

**Mid Suffolk District Council**

**Segregated Waste Scheme**

**Feasibility Study**

**Mountford in Partnership**

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# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

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# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 1**

#### **Introduction**

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## **Part 1      INTRODUCTION**

- 1.1      As members will be aware, Government and EU policy has now firmly structured the future of waste management. Added to the responsibility of collecting domestic waste is the direction to recycle and/or compost waste from the household waste stream, to reach statutory performance targets.
- 1.2      It is expected that Government and Local Authorities, in reaching these targets will stimulate, indeed force the market to find new and inventive ways to use recycled commodities. As a result some arresting of the haemorrhage of the world's natural resources will take place and certain unsustainable methods of final disposal i.e. landfill, will be significantly reduced.
- 1.3      Many authorities have responded to the challenge and the Audit Commission have recently published their findings in their document “ Waste Management: the strategic challenge” having completed the first 100 Best Value Inspections of Waste Management related services. The document outlines the Action Plan that the audit commission considers necessary for local authorities to succeed. The points raised are as follows:
  - Give priority to meeting the statutory recycling targets, building on the experiences of those authorities that have already achieved or exceeded them.
  - Adopt kerbside collection of recyclables to increase recycling rates, and explore the potential for reducing costs, such as alternate week collections.
  - Ensure that more residents have access to a range of recycling facilities including provision at civic amenity sites.
  - Collect information on the type and amount of waste generated within the local area, to inform future policy and provide practical pointers to waste reductions.
  - Develop approaches to reducing the whole waste stream – for example home composting.
  - Adopt a more proactive approach to enforcement – for example reduce trade waste entering the household stream via fly tipping and abuse of civic amenity sites.
  - Increase public awareness about the need for long-term sustainability decisions that might be unpopular in the short term.
  - Make long-term commitments to better waste disposal facilities (composting or materials reclamation plant, energy from waste, landfill sites).

- Demonstrate how it intends to address the achievement of prescribed recycling standards while reducing the cost of collection to that of the lower quartile.
  - Integrate often fragmented local plans for waste services to identify the changes needed to achieve sustainable waste management.
  - Develop long term plans in partnership with other councils (for example, between councils and districts or neighbouring unitary authorities) and ensure that the development of plans is informed by best private sector practice.
  - Co-ordinate Best Value reviews and contracting timetables with a view to joint working.
  - Develop joint initiatives with other authorities and with the private and voluntary sectors to minimise waste and increase recycling rates.
  - With longer contracts, build in regular agreed reviews, consultations with users and stakeholders and flexibility to accommodate technological and organisational change.
- 1.4 Members and officers may be assured that work completed on the feasibility study and its recommendations are in total accord with the Audit Commission's Action Plan.
- 1.5 The conclusions reached in the study were not, however, prompted by the Audit Commission. In fact, the bulk of the work was completed long before the publication was released.
- 1.6 That it should be so aligned suggests that the research has been thorough and the conclusions in line with informed thinking.

# **Mid Suffolk District Council**

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### **Feasibility Study**

#### **Part 2**

## **Statutory Obligations for Recycling and Composting**

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## **Part 2        Statutory Obligations for Recycling and Composting**

- 2.1.1 In the Best Value Performance Indicators 2001/2002 (jointly produced by the Home Office and the DETR), Chapter 9 specifically refers to Performance Standards for Household Waste Recycling and Composting.
- 2.1.2 The guidance points out that Waste Strategy 2000 announced the Government's intention to set statutory performance standards for household waste recycling and composting for 2003/4, 2005, 2010 and 2015.
- 2.1.3 The Government has set statutory performance standards for 2003/4 and 2005/6 by way of an order dated 1<sup>st</sup> April 2001. These standards apply to the total of indicators BV82a (total tonnage of household waste – percentage recycled) and BV82b (total tonnage of household waste – percentage composted). The overall impact of these standards increases national recycling rates to at least 25% in 2005/6, to 30% in 2010 and 33% in 2015.
- 2.1.4 The standards apply to both waste collection authorities and waste disposal authorities. The Government strongly encourages authorities in the geographical area of a WDA including any relevant unitary authorities to pool their targets and to work together to achieve them. Other authorities, for example neighbouring unitary authorities, that feel it is in their interests to work together, may also wish to pool targets. Authorities should, in any case, be working together to produce Municipal Waste Management Strategies. Members are already aware that this is happening in Suffolk with the County Joint Municipal Waste Strategy.
- 2.1.5 As indicated in the consultation paper, some amendments to the interpretation of indicators BV82a and BV82b have been included. These changes have been described in the guidance on developing Municipal Waste Management Strategies published in 2001.
- 2.1.6 Standards are set based on recycling rates in the 1998/99 Municipal Waste Survey. A list of WCA and WDA 1998/99 recycling rates, together with proposed standards, are included in the guidance on Municipal Waste Management Strategies.
- 2.1.7 The consultant has contacted the DETR and it is confirmed that Mid Suffolk will be required to meet the following targets:
- 16% by 2003/4  
24% by 2005/6
- 2.1.8 Although Mid Suffolk collects approximately 26500 tonnes of household waste through the refuse collection, when considering the current tonnage of arisings from which to calculate the Council's recycling rate, these targets would be set against a total annual waste stream of 29,127 tonnes. This is because when calculating the tonnage against which recycling targets are to be set, it is necessary to include the tonnage collected currently from Bring Sites,

Street Cleaning Arisings, and White Goods collected from the Bulky Waste service.

2.1.9 In Mid Suffolk this amounts to 29,127 tonnes in total.

This would mean:

4673 tonnes by 2003/4

7010 tonnes by 2005/6

At present, Mid Suffolk is achieving 2612 tonnes, a recycling rate of 8.94%.

2.1.10 In discussions with the DETR, in relation to a failure by an authority to meet targets for recycling and/or composting, the consultant established confirmation that wide powers of intervention are available to the Secretary of State and whilst each case will be judged on its merits, in extreme cases the waste collection and recycling responsibilities of WCAs and WDAs can be passed to another agency.

2.1.11 As the regime for increased recycling and composting develops, then constraints on landfill as a disposal option will grow. This is due to the impact of the Landfill Directive, now enacted into U.K law, which will implement a phased ban of the land filling of biodegradable waste, beginning in 2010.

