison is made between the recommended collection methodology and what it would cost the council to continue with the current waste strategy. This results in revenue saving from the new collection system. This revenue saving can then be used over 10 years to offset the revenue cost of the capital expenditure at £843,000. The table below illustrates that over the 10 year period there are sufficient funds to cover the cost of the bins and there still remains a saving of £317,894.

Years	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Total
<b>Cost</b> of 240 litre wheeled bins	85,711	85,711	85,711	85,711	85,711	85,711	85,711	85,711	85,711	85,711	<b>857,107</b>
Saving from the new recommended collection methodology	84,000	90,000	96,000	104,000	113,000	120,000	130,000	138,000	146,000	154,000	<b>1,175,000</b>
<b>Cost</b> after repayment of bins	1,711										<b>1,711</b>
<b>Saving</b> after repayment of bins		4,289	10,289	18,289	27,289	34,289	44,289	52,289	60,289	68,290	<b>319,604</b>
Total Saving											<b>317,894</b>

## **8.0 LEGAL IMPLICATIONS:**

8.1 There are no legal implications with this proposal.

## **9.0 EQUALITY/DIVERSITY ISSUES:**

9.1 There are no equality issues associated with this proposal, though it is proposed to carry out a review in the next two years of properties which receive an assisted collection.

## **10.0 HEALTH AND SAFETY ISSUES:**

10.1 The Strategy seeks to improve health and safety with respect to manual handling and operatives working in the road. Under the present arrangement each Recycling Loader can expect to lift around 400 boxes per day and sort the material at the kerbside, some boxes can weigh up to 20kg. In 2013/14 there were 72 working days (5 days per FTE) lost to musculo-skeletal/back issues in the recycling service, there were also incidents of cuts. Whilst risk assessments and personal protective equipment can mitigate these risks, the potential to eliminate them needs be considered first. The preferred option of using a third wheeled bin and separate box for glass eliminate some of these risks.

## **11.0 RECOMMENDATIONS:**

11.1 That Cabinet approves and recommends to Council that:

- (1) the draft Waste Management Strategy as set out in Annex' A' be adopted;
- (2) a two stream recycling collection as described in paragraph 2.4 be implemented;

- (3) the existing blue box be used for separate glass.
- (4) the procurements of containers, vehicles and dry recycle contracts for the two stream collection of dry recycling be approved;
- (5) the costs be met from the existing revenue and internal borrowing against Council funds as set out in Section 7.

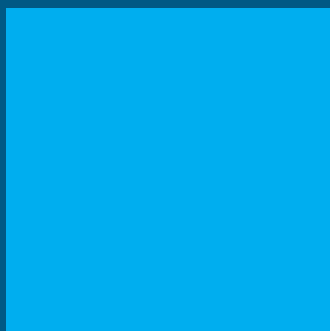
MICK JEWITT

**Background papers:** Annex A Waste Management Strategy 2015 -2025  
Annex B Modelling Summary Tables

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# WASTE MANAGEMENT STRATEGY 2015 - 2025



March 2015



# Executive Summary

**Hambleton District Council's Waste Strategy looks at how waste will be collected by the authority over the next ten years - from 2015 to 2025.**



It covers every facet of municipal waste management and is designed to optimise environmental performance and deliver value for money services for Hambleton residents.

The strategy sets out policies, aims, high level objectives and targets for the district and concentrates on areas the Council and its residents can influence. It identifies what waste services will look like over the next ten years and how and when the Council will achieve this.

Its prime feature is to change kerbside collections of dry recyclables - glass, paper, card, cans and plastics - to enable residents to recycle a much wider range of materials. The new system will not only be more cost-effective, but will also enable the Council to improve its recycling performance - and lift it above the national target of 50%. The strategy challenges Hambleton to recycle and compost 53% of waste collected by 2017, rising to 55% by 2020 - to make the district the top performer of all local authorities in North Yorkshire.

Ownership and delivery of the strategy sits with the Council but its success depends on residents making the best use of the services provided - and striving to reduce, re-use and recycle the waste they produce.

A handwritten signature in black ink, appearing to read 'Mark Robson', written over a horizontal line.

**Cllr Mark Robson**  
Leader of Hambleton District Council



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# Introduction

Hambleton District Council is a Waste Collection Authority, undertaking collections from 39,980 rural and urban dwellings in 2013/14. Its 89,913 residents live in and around the five market towns - Bedale, Easingwold, Northallerton, Stokesley and Thirsk. The authority is one of six other district and borough councils operating in a two-tier local government area. North Yorkshire County Council is the Waste Disposal Authority responsible for the disposal and/or treatment of residual waste.