## **2.2 Comment**

2.2.1 The robustness of Government Policy on recycling and composting, and the almost unanimous support of the public for such initiatives, albeit they are both perhaps unaware of the full logistical difficulties and level of cost, leaves local authorities little room to manoeuvre.

2.2.2 In view of this the most cost effective and efficient way of achieving the objectives must be found and actioned, whilst outlets for the recyclables collected are still available.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 3**

#### **Methods of Increasing Recycling Rate**

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## **Part 3      Methods of Increasing Recycling Rate**

- 3.1.1 When considering the methods of achieving the recycling/composting targets as reported in Part 2, attention is drawn to the Mid Suffolk Officers' report dated 4<sup>th</sup> September 2000 (see Appendix 1 of Part 3).
- 3.1.2 That report, considered by members previously, was entitled "The Government's New Waste Strategy and a Refuse Collection/Recycling Proposal to Meet the Requirements Within Mid Suffolk District Council."
- 3.1.3 As members will be aware, the current recycling operation in Mid Suffolk is based around 84 "Bring Sites" (not including CA sites). The yield from which is approximately 2612 tonnes of dry recyclable material, comprising 1100 tonnes of glass, 1400 tonnes of paper, 30 tonnes of cans and 30 tonnes of textiles.
- 3.1.4 Every opportunity has been taken to extend the sites throughout the district, and to encourage householders to recycle through educational and promotional activities. However, it is not considered that there is any further capacity available from bring centres due to a general reluctance by some areas within the district to provide sites for locating recycling centres. In addition, expert waste management consultants working on the County Waste Strategy have pointed out that even with a broader spread of recycling centres, it would not be possible to reach Government targets for 2005 from bring centres alone.
- 3.1.5 This being the case, other methods of collection now have to be considered.

### **3.2      Dedicated Recycling Collections**

- 3.2.1 Many authorities have implemented independent recycling collections focussing on either paper, cardboard, glass, cans, textiles and organic waste or combinations of all these types of material.
- 3.2.2 The advantages of a kerbside collection of segregated waste are that the service is high profile, generally produces clean dry recyclables, and affords separation opportunities resulting in a ready market found for the recycle. The disadvantages are that the schemes are voluntary and therefore generally do not enjoy high recycling rates.
- 3.2.3 Separate kerbside collection schemes are labour and vehicle intensive, resulting in high costs for a relatively low yield. They score low on environmental sustainability as more vehicles are placed on roads in addition to the existing refuse collection service.
- 3.2.4 Many authorities have launched dedicated schemes that fall far short of the targets, which must now to be sustained at a relatively high cost due to their

popularity with householders. Whilst 16% -18% is not uncommon from this form of collection scheme, the lack of compunction to participate makes this form of collection unlikely to achieve targets for 2005.

- 3.2.5 The implementation of a District-wide dedicated recycling scheme normally increases the cost of collection by £12 per household per annum on average.

### **3.3 Collection of Recyclables with the Normal Refuse Collection Service**

- 3.3.1 Some local authorities have attempted to increase the scope for recycling in their areas by providing sacks for a defined range of recyclables that are collected on the refuse vehicles, at the same time as the general refuse. The recyclables are then extracted at a Materials Reclamation Facility (MRF) when the refuse collection vehicles discharge. This is commonly known as a survival bag system, as the sacks are meant to survive compaction within the refuse collection vehicle.
- 3.3.2 Where this system is used, the sacks for containing dry recyclable materials are often contaminated as a result of compaction, creating considerable operational difficulties at the MRF. In view of the low recovery rates MRF gate fees will need to increase to meet operational costs.
- 3.3.3 Yields obtained from survival sack systems have generally fallen far short of expectations because of the contamination and recovery problems, resulting in lower than expected recycling rates, at a high cost of recovery at the MRF end of the operation.
- 3.3.4 Although participation rates are generally high, in the order of 70%, survival bag systems have resulted in a recycling rate of about 7%. Where in use elsewhere, it is known that Officers are now investigating adopting an alternate week collection, based upon a twin bin system due to the failure of the sack system to help meet targets.

### **3.4 Separate Organic Waste Collections**

- 3.4.1 Where organic waste collections have been introduced they are considered to provide a successful and practical way of helping a local authority to meet targets. Figures in the region of 20% are realised from a separate collection of organic waste (brown bin scheme) by Council's within Suffolk. This service format requires additional vehicles and operatives to the normal refuse collection round.
- 3.4.2 Where in operation within Suffolk, local authorities operating compostable waste collection schemes are now investigating methods for collecting dry recyclable waste, in order to allow statutory targets to be met.

### **3.5 Alternate Week Organic Waste and Residual Waste Collections**

- 3.5.1 Other local authorities have introduced an alternate week collection of organic waste and residual waste.
- 3.5.2 The scheme operates by issuing two wheeled bins and collecting residual waste on weeks 1 - 3 - 5 etc and organic waste on week 2 - 4 - 6 etc. Organic waste is sent to a composting plant, while residual waste is land filled.
- 3.5.3 The difficulties of such a system lie in the fact that this type of scheme will result in an increase in the total tonnage of waste collected and that due to the seasonal nature and fluctuating levels of waste arisings vehicle loads are not constant.
- 3.5.4 Such a system operated on a “no charge” basis, through issuing a wheeled bin purely for compostable waste, is likely to allow Mid Suffolk to meet targets, but will lead to an additional cost through an increase in the amount of waste collected from each householder, and is likely to require additional vehicles and operatives to manage the extra tonnage of waste collected during peak summer periods.
- 3.5.5 Officers are of the opinion that an alternate week collection of dry recyclable waste and residual waste does not meet the Council’s stated waste minimisation objective of not providing a collection service, as part of its main service provision, for waste that would otherwise be composted at home or taken to a household waste site, by many householders in the district.
- 3.5.6 If an alternate weekly collection of compostable and residual waste were to be provided, in preference to dry recyclables and residual, then a choice must be made to landfill dry recyclable materials. This would be the least sustainable option.
- 3.5.7 In a rural area such as Mid Suffolk, the obvious way forward for compostable waste is to seek local alternatives for collecting and handling that material. On farm composting and local community composting initiatives would provide the most sustainable solution to the problem.
- 3.5.8 The Landfill Directive does not take effect until 2010, which provides an opportunity to investigate more local solutions to tackle the compostable waste issue.
- 3.5.9 The Consultant is of the opinion that a compostable waste collection is the least sustainable of the two alternate week collection alternatives available to the Council. He anticipates that the total volume of waste collected will rise by circa 20% with an equivalent increase for additional equipment and staff.

### **3.6 Alternate Week Collection of Dry Recyclable and Residual Waste**

- 3.6.1 It is apparent that if an authority wishes to meet the 2005-2015 targets, and implement a sustainable operation without the need for a dramatic increase in the number of vehicles and operatives required, with the aim of producing clean dry recyclables, which are acceptable to the market place, then a kerbside segregated waste scheme is required.
- 3.6.2 Twin wheeled bins are the recommended collection option. They can be easily moved, are lidded and have a proven life of 8-10 years (some are still in use after 12 years). It is a straightforward procedure to attach recycling information to the lids, which aids the prevention of contamination and informs the householder of the materials they can and cannot recycle.
- 3.6.3 Where this form of scheme has been successfully introduced [REDACTED] they have achieved a 35% recycling straight away. Both [REDACTED] and [REDACTED] have realised 35% recycling rates through their twin bin schemes with approximately 75% of their householders actively participating. Higher levels of participation will lead to an increased recycling rate.
- 3.6.4 The size of wheeled bin provided is critical for the success of the scheme. If containers supplied are too large then householders are not compelled to segregate their waste. Issues related to the size of bins recommended are discussed in Part 5.
- 3.6.5 For Mid Suffolk a new fleet of RCV's will be required, equipped with bin lifts to empty the wheeled bins. The existing fleet is unable to handle bin lifts due to insufficient power capacity.

### **3.7 Materials Reclamation Facility (MRF)**

- 3.7.1 A kerbside collection of dry recyclable materials will require the services of a MRF to recover the materials for recycling. Key issues for the successful operation of a MRF are the standard of the recyclable materials presented for sorting, and a low level of contamination.
- 3.7.2 There will always be an element of the dry recyclable materials that cannot be recycled, either through contamination or because the wrong material has been placed within the recycling collection bin.
- 3.7.3 Local Authorities operating the twin bin scheme with dry recyclables elsewhere have stated that non-recyclable materials account for between 5% and 15% of the materials delivered to a MRF.
- 3.7.4 Non-recyclable materials (residual) are sent to landfill after sorting has taken place.

- 3.7.5 It is not clear as yet whether non-recyclable materials sent to landfill as residual waste will mean that the tonnage of material rejected will not qualify for Recycling Credit.
- 3.7.6 If an alternative MRF is utilised than that which is in operation at Great Blakenham, then a decision will need to be obtained from Suffolk County Council regarding charges for landfill of the non-recyclable waste.
- 3.7.7 An important issue to consider with an MRF sorting dry recyclable materials for recycling, is the health and safety of staff operating the MRF, and a requirement for a low level of contamination of materials such as paper and card from broken glass.
- 3.7.8 The issue of glass recycling is discussed further in part 7 of this report.

# **Mid Suffolk District Council**

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#### **Part 4**

#### **Waste Analysis 2001**

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## Part 4 Waste Analysis 2001

- 4.1.1 During April and May 2001, Network Recycling on behalf of Mid Suffolk District Council undertook two waste analyses in the district. In each case they selected 155 households using an ACORN profile for Suffolk County. This ensured a representative sample of domestic waste arisings from the residents of Mid Suffolk. The waste collected was examined, weighed and categorised.
- 4.1.2 Following the exercise the sample was applied to the total number of households namely 36,617 and the aggregated tonnage was almost identical to the actual indicating tonnage of refuse collected. This demonstrates that the exercise was thorough and that the test sample was representative.
- 4.1.3 The annual tonnage per category for the two samples was as follows.

<b>Category</b>	<b>Annual Tonnage April Sample Tonnes</b>	<b>Annual Tonnage May Sample Tonnes</b>
<u>Paper &amp; Card</u>		
1. News & Pams		
2. Directories		
3. Household Paper		
4. Paper & Card Packaging		
5. Cardboard		
6. Non-recyclable paper – Sub Total of 1-6	6,660	5,551
<u>Glass</u>		
7. Clear Glass		
8. Green Glass		
9. Brown Glass		
10. Non-recyclable Glass – Sub Total of 7-10	1,368	1,456
<u>Ferrous Metal</u>		
11. Steel Drink Cans		
12. Steel Food Cans		
13. Batteries		
14. Aerosols		
15. Scrap Metal – Sub Total of 11-15	701	687

<u>Non-Ferrous Metal</u>		
16. Aluminium Cans		
17. Aluminium Foil		
18. Scrap Metal – Sub Total of 16-18	135	151
	<u>Tonnes</u>	<u>Tonnes</u>
<u>Dense Plastic</u>		
19. All Types - Sub Total of 19	1,047	1,142
<u>Plastic Film</u>		
20. All Types – Sub Total of 20	1,153	1,164
<u>Textiles</u>		
21. Textiles		
22. Shoes – Sub Total of 21-22	1,224	595
<u>Miscellaneous</u>		
23. Not capable of recycling – Sub Total of 23	4,856	3,123
<u>Putrescible waste</u>		
24. Home compostables/kitchen waste		
25. Meat Bones		
26. Garden Waste – Sub Total of 24-26	<u>9,312</u>	<u>10,993</u>
TOTAL	<u>26,396</u>	<u>24,862</u>

- 4.1.4 It is apparent from the above that tonnage and volume vary during the year. The analyses have highlighted certain issues that were not previously realised. On an average annual weighed tonnage of 26,549 tonnes of collected Domestic Waste, it is estimated that approximately 3,500 tonnes (13%) consists of garden waste (see section 6).
- 4.1.5 If home compostable kitchen waste and other kitchen waste is added to garden waste, then the mean figure for the total content of the Domestic Waste Stream of putrescible waste is 10,152 tonnes (38%). Part 6 of this report discusses this issue.
- 4.1.6 Of the remainder there is a further 11,265 tonnes (42.5%) capable of being recycled once it is separated from the Waste Stream.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