Hambleton operates collections from its main depot in Northallerton and from a smaller depot in Stokesley. It does not have any in-house Waste Transfer Stations so is reliant on delivery points provided by the County Council for residual waste and by its current recyclates processing contractor for the delivery of dry recyclates. Garden waste is taken direct to a number of its contractor's composting facilities where it is processed to produce compost. The Council pays a gate fee, but also receives income from the County Council in the form of recycling credits. Hambleton also receives recycling credit income for the dry recyclates it collects - they are paid at the same rate per tonne for both dry recyclates and garden waste.

Hambleton is a member of the York and North Yorkshire Waste Partnership, made up of all the councils in the North Yorkshire area - North Yorkshire County Council, Craven District Council, Hambleton District Council, Harrogate Borough Council, Richmondshire District Council, Ryedale District Council, Scarborough Borough Council, Selby District Council and City of York Council. The group collaborates to deliver best practice in waste management - aiming to achieve efficiency savings through partnership working and economies of scale and deliver its Municipal Waste Management Strategy for the City of York & North Yorkshire 2006-2026, 'Let's talk less rubbish'.

One common goal is to achieve sustainable waste management through the implementation of best practice and ensure compliance with Waste Regulations. As a member of the EU, the UK transposes European Directives on waste into law for the country. The revised Waste Framework Directive sets out the EU's waste recycling targets for household and non-hazardous construction and demolition waste. It also enshrines the five-step waste hierarchy into EU law and introduces a definition of by-products that will allow some materials currently defined as waste to be classed as non-wastes.

The Directive requires member states to take "necessary measures designed to achieve" a target to recycle 50% of waste from households by 2020. This is in line with the English 2007 Waste Strategy. The York and North Yorkshire Waste Partnership Waste Strategy has a target to recycle or compost 50% of household waste by 2020. Hambleton has set a target to recycle and compost 53% of its household waste by 2017. It aims to exceed the sub regional Waste Strategy and the national 2007 targets.

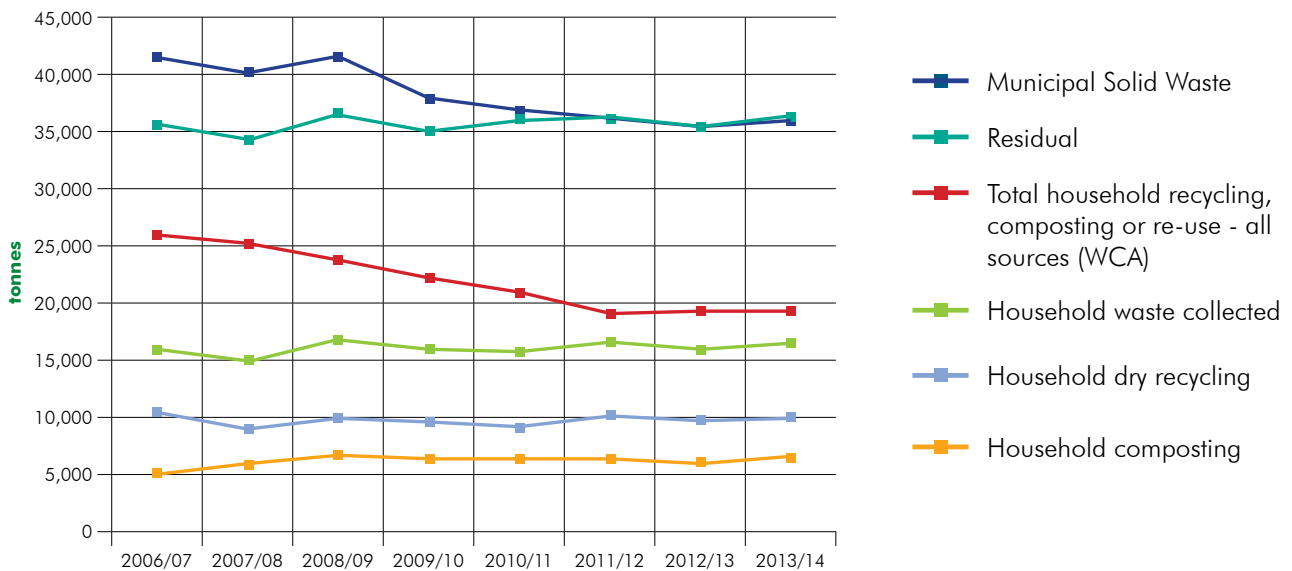
A key part of the Directive says that by 2015 members must set up separate collections for at least paper, metals, plastics and glass unless it is not technically, environmentally and economically feasible (TEEP). In devising its strategy, the Council has taken account of this regulatory requirement.

# Background

A comprehensive review of waste management was undertaken during 2014-15 to develop the Council's new Waste Management Strategy. It included modelling options for the collection and treatment of dry recyclables and collection of refuse across the district - with the finalised strategy defining high level objectives and targets and the details of how these will be achieved. Core to

ensuring the successful delivery of the strategy will be future collection methods. The strategy also informs two key procurements to be completed during 2015- waste collection vehicles together with maintenance arrangements, and the new contract for the treatment of dry recyclables. Both will need to be in place by the beginning of January 2016.

## Tonnages of Municipal Solid Waste collected between 2006 and 2014



## Recycling, Composting and Re-use rates 2006 to 2014

Year	(%)
2006/07	44.27
2007/08	43.92
2008/09	46.30
2009/10	45.64
2010/11	44.27
2011/12	46.25
2012/13	45.24
2013/14	46.85

Residual waste tonnages have decreased year on year between 2006 and 2012, but are now fairly static. Recycling and composting tonnages have been on a plateau since 2008/09, which is reflected in the fairly static recycling rates. The rates achieved in 2008/09 are almost identical to those achieved in 2013/14.

Early indications are that both dry recycling and composting tonnages and rates will be similar in 2014/15 to that achieved in 2013/14 - there has been hardly any change in performance over the last seven years. To improve performance requires a change to the current service methods and the collection of a wider range of dry recyclable materials at the kerbside.

Hambleton aims to provide its residents with a high quality waste management service. The Council will seek to optimise the balance between costs and benefits to provide value for money; equality - all residents will have access to the service; a simpler system to enable the recycling of a wider range of dry recyclables; and improved environmental performance demonstrated by achieving a higher rate for recycling.

It has also taken account of the latest Waste Regulations to ensure that what is put in place is compliant.

This has been a particularly important consideration because the changes have coincided with the timing of changes to the regulations, which means that the final decisions need to stand up to scrutiny.

The waste service not only has a high profile with residents but represents a significant proportion of the Council's annual budget spend. Excluding street cleansing, the Council is spending around £1.45m per year on waste and recycling collections. It is a service that affects every household and for some residents defines the Council.

The aims of the review were identified in a report to the Council's Cabinet in June 2014:

- improve recycling tonnages and therefore environmental outcomes - including modelling of materials that could be collected
- improve the efficiency of collections, through the procurement of appropriate vehicles, and examine collection methods to reduce the collection time per property
- improve customer satisfaction with the service
- ensure that Health and Safety is a core consideration for both residents and operatives
- identify possible cost efficiencies.



## Current Collections

Hambleton operates an alternate weekly collection service where general household, dry recyclates and garden waste is collected over two weeks. It covers:

- collection of residual waste - predominantly using 240-litre black wheeled bins, communal 1100-litre bins, and some black sacks
  - collection of dry recyclates at kerbside using 55-litre boxes and 60-litre blue bags
  - 100+ mini recycling sites using 1100-litre bins
  - collection of garden waste predominantly using a 240-litre green wheeled bin, with residents able to buy extra compostable sacks
  - collection of waste from old Schedule 2 premises (schools and institutions) for which the Council makes a charge
- a network of bring sites to enable collection of additional materials for recycling. There are 12 large recycling bank sites, serviced by the current contractor (Yorwaste), located in Bedale, Easingwold, Northallerton, Stokesley, Thirsk and Great Ayton; 15 glass bank sites operated and serviced by GRUK; 52 textile banks operated and serviced by four charities (Salvation Army, The British Heart Foundation, ERC and Oxfam); and five carton banks operated and serviced by ACE in the five market towns
  - a charged bulky waste collection service available on demand.





Currently the kerbside recycling collection uses five 23 tonne vehicles with three stillage compartments for the collection of three streams of dry recyclates - glass, paper/card, and cans/plastics. It also uses two 26 tonne RCVs and two 3.5 tonne flat back pick-ups for remote and hard to reach properties. Collections of dry recyclables are made five days a week (Monday to Friday) all year round with individual properties receiving a collection once every fortnight. A full collection cycle is made every ten days.