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#### **Part 5**

#### **Best Options for Mid Suffolk and Public Reaction**

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## **Part 5 Best Options for Mid Suffolk and Public Reaction**

- 5.1.1 The experience of others and the Action Plan from the Audit Commission clearly point to a need for a kerbside collection. To accommodate segregated waste, it is proven essential to provide residents with two wheeled bins, one for recyclables and the other for residual waste.
- 5.1.2 Ideally the bins should comprise the same body colour with different coloured lids. This will reduce the need to carry a greater amount of replacement stock and spare parts.
- 5.1.3 In week 1 dry recyclables are collected and in week 2 residual waste. In essence, exactly the same volume of waste is collected but you have prevailed on the community to segregate their waste before collection, in order that their waste will fit into the containers, without contamination.
- 5.1.4 Where contamination of the dry recyclable container is observed it is important that a firm stance is taken and that container left un-emptied to be collected on the residual waste collection week. Staff will be required when implementing the scheme to check that containers are being used properly. Where incidences of contamination are observed it is important that the householder is notified in order that the error can be rectified. Funding has been obtained to support the costs of staff for the implementation phase of the scheme in Mid Suffolk.
- 5.1.5 Tests carried out in Mid Suffolk have shown that residual waste over this period, if wrapped, does not decompose to cause smell or infestation. Other authorities operating the same type of scheme have supported this assertion.
- 5.1.6 The question of bin size has been carefully investigated and it is felt that all average sized households will be able to retain residual waste in a 140 litre bin.
- 5.1.7 During the trial it was found that the retention of recyclables created more bulk but the test conditions were for a family with children. It is clear that some adjustment is needed and it is proposed that 140 litre bins will be provided for recycling, but 30% of the households will require 180 litre bins where family size is greater.
- 5.1.8 Where householders are unable to store wheeled bins due to the nature of their property, it is considered that boxes or bags are provided for those householders.
- 5.1.9 Where families with babies are present it is considered that an extra container be provided to contain nappy waste. Those containers can be taken back for reuse once nappies are no longer required. It will be possible to offer this service through health visitors and Doctors Surgeries.

- 5.1.10 The recent Best Value Review of the current Refuse Collection Service has identified an efficient and well-received service. The incumbent contractor has experience in segregated waste schemes and their contract expires in two years.
- 5.1.11 Recommendations later in this report will point to a new contract over 15 years with the same contractor subject to acceptance of the costs. New bin-lift vehicles will be required and it would be the responsibility of the contractor to provide these within the contract. Back door collections, assistance to the elderly and disabled, would remain unchanged.
- 5.1.12 The question of final disposal is discussed in Part 7.
- 5.1.13 As has previously been stated, a segregated waste scheme is totally dependent on the support of the community. This has now been gauged and we report as follows.

## **5.2 Public Reaction**

- 5.2.1 In the spring of 2001 Linda Jones and Partners undertook a full consultation exercise within Mid Suffolk in order to gauge the public response to an Integrated Refuse and Recycling Scheme.
- 5.2.2 Phase 1 of the consultation exercise was centred upon a number of focus group meetings, which were held in Debenham and Stowmarket. The purpose of this part of the exercise was twofold. Firstly to obtain qualitative feedback regarding the proposed scheme, the bins were shown to the consultees. Secondly to provide a framework for the questionnaire exercise that followed in phase 2.
- 5.2.3 The phase 2 questionnaire comprised 63 questions and also included a picture of a 140 litre and a 180 litre wheeled bins, beside a 90 litre dustbin to provide perspective.
- 5.2.4 Some of the questions concerned the existing service and were reported on in the Best Value Review. For the purposes of this report 7 questions have been selected that deal with central issues.
- 5.2.5 The following base information was lifted from the replies. The average number of people in each household was 2.5 and the average number of bins put out weekly was 1.4. The average number of sacks put out was 2.3 per household. A total of 2,800 questionnaires were distributed of which 1240 were returned.

5.2.6 With regard to the specific questions selected –

	<i>Satisfied</i>	<i>Unsure</i>	<i>Dissatisfied</i>	<i>No response</i>
<i>Question 39</i> Satisfaction with idea of kerbside segregated waste collection	79%	12%	4%	5%
<i>Question 40</i> Satisfaction with items to be collected	83%	8%	5%	4%
<i>Question 41</i> Likelihood of participating	87%	3%	10%	
<i>Question 42</i> Satisfaction with fortnightly collections	69%	9%	19%	3%
<i>Question 43</i> Satisfaction with introduction of wheeled bins	78%	7%	12%	3%
<i>Question 44</i> Satisfaction with issue of 2 wheeled bins	76%	7%	12%	5%
<i>Question 48</i> Satisfaction of identifying items to be placed in each bin	85%	7%	5%	3%

5.2.7 From the responses seen there would appear to be a solid band of support from 80% of the community. There is some concern as to the fortnightly collection but this is because it departs from long established methods. From experience elsewhere, many people who are currently unsure are happy to take part if the majority so decide.

5.2.8 There would appear to be a 10% rejection rate that is fairly typical and arrangements can be made to deal with this operationally.

5.2.9 Earlier in the study it was explained that the recycling take-up rate was gauged to be 75%. It is clear from the consultation exercise that this may be improved upon.