Single compartment RCV vehicles are used for the fortnightly collection of residual waste and garden waste (residual waste is collected week one and garden waste is collected week two using the same vehicles) with a fleet of eleven 26 tonne and one 7.5 tonne vehicles. The garden waste service operates on a non-charged basis. It is suspended over the winter period (December to February).

The 100+ bring sites are serviced either in-house or by the current recyclates processing contractor (Yorwaste). Yorwaste services the 11 large recycling banks and GRUK operate the 15 glass banks. Charities operate the textile banks and retain the income for materials collected and ACE service and retain material from the five carton banks.

The front-line waste collection service is made up of 19 drivers and 27 full-time and two part-time loaders, complemented by the use of agency staff when needed.

## Current Performance

Overall the 46.8% recycling, composting and re-use performance for Hambleton in 2013/14 was higher than the national average. However, when disaggregated, the kerbside dry recycling performance is relatively poor at 17.7% as reflected by the yield at 124 kg/household/year when compared to similar authorities where the average yield is 170 kg/household/year. A key reason is due to confusion over what materials are accepted

for recycling and what materials are not - white/grey card is accepted but brown card is not; plastic bottles are accepted but not mixed plastics. As a result recyclable materials find their way into the residual waste stream sent to landfill elevating yields for residual waste. The garden waste service performs well at 248 kg/household/year - it is the greatest contribution (28.7%) to the overall recycling rate.



**The new strategy aims to recycle or compost 53%  
of all household waste by 2017**





# Waste Collection Modelling

Modelling for different kerbside dry recyclables collection methods has been undertaken to help with the recycling performance and cost assessment of the options.

The highest performing method in terms of recycling rates is a fully co-mingled system. But this would mean changing from a system where glass and paper are collected separately to a system where they are mixed together and the European Commission has stated that only 'compatible dry waste' should be collected co-mingled and glass should be collected separately from paper.

Further, Lord de Mauley, when at Defra in October 2013, wrote to local authorities citing the issues of keeping glass shards out of the paper stream and urged care.

The modelling showed that a twin stream system where glass is separate from the co-mingled materials showed improved recycling figures and reduced cost and passes the TEEP assessment.

**The modelling concluded that a new kerbside collection based on a two stream arrangement with separate glass should be introduced.**



# The Next Ten Years

## Service Provision

The current dry recycling kerbside service is at capacity. It is becoming increasingly difficult to provide a kerbside recycling service to new housing developments. Significant growth in housing is expected over the coming years which will only exacerbate this issue if 'business as usual' is maintained.

### High Level Objective

To provide households in Hambleton with a comprehensive waste and recycling service

### Target

All existing households (100%) to receive a service by the end of 2016

### KPI

Percentage of households receiving a service

Modelling has allowed for the predicted increase in housing and the infrastructure needed to service these households. There will continue to be the need to use the small collection vehicles for 'hard to reach' properties.

### High Level Objective

To deliver a waste management service that is economic and cost-effective

### Target

To ensure that the Council provides value for money waste management services

### KPI

Cost of waste management services per household

## Sustainable Waste Management

Sustainability is about balancing social, environmental and economic drivers to arrive at a solution - in this case for a waste management service. It must meet the needs of people now, without compromising the needs of future generations. For Hambleton, this is about delivering a service that residents can use and one that is safe for staff to operate. The service also needs to be compliant with Waste Regulations and to optimise environmental outcomes in the most cost-effective way.

### High Level Objective

To deliver services which are safe to use and operate

### Target

To reduce the levels of sickness for collection crews

### KPI

Reduced crew sickness levels over time

The health and safety of the Council's collection crews and its residents is paramount. In designing its new services the Council has considered reducing the amount of manual handling needed for kerbside recycling and providing suitable containers for the expected yields.

### High Level Objective

To deliver services which are legal

### Target

To implement services that are compliant with Waste Regulations

### KPI

No legal challenge and or unsuccessful legal challenge

It is also wants to deliver a service that is environmentally sound and reduces carbon impacts.

### High Level Objective

To deliver services which are environmentally friendly

### Target

To implement the waste hierarchy and thereby conserve resources and reduce the Carbon impacts of waste management

### KPI

Increased recycling, composting and re-use performance

## Health and Safety

The current kerbside sort system involves a lot of lifting and manual handling by the crews. A typical recycling collection round will involve the manual sorting of dry recyclable materials from around 700 households. The council wants to reduce the amount of lifting and manual handling and reduce levels of absence for collection crews. The new two stream system, although not completely eliminating lifting, will significantly reduce manual handling. The contents of the glass box will be tipped into a slave wheeled bin before being tipped mechanically into the collection vehicle. The wheeled bin containing co-mingled materials will be lifted and emptied into the collection vehicle purely by mechanical means. The new collection arrangements will also reduce the amount of lifting by residents - only the glass box will need to be lifted to put out for collection.

Current glass yields for Hambleton are less than 2 kg/household/collection. If the glass box is presented for collection every fortnight only a very low weight will be lifted. Residents will be encouraged to leave their glass box out for every collection and to use a second box to divide larger loads. Excess glass can be taken to a Household Waste Recycling Centre.

## Customer Satisfaction

Providing efficient, cost-effective services that meet the needs of residents is essential. The Council recognises the importance that residents place on the Council's waste collection service and the strategy is designed to improve them but at the same time is mindful of costs that are ultimately borne by the council taxpayer. Feedback has already been used to help inform the strategy. Residents asked that the range of materials recycled through fortnightly collections be expanded - and through this strategy that will happen.

### High Level Objective

To provide a high quality service that is efficient, effective and easy to understand that meets the needs of our customers

### Target

To achieve a minimum customer satisfaction rating of 90% in respect of the Council's waste collection services

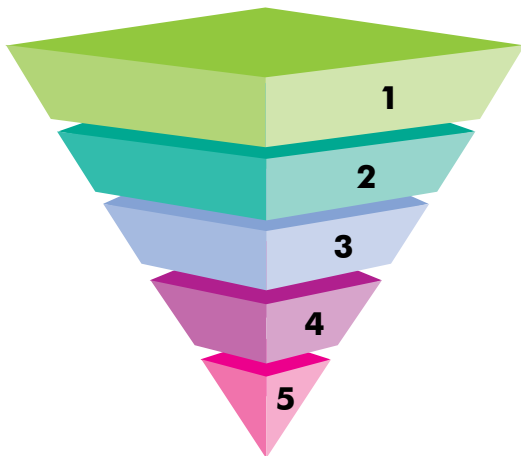
### KPI

Results of customer sample satisfaction surveys



# Waste Hierarchy

Wherever possible the Council will seek to promote and drive the management of waste up the waste hierarchy to achieve best practice. The residual waste stream represents a significant proportion of all waste collected and is the one from which least value can be obtained. Disposal sits at the bottom of the hierarchy - but the higher the tonnages required to be managed, the higher the costs. The Council will strive to reduce yields of residual waste collected at kerbside, which in 2013/14 were 437 kg/household/year.



## Reduce

what you can - if you can't reduce it...

## Re-use

what you can - if you can't re-use it...

## Recycle and compost

what you can - some is then burned to...

## Create energy

for electricity - the remainder is...

## Disposed

of in landfill - the LAST option

### High Level Objective

To promote the waste hierarchy (Reduce, Re-use, Recycle) by limiting the volumes of residual waste

### Target

Review and or introduce policies during 2015-16 bin sizes, side waste policies

### KPI

Reduce kerbside collected residual waste to 400 kg/household/year by 2017

## Reduce

Reducing waste sits at the very top of the waste hierarchy - waste that is prevented from entering the collection system is waste that does not need to be managed. This avoids costs and enables resource efficiency, which is better for the environment.

## Re-use

Re-use of items such as furniture and electrical equipment is another opportunity to prevent resources entering the waste collection and management service. The Council will continue to encourage re-use by promoting local charities that offer a re-use service. It will also provide support to community groups and organisations.

### High Level Objective

To advocate the waste hierarchy (Reduce, Re-use, Recycle) by promoting re-use of bulky waste collected

### Target

Increase the tonnages of bulky waste diverted for re-use year on year by 1% over the period of the strategy

### KPI

Monitor re-use tonnages from organisations on Hambleton's list of re-use organisations as published on the Council's website

## Home Composting

The most environmentally sustainable option for dealing with garden waste is to deal with it at the point of production through home composting. It means garden waste is prevented from entering the waste collection service, avoids transport vehicle emissions, and does not need to be managed, so avoiding waste management costs.

The York and North Yorkshire Waste Partnership subsidises the cost of composting bins for residents in the partnership's area to encourage residents to compost at home. Residents can order them from:

[letstalklessrubbish.com/](http://letstalklessrubbish.com/)



### High Level Objective

To advocate the waste hierarchy (Reduce, Re-use, Recycle) by promoting home composting

### Target

Organise home compost bin sales events at the start of the growing season

### KPI

Minimum of one home compost sales event in the area each year



# Recycle and Compost

Once waste has entered the waste management system, the next best approach is to recycle and compost it. This not only achieves resource efficiency, but reduces carbon emissions through avoided manufacture of goods from raw materials - and decomposition of organic matter in landfill which produces powerful greenhouse gases that contribute to global warming and climate change.