# **Mid Suffolk District Council**

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#### **Part 6**

#### **Green Waste**

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## **Part 6      Green Waste**

### **6.1      Biodegradable Waste: Mid Suffolk District Council's Position**

- 6.1.1 The European Landfill Directive, now enacted into U.K law, places local authorities under a duty to progressively reduce the volume of biodegradable waste sent to landfill.
  - 6.2.2 Biodegradable waste includes kitchen, garden, food, animal wastes (putrescible wastes) and paper and card.
  - 6.1.3 The U.K has been granted a four-year derogation due to its heavy reliance on landfill, the first target will now arrive in 2010. At that time landfill operators will be placed under a duty to ban the landfill of biodegradable waste, unless a special permit is issued to allow landfill.
  - 6.1.4 The Waste Strategy 2000 puts forward a system of “tradable permits” to be established that will allow landfill operators to landfill biodegradable waste. However, those permits will obviously bear a financial cost and their supply may possibly be limited, forcing up the cost. To date there is insufficient detail available on the development of tradable permits to appraise Members further.
  - 6.1.5 Under the Landfill Directive, local authorities will be required to reduce the volume of biodegradable waste sent to landfill by:
    - 75% of 1995 levels in 2010
    - 50% of 1995 levels in 2013
    - 65% of 1995 levels in 2020
  - 6.1.6 Exactly how the 1995 levels of biodegradable waste will be decided is not clear. It is possible that government will benchmark the percentage of municipal waste arisings, considered to be biodegradable.
  - 6.1.7 For those Council's unable to reduce their biodegradable waste arisings accordingly, tradable permits will need to be obtained, or other options for “treatment” of the waste utilised, such as composting plants or energy recovery technologies.
- ### **6.2      Mid Suffolk's Position**
- 6.2.1 Although the paper and card content of the refuse collection remained constant over the two waste analysis exercises at approximately 25%, there was wide variation in the tonnage of putrescible waste collected.

- 6.2.2 It has been made apparent through the two recent waste analysis exercises carried out in Mid Suffolk - in early April and at the end of May - that Mid Suffolk currently landfills equivalent to the national average of putrescible waste each year.
- 6.2.3 The waste analysis indicated a range of 35% to 44% putrescible waste, collected during two sampling weeks. Although the figures are very different, it is considered that if taken over a whole year, the tonnage of putrescible waste would even out to approximately the national average of 35-36%.
- 6.2.4 The volume of garden waste entering the refuse collection during the two waste analysis exercises cannot account for the full increase alone. Garden waste arisings increased by 2.28% of the annual waste stream over the period of the waste analyses. Taken over the two exercises, compostable kitchen waste and food waste arisings increased by 3.83% of the waste stream and 2.91% respectively.
- 6.2.5 Assumptions regarding the putrescible waste contained within the refuse collection must be based upon the two waste analysis exercises, and conclusions drawn on that evidence, as resources are not available to undertake further analysis work. Therefore to guide the direction of possible changes to future waste management services in Mid Suffolk, it is considered that national average figures for putrescible waste are accepted.

### **6.3 Garden Waste**

- 6.3.1 It is clear from the waste analysis work that garden waste comprises a much larger fraction of the refuse collection waste stream than originally anticipated by Officers.
- 6.3.2 It was assumed that due to the nature of the collection system operated within the district that garden waste would be a fairly minor component of the household waste stream. This is because it was thought that it would be difficult for householders to disguise garden waste in refuse sacks and dustbins, and because Onyx has instructed their operatives not to collect garden waste, unless contained within a separately purchased "orange sack."
- 6.3.3 Further evidence to support the assumption made by Officers was provided by the operational manager at the Material Reclamation Facility at Great Blakenham. Haul Waste, now Viridor Ltd, informed Officers verbally that the proportion of garden waste contained within the refuse delivered to the MRF from Mid Suffolk, contained very low amounts of garden waste, typically <5%. This may be a reflection of the time of year that the Gt Blakenham MRF was in operation, mainly in autumn and winter. This has not proved to be the case and it is now reasonable to expect that there is in excess of 3,500 tonnes of garden waste present in the waste stream in this district, annually. This equates to approximately 13% of the household waste stream per annum. This estimate is based upon the figures established by the waste analysis, and

from national average “compostable” waste figures for the household waste stream.

- 6.3.4 The volume of garden waste present in the waste stream is probably exacerbated by the “orange sack” service currently provided, which encourages garden waste to be placed into the refuse collection.
- 6.3.5 As a result of the Best Value Review of the existing refuse collection and recycling service it was clear that the level of sales of orange sacks is low, at approximately 8500 per annum. In addition, the method and network of distribution of the sacks is far from satisfactory; the cost is double that of other authorities used for the Best Value benchmarking exercise, and the garden waste collected is then sent to landfill anyway.
- 6.3.6 The low sales of orange sacks are probably related to the low level of awareness of the service and the poor network of distribution across the district. This is because sales of the sacks are based at Stowmarket and Needham Market. Debenham Parish Council does make orange sacks available for local residents to buy, but they are the only point of distribution outside Stowmarket and Needham Market.
- 6.3.7 Any householder not living close to a distribution point for orange sacks, must purchase them at an additional cost in order that they may be posted out. This means that those without a car, or living too far from a point of sale must pay more for the sacks, and consequently use of the service.
- 6.3.8 It is clear that garden waste will continue to become a major problem for the Council in the future, preventing targets set by the E.U Landfill Directive from being achieved.
- 6.3.9 Garden waste may also pose a risk of contamination of the dry recyclable waste collected from the proposed kerbside collection scheme, if householders “hide” garden waste in their dry recyclable container.
- 6.3.10 Some householders may be coerced into utilise alternative methods to dispose of their garden waste, as they are likely to be unable to contain their household waste and garden waste into the size of wheeled bins provided.
- 6.3.11 In order to minimise the amount of garden waste sent to landfill it is proposed that the "orange sack service" be discontinued under the new contract when the proposed wheeled bin service is introduced.
- 6.3.12 An alternative can be provided once the twin bin service has bedded through a “buy-in” garden waste collection service. This can be achieved in a number of ways.
- 6.3.13 Firstly, householders might be offered the opportunity to purchase a “third” wheeled bin, for garden waste, if they so wish and they decide that they have the space to accommodate it.