## Kerbside Collections

A new collection method will be introduced in early 2016, moving from the current kerbside sort system to one where materials are collected on a two stream basis. Glass will be collected as a separate material stream, but all other recyclable materials will be co-mingled. Residents will be provided with a new blue-lidded 240-litre wheeled bin for co-mingled recyclables - they can use sacks if they do not have space for a wheeled bin. They will use their existing blue recycling box for glass.

They will also be able to recycle a wider range of materials - they are expected to be:

- paper - including telephone directories, yellow pages, catalogues
- card - all types including brown card and bulky brown card as a side waste collection
- plastics - all types of plastics
- metals - cans, tins, aerosols, foil
- Tetrapak cartons

### High Level Objective

To deliver services which are safe to use and operate

### Target

To reduce the levels of sickness for collection crews

### KPI

Reduced crew sickness levels over time

This new system will comply with the new waste regulations on separate collections.

### High Level Objective

To advocate the waste hierarchy (Reduce, Re-use, Recycle) by promoting re-use of bulky waste collected

### Target

Increase the tonnages of bulky waste diverted for re-use year on year by 1% over the period of the strategy

### KPI

Monitor re-use tonnages from organisations on Hambleton's list of re-use organisations as published on the Council's website

## Side Waste

A new policy to enable residents to recycle materials they are unable to fit into their new blue-lidded recycling wheeled bin, such as bulky brown cardboard packaging, will be introduced. If it is contained in sacks or boxes, or weighted down, it will be collected.

## Garden Waste Collections

Garden waste collections will continue unchanged - from a 240-litre green wheeled bin for nine months of the year (March to November).

### High Level Objective

To collect garden waste separately

### Target

To achieve a minimum composting rate of 27% by 2017

### KPI

Quarterly performance figures as submitted to WasteDataFlow from Q1 2016-17

## Other Dry Recycling Initiatives

The Council uses other recycling initiatives such as street-side recycling bins to encourage recycling 'on the go'. This will continue - and the Council will also provide information and advice to community groups looking at waste initiatives.



## Food Waste

Hambleton - in conjunction with the York and North Yorkshire Waste Partnership - will seek to encourage residents to prevent and/or reduce food waste by activities around the on-going 'Love Food, Hate Waste' campaign run by the Waste and Resources Action Programme.

Prevention of food waste is something that everyone can do something about by adjusting behaviour be it through cooking sensible portion sizes; shopping habits; better use of the freezer; and understanding the difference between 'use by' and 'best before' dates.

In developing the strategy, the potential separate collection of food waste was considered. The new waste treatment facility under construction near Knaresborough - Allerton Waste Recovery Park - will include anaerobic digestion of food waste. The new facility will also contain front-end mechanical treatment designed to recover dry recyclables

contained in the residual waste stream, which will help boost recycling across North Yorkshire.

Once the dry recyclables are recovered and the organics have undergone Anaerobic Digestion, the remaining waste will be treated using Energy from Waste, to produce low carbon electricity to feed into the National Grid.

### High Level Objective

To not collect food waste separately, but to gain recovery via the Allerton Waste Recovery Park facility

### Target

To treat food waste contained in the residual waste stream using the facility as soon as the new waste treatment plant comes on-line

### KPI

Renewable electricity being generated using food waste from 2018





## Landfill

Residual waste collected by Hambleton is passed to the County Council, as the Waste Disposal Authority, which then makes arrangements for its disposal and or treatment. Currently, Hambleton's residual waste is sent for disposal using landfill. However, once the Waste Recovery Park facility can accept residual waste for treatment, all Hambleton's residual waste will be sent for recovery.

## Bring Sites

Hambleton will review its existing network of bring sites to decide what type of materials are collected - once the new kerbside collection service has bedded-in. It is anticipated that the number of sites will be reduced as materials previously deposited in them will be collected at the kerbside. Textiles will continue to be collected using bring sites.

## Household Waste Recycling Centres

There are five Household Waste Recycling Centres in the Hambleton area - at Northallerton, Stokesley, Leeming Bar, Thirsk and Tholthorpe. They are provided by the County Council which also manage the operating contractor. The centres accept a wide range of materials and provide residents with additional capacity to recycle their waste including materials that are not accepted at the kerbside.