- 6.3.14 Secondly, a network of distribution points for selling biodegradable garden waste sacks can be established, for those who opt not to buy a third wheeled bin.
- 6.3.15 Distribution of the sacks could utilise local shops, garages, pubs and post offices as points of sale.
- 6.3.16 Householders will then be informed on which day to place their bins/sacks out for collection, and the garden waste can be collected and transported for composting.
- 6.3.17 Where householders are in receipt of benefits it will be possible to provide a sack or sacks at a reduced rate, with a limit on the number issued to avoid misuse of the service by householders supplying sacks to others, not receiving benefits.
- 6.3.18 For those wishing to compost at home, the availability of subsidised price home composters should be heavily promoted when information regarding the service is sent out. It is suggested that a further approach be made for Landfill Tax Credit Scheme funding for the compost units.
- 6.3.19 It is realised that this proposal moves away from Members wishes not to collect garden waste that would otherwise remain in people's gardens for composting. However, it is considered that those householders who are composting will continue to do so as the proposed garden waste collection service offered is not free.
- 6.3.20 Officers are of the opinion that possibilities for establishing a garden waste collection scheme should consider operating a service over a 7 – 8 month period only (Mar, Apr – Oct) and to utilise the refuse collection vehicles employed on the fortnightly collection, but out of normal working hours.
- 6.3.21 Members should note that when considering the proposed alternate week collection of dry recyclable waste and residual waste, it will be necessary to also consider the need to meet E.U Landfill Directive targets, as the timeframe for the targets will be encompassed by any extended/new contract period for the dry recyclable scheme.

## 6.4 Community Composting Schemes

- 6.4.1 The Audit Commission in their recent publication (Waste Management: the strategic challenge) focussing on the results of 100 Best Value audits of waste management services in the U.K, make it clear that they expect local authorities to develop partnerships in order to minimise the volume of household waste sent to landfill.
- 6.4.2 Within Mid Suffolk, three community groups have recently expressed an interest to establish community composting sites within their villages. They are Mendlesham, Stonham and Metfield. Mendlesham are in discussions with Suffolk Acre, to develop their scheme.
- 6.4.3 The purpose of a community composting site is to provide a location, in or near a village or town, where local people are able to take garden waste for conversion into usable soil improver or mulch, by shredding and chipping that material.
- 6.4.4 The success of a community composting scheme is reliant on a number of factors such as:
- Adequate funding for licensing and operational costs.
  - The availability of a suitable, overlooked site, preferably on a hard standing.
  - A community group willing to manage the facility.
  - A suitable shredder/chipper being made available.
  - Manpower to operate the shredder/chipper.
  - Transport to take away freshly shredded material to a central depot and then take back composted materials when the shredder is next on site.
- 6.4.5 By providing support for community composting schemes, it is considered that significant quantities of garden waste can be diverted from landfill, and that a useable material for soil improver and mulch, or footpath surfacing can be produced.
- 6.4.6 That material can be used on MSDC Amenity/Countryside work, returned to the community for their own use, or sold to the public.
- 6.4.7 It is recommended that Officers continue to investigate establishing these schemes in order to reduce the incidence of garden waste disposed of in the refuse collection.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 7**

#### **Glass**

**Mountford in Partnership**

## **Part 7      Glass**

- 7.1 It will not be possible to collect glass using the twin wheeled bin scheme. This is because glass would be smashed during compaction of the load in the refuse collection vehicle and during discharge at the MRF. Therefore, as pointed out in part 3 of this report, glass provides a health and safety and materials contamination problem for dry recyclables delivered to the MRF.
- 7.2 Additionally it was made clear from the consultation focus group sessions, and from members of the public attending the Best Value Challenge exercise for the existing refuse and recycling service that confusion was likely to occur if the public continue to be asked to take glass to bring centres, while using the twin bin service to recycle the rest of their waste.
- 7.3 Householders are likely to either place their glass into the residual waste container as they will deem it not worth recycling, or in the worse case scenario place it into the dry recyclable wheeled bin, even though it will be clearly marked NO GLASS.
- 7.4 It is considered unlikely that householders who do not recycle their glass now will do so unless recycling glass is made an easier task.
- 7.5 Where a twin wheeled bin service has been introduced elsewhere, those Council's are now faced with a dilemma and are looking closely at providing a glass collection service to offset these problems.
- 7.6 It is estimated that approximately 10% of the waste stream consists of glass. This is based upon the waste analyses and the total annual tonnage of glass collected at bring centres each year. This means that there is an annual total of approximately 2600 tonnes of glass in the household waste stream.
- 7.7 Consideration has been given to a separate collection service based on three open vehicles equipped with containers providing a fortnightly service. A local contractor has showed interest in the project and a cost for the service has been provided.
- 7.8 Detail on the likely costs of a separate glass collection service is provided in part 8 of this report.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 8**

#### **The Way Forward and Financial Appraisal**

**Mountford in Partnership**

## **Part 8      The Way Forward and Financial Appraisal**

- 8.1.1 It is now apparent that the only way forward is to consider a kerbside collection system based on two bins, one for residual waste and the other dry recyclables. The collection to be weekly but alternating residual waste week 1 - 3 - 5 etc and recyclables week 2 - 4 - 6 etc, and so on.
- 8.1.2 The standard bin sizes to be 140 litre for dry recyclables and 140 litre for residual waste. However approximately 30% of the community may require 180 litre for recycling due to larger family size.
- 8.1.3 The current contractor ONYX Southern has considered the proposal and provided a quotation for the new service.
- 8.1.4 Currently all waste is land filled at Great Blakenham. On this site is a major MRF that is operated by Viridor Waste Management Ltd. They own the MRF and have tipping rights for the landfill. A further company Wastepack Ltd. had an interest (under renegotiation) in the MRF and the site is licensed by Suffolk County Council.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- 8.1.9 During the consultation exercise and surrounding publicity, [REDACTED] expressed an interest in developing an MRF at their Claydon site and approached Mid Suffolk Officers.

- 8.1.10 The Consultant advised [REDACTED] of the likely yields from a kerbside collection scheme based upon the results of the two waste analyses. Subsequently



### 8.3 Wheeled Bins

[REDACTED]

[REDACTED]

[REDACTED]

### 8.4 Glass Collection Service

8.4.1 The scheme requires a glass collection service based on three 6.5 tonne open lorries and six staff. Collections will be fortnightly. Householders will be issued a robust plastic box in which to retain bottles. When the boxes are collected the collection staff will sort the glass at the kerbside into the appropriate bins on the vehicle.

[REDACTED]

### 8.5 Total Cost and Recycling Credits

8.5.1 By the time this scheme can be realised the current service will have been subject to an inflationary uplift in the order of 5%.