# Procurement Strategy

## Vehicles

Hambleton's existing fleet of recycling collection vehicles is aged and needs replacing by early 2016. Modelling has assessed the types and options of collection vehicles needed to facilitate a new service. Procurement for new vehicles using a Competitive Dialogue procedure designed to ensure that the final specification of vehicles required can be met is about to begin. Strategically, this project is also reviewing the supply of the whole fleet and their maintenance to explore if efficiency savings might be made and ensure that best value for money is achieved.

## Material Containment

Introduction of two stream kerbside recycling collection requires new containers. The Council has decided to provide all residents with a new 240-litre blue-lidded wheeled bin for all dry recyclables except glass. If residents do not have space for the new bin they will be able to use sacks for co-mingled dry recyclables - but not for glass. Residents will continue to use their existing blue recycling boxes for glass. No other recyclables must be mixed with the glass because crews will not be able to sort materials at kerbside under the new recycling service.

The new wheeled bins will be procured during 2015.



## Route Optimisation

Re-design of the kerbside recycling services means that efficiencies can be made by building new collection rounds - this is best achieved by using specialist waste collection route optimisation software. This is especially important for Hambleton because significant growth in the number of dwellings is forecast - an assumed annual rate of 290 new dwellings per year. These will need to be allocated to the most appropriate collection rounds and it might require round redesign to balance the collection rounds. In 2015 the Council will be procuring the necessary software and expert support to ensure that when the new recycling collection service goes live the new rounds are built and ready to operate.

## Treatment of Dry Recyclables

The Council's existing contract for the treatment of collected recyclables ends in January 2016. During 2015 procurement will be needed for a new contract. The Council is running a joint procurement with three partner councils - Craven, Harrogate, and Richmondshire - in order to combine the tonnages of recyclables being made available to the market. It will attract better material values for all of the councils and enables the sharing of procurement costs to achieve additional efficiency savings.

The service contract will cater for the wider range of materials being collected using the new two stream system. As recyclables are a global scale commodities market, the value of recyclable materials will vary over time, so a Competitive Dialogue procedure will be used, informed by expert support, to achieve the best prices and environmental outcomes for the recyclables collected.

## Future Opportunities

The procurement strategy for infrastructure and services will be used to contribute towards achieving efficiencies. But there is another opportunity that could provide additional efficiency savings - a change in shift pattern for the collection crews from the current five day working to four day working over compressed hours. However, waste collection from households would still continue on a five day basis between Monday and Friday and residents would see no difference in the service they receive because the crews working pattern would be staggered. Crew A would work from Monday to Thursday and crew B from Tuesday to Friday.

The efficiency gains are made through better use of vehicles because the number required is reduced - on five day shift pattern, crew A and B each need access to a vehicle five days a week but with four day staggered shift pattern there are two days a week when the two vehicles used by these crews can be made available for use by other crews. The Council will continue to investigate this area, in discussion with its staff, but does not plan to introduce new working arrangements in tandem with the introduction of the new kerbside recycling collection service. However, it may be revisited in the future.

## Commercial Waste

Hambleton does not provide a commercial waste collection service having transferred all commercial waste agreements to Yorwaste in July 2010. It will continue to provide information to help new commercial businesses requiring a commercial waste service to find a registered waste carrier and will also keep its Business Waste Handbook up to date.

# Communications

Before the new service starts, information will be issued to every household - which will also provide an opportunity to receive feedback from residents. Details will be provided on what materials can be recycled at kerbside and when to set bins out for collection so residents understand how they can make best use of the new recycling service.

## High Level Objective

To positively and proactively engage with residents to achieve the high level objectives and targets as set out in strategy

## Target

Engage with residents in the summer of 2015 to provide information on the strategy and proposed new recycling service to come into operation in January 2016. Fine-tune the strategy following residents' feedback

To provide information packs on the new recycling collection services in a timely manner so that residents understand how they can participate in the new scheme from inception in January 2016

## KPI

Residents' engagement regarding the strategy successfully completed in May 2015

Information packs delivered to all households during October/November 2015

## Monitoring

Key Performance Indicators will be monitored at a frequency as appropriate to the indicator. Where they are not being achieved, the reasons for this will be explored and any corrective action applied.

In the first two years of the strategy, quarterly reports regarding implementation of the strategy and new collection services and feedback from residents will be provided by the Head of Environmental Services to the Council's Management Team. After that management reports will be submitted biannually.