Therefore the comparable price per annum = [REDACTED]

The new proposed service will cost per annum [REDACTED]

8.5.2 Recycled items enjoy recycling credits and the Feasibility Study indicates that Mid Suffolk will recycle 10,970 tonnes. Forecast recycling credits for 2002/3 are estimated to be [REDACTED] per tonne. Therefore Mid Suffolk would receive [REDACTED] in credits.

8.5.3 The current practise is for the processing contractors to keep the income to offset the cost. The local authorities retain the credits. As explained, we are unable to obtain the gate fee from [REDACTED] has

indicated a price of [REDACTED] per tonne. Therefore [REDACTED].  
Accordingly, the credits will be worth [REDACTED] net.

8.5.4 During the data gathering process, opportunities for sponsorship were investigated and, if the scheme proceeds, some [REDACTED] per annum will be achieved by sponsorship.

The final assessed cost of the service therefore will be:

[REDACTED]

8.5.5 The old cost of refuse collection per household was [REDACTED], based upon a 5% uplift in 2002. The new cost of service per household will be [REDACTED], an increase of [REDACTED].

8.5.6 It should be noted that during the consultation exercise, without knowing the actual cost, the public expected current refuse collection and recycling service costs per household per annum to be £91 (mean average).

8.5.7 The control of 70,000 wheeled bins and to deal with losses and re-issue, etc. requires close supervision. It is strongly recommended that a "Waste Management Officer" be employed within the Client Group to deal with this.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 9**

## **Community Strategy – Sustainability Appraisal**

**Paul Lewis**  
**Environmental Co-ordinator**  
**Mid Suffolk District Council**

## **9. Community Strategy – Sustainability Appraisal**

### **9.1 Background Information**

#### **9.1.1 Refuse Collection Service**

9.1.2 Mid Suffolk District Council is the Waste Collection Authority in the district and is responsible for collecting household waste from 36,617 households. The Council currently collects 26,550 tonnes (2000/2001) of household waste from the refuse collection, per annum.

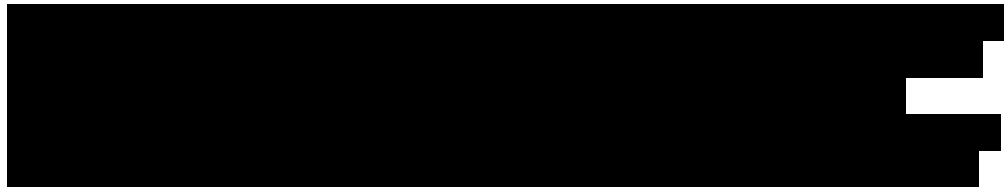
9.1.3 MSDC is directed by the Waste Disposal Authority (Suffolk County Council) to take the refuse collected to landfill at Great Blakenham, for disposal.

9.1.4 None of the household waste delivered to the landfill site is currently recovered for recycling, even though a Materials Reclamation Facility (MRF) is sited at the landfill site.

9.1.5 The MRF was designed and built as the first “dirty” MRF constructed in the country and was contracted, via Suffolk County Council, to remove 25% of the waste stream from the MSDC refuse collection. The MRF and the landfill is owned and managed by Viridor Waste Management Ltd.

9.1.6 When MSDC were delivering the refuse collection to the MRF, it was tipped at the loading area and then sorted automatically and manually, allowing materials such as plastics, paper, card, and metals to be recovered for recycling. The residual waste was then directed to landfill.

9.1.7



9.1.8 As MSDC does not currently provide a “kerbside” type collection of household waste, which allows materials to be source separated by householders, the Council is unable to utilise the MRF. This means that 100% of the refuse collection goes to landfill.

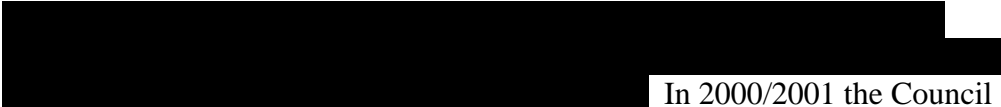
9.1.9 MSDC does achieve the lowest household waste arisings per annum in Suffolk from the refuse collection, at approximately 0.72 tonnes per household per year. This compares to figures of over 1 tonne per annum for neighbouring authorities, close to the national average figure.

9.1.10 Officers consider that the lower annual refuse collection per household rate is due to the Council’s past decision not to provide wheeled containers for household waste. Although that decision was primarily based upon the issue of cost, it is now generally considered that by choosing not to provide

householders with the industry standard 240 litre wheeled bin – only choice available at the time - has enabled the Council to effectively minimise the quantity of refuse collected for disposal, and placed the Council at an advantage over other authorities.

- 9.1.11 Generally it is accepted that large wheeled bins are responsible for higher refuse collection rates. This is because wheeled containers - if unrestricted by their size - will generally be used to dispose of large volumes of garden waste and other items that would not normally be collected, if observed at the curtilage by the refuse collection operatives.
- 9.1.12 The current refuse collection service utilises 9 refuse collection freighters (RCV's), all powered by standard diesel fuel. The service also utilises a cage vehicle, which is also powered by diesel fuel.
- 9.1.13 Distance travelled by the RCV's in 2000/2001 was [REDACTED] miles and the vehicles used [REDACTED] litres of Low Sulphur Diesel fuel.
- 9.1.14 The refuse collection operates by operatives lifting and emptying dustbins and sacks, provided by residents, into the back of the refuse collection vehicles (RCV).
- 9.1.15 A bulky collection service is provided to householders for items such as fridges, freezers and furniture. White goods are collected separately and sent for recycling. Refrigerants such as CFC's contained within older fridges and freezers are removed for safe disposal by the contractor.
- 9.1.16 Furniture and other similar household items are collected in the RCV and disposed of to landfill.