An annual report will be made to Cabinet including any recommendations and assessment against the indicators.

An action plan will accompany the strategy identifying tasks needing completion at a detailed level in order to deliver the strategy's high level objectives and targets. The action plan will be reviewed and refreshed on an annual basis.

**There will be a full review of the strategy after five years - in 2020 - to allow targets to be updated, policies to be reviewed and new policies introduced.**

This information is available in alternative formats and languages



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**ASSOCIATED TABLES**

**Table 1:** Modelled collection options, compliance and effect on manual handling

Option	Collection system	Separate collections as per TEEP regulations	Reduced manual handling	Other points
A	Current service, Yorwaste prices for recyclate	Yes	x	
A1	Current service, market prices for recyclate	Yes	x	Increased costs as current market prices for recycling are lower than those from Yorwaste.
B	Enhanced separate collections, weekly	Yes	x	More recycling collected - comprehensive materials (inc. brown card and mixed plastics) also reduces confusion among residents. Needs effective promotion of new enhanced service to maximise yields.
C	Enhanced separate collections, fortnightly	Yes	x	
D	Fully co-mingled inc. glass	No	✓	Estimated to maximise recycling at the kerbside. Interchangeable RCVs with residual and garden waste services. Risk of challenge over TEEP – major consequences if successful.
E	Two-stream: co-mingled + sep. glass, split-body	Partly/Largely	✓	Substantially increased recycling compared with Option A. Addresses key driver of the regulations – keeping glass separate from paper – but still an element of risk of challenge.
E1	Two-stream: co-mingled + sep. glass, podded	Partly/Largely	✓	As E. 3 loaders per podded vehicle to optimise efficiency but reduced number of rounds.

**Table 2:** Cost comparison of modelled options and impact on the recycling rate 2015/16.

Option	Collection system	Kerbside recycling kg/hh/yr	Difference from A (kg/hh)	Recycling rate (%)	Difference from A (%)	Costs (£k p.a.) in 2015/16	Difference (£k p.a.) in 2015/16	
							From A (budget)	From A1
A	Current service, Yorwaste prices for recyclate	126	0	45.3%	0.0%	£1,433	£0	-£125
A1	Current service, market prices for recyclate	126	0	45.3%	0.0%	£1,558	£125	£0
B	Enhanced separate collections, weekly	190	64	49.7%	4.3%	£1,861	£428	£303
C	Enhanced separate collections, fortnightly	170	45	48.5%	3.2%	£1,398	-£35	-£160
D	Fully co-mingled inc. glass, fortnightly	246	120	54.5%	9.2%	£1,367	-£66	-£191
E	Two-stream: co-mingled + sep. glass, split-body, fortnightly	219	93	52.6%	7.3%	£1,355	-£78	-£203
E1	Two-stream: co-mingled + sep. glass, podded, fortnightly	219	93	52.6%	7.3%	£1,304	-£129	-£254

**Table 3. Annual costs (£000s) for standard working day over 5 days (Monday to Friday)**

	Households	40,221	40,652	41,083	41,514	41,945	42,235	42,525	42,815	43,105	43,395
Option	Type of recycling collection	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
A	Current service, Yorwaste prices*	£1,435	£1,427	£1,433	£1,435	£1,437	£1,441	£1,447	£1,452	£1,456	£1,460
A1	Current service, market prices	£1,558	£1,551	£1,558	£1,562	£1,565	£1,570	£1,577	£1,582	£1,588	£1,592
B	Enhanced separate collections, weekly	£1,858	£1,850	£1,861	£1,866	£1,873	£1,881	£1,890	£1,899	£1,908	£1,916
C	Enhanced separate collections, fortnightly	£1,404	£1,394	£1,398	£1,398	£1,399	£1,401	£1,403	£1,406	£1,408	£1,410
D	Fully co-mingled including glass, RCV	£1,381	£1,368	£1,367	£1,362	£1,358	£1,355	£1,352	£1,347	£1,343	£1,337
E	Two-stream, sep. glass; split-body RCV	£1,368	£1,356	£1,355	£1,351	£1,347	£1,345	£1,343	£1,339	£1,336	£1,330
E1	Two-stream, sep. glass; podded RCV	£1,317	£1,305	£1,304	£1,301	£1,297	£1,294	£1,292	£1,289	£1,285	£1,280

\*income is calculated at CURRENT market values for materials.

**Table 4. Cost savings of proposed system compared with existing system over 10 years.**