## 9.2 The Recycling Service

- 9.2.1 Mid Suffolk District Council operates a network of 84 recycling “bring” centres in the district. At those recycling centres a mix of glass, paper, cans and textiles is collected.
- 9.2.2 The glass recycling service provides collection facilities for green, brown and clear glass. It also provides facilities at the smaller village locations for mixed glass collections.
- 9.2.3 At the recycling bring centres, the following collection facilities are provided:
- 62 with one or more glass banks
  - 82 with paper banks
  - 24 with textile banks
  - 39 with can banks
- 9.2.4 The Council has adopted a system to manage the majority of recycling bring centres in the district by setting up a network of 90 Community Recycling Groups.
- 9.2.5 Community Recycling Groups are able to obtain payment of recycling credits - paid through MSDC by Suffolk County Council – for managing those recycling bring centres.
- 9.2.6 Some Community Recycling Groups do not manage recycling bring centres but collect material for recycling, such as newspapers and deliver this directly to the merchant for which they receive a payment and the recycling credit. This activity accounts for the greater number of Community Recycling Groups registered, than there are recycling bring centres in the district.
- 9.2.7 Community Recycling Groups are registered with the Council and undertake to manage, and promote the use of recycling centres. They are paid the recycling credit, less collection charges made by the contractor. Recycling Credit is paid directly to registered charities or constituted organisations, nominated by those groups.
- 9.2.8  In 2000/2001 the Council collected:
- 1440 tonnes of paper
  - 1092 tonnes of glass
  - 25 tonnes of cans
  - 33 tonnes of textiles
  - 23 tonnes of white goods

- 9.2.9 This gives the Council a recycling rate of 8.9% from the bring centres and bulky/white goods collection system. Contractors are utilised to collect the materials from the recycling centres. The Council has a very limited number of contractors available locally through which to operate the service.
- 9.2.10 The Council is unable to obtain figures from those contractors in regard to the miles driven by lorry to service bring centres in the district. This is because the contractors used, service banks at sites in different districts and from commerce, on the same journey.
- 9.2.11 The dearth of available recycling contractors makes it extremely difficult to require collection contractors used by the Council to utilise cleaner or alternative fuels in their vehicles.
- 9.2.12 Recycled materials are transported to a number of destinations at home and abroad for reprocessing and recycling. This also makes it extremely difficult to track where materials collected in this district are transported. Materials are “bulked up” after they are collected from this district and material collected in Mid Suffolk is mixed at the bulking point with materials collected elsewhere.

### **9.3 Composting**

- 9.3.1 Officers at Mid Suffolk have been jointly responsible for establishing and obtaining funding from the Landfill Tax Credit Scheme, to establish a Home Composting Scheme in this district and in three other districts, within Suffolk.
- 9.3.2 The scheme was set up in 1999 and in Mid Suffolk 4,160 subsidised cost home compost units have been distributed to residents.
- 9.3.3 It is not possible to accurately estimate the quantity of organic waste that this scheme has removed from the waste stream, due to a wide variety of variable factors. For example, some residents will have ceased to use their compost units if they have been unsuccessful in using them effectively.
- 9.3.4 Mid Suffolk residents make use of the green waste disposal facilities at the household waste sites in the district. In 1999/2000, each MSDC household disposed of 58kgs of green waste at the household waste sites. This figure amounts to 2123 tonnes of green waste (garden waste) per annum.
- 9.3.5 It is not possible to accurately estimate the quantity of green waste disposed of each year within the refuse collection. Indications from the recent waste analysis in the district showed that of the refuse collected, approximately 13% in April 2001 and 17% in May was garden waste.
- 9.3.6 Variables such as time of year will affect the quantity of garden waste in the refuse collection, however it is generally accepted that approximately 35% of

the household waste stream – taken over one year - is made up of organic waste.

- 9.3.7 If this figure is accepted then the ratio of garden waste, to food waste, to compostable waste such as vegetable peelings, found in the waste analyses can be used as a rough guide to estimate the annual volume of garden waste, disposed of in the refuse collection.
- 9.3.8 Using this guide it is estimated that there are 8761 tonnes of organic waste contained within the refuse collection per annum. 36.2% of that tonnage would be garden waste.
- 9.3.9 This equates to 3171 tonnes of garden waste disposed of in the refuse collection per annum, or approximately 11.4% of the total refuse collection.
- 9.3.10 The Council provides an ‘Orange Sack’ garden waste service to householders. Garden waste disposal sacks are supplied at 60p per sack.
- 9.3.11 The sacks can be purchased by householders from Onyx at Creeting Road Depot, the cashiers office at the Tourist Information Centre in Stowmarket, the cashiers office in the headquarters building at Needham Market, and from Debenham Parish Council.
- 9.3.12 Onyx will post sacks to householders in bundles of 10. A charge is made for this service and 10 sacks are supplied at 82.3p each, including postage.
- 9.3.13 In the year 2000/2001 a total of 8,581 orange sacks were sold from the following distribution points:
- |                            |      |
|----------------------------|------|
| Onyx                       | 1881 |
| Cashiers at TIC            | 4000 |
| Cashiers at Needham Market | 2200 |
| Debenham Parish Council    | 500  |
- 9.3.14 Mid Suffolk has a composting facility located within the district, located at Creeting St Mary. The composting depot is owned and managed by County Mulch Limited, who is a contractor to the County Council’s Local Authority Waste Disposal Arms-length Company (LAWDAC), Suffolk Waste Disposal Company.
- 9.3.15 Garden waste is transported to County Mulch from the household waste sites within the county, where the material is composted for use as soil improver. The Council makes no use of the composting facility in the delivery of its refuse collection/recycling/composting services.

## **9.4 Community Strategy – Sustainability Appraisal Methodology**

- 9.4.1 Mid Suffolk District Council have produced a Community Strategy, which sets out a vision for a sustainable Mid Suffolk through 13 Community Strategy Goals.
- 9.4.2 The Community Strategy Goals encompass the corporate sustainability objectives of the Council and provide the baseline for the delivery of the Council's services and functions, in regard to sustainable development.
- 9.4.3 A Community Strategy – Sustainability Appraisal System has been devised, based upon an appraisal checklist produced by the LGA, SOLACE and IDeA. The checklist asks a series of questions in order to determine whether the service or function under review, has a positive or negative impact upon the Community Strategy Goals.
- 9.4.4 The appraisal system allows Officers to assess the service or function under review and to “draw out” the aspects of that service or function that have positive and/or negative impacts upon the Community Strategy Goals.
- 9.4.5 Where a particular question in the checklist is relevant to the service under appraisal, the positive and negative impacts are highlighted. At the end of the exercise it is possible to identify which Community Strategy Goals are affected, and whether the service or function has a positive or negative (or both) effect on Community Strategy Goal(s).
- 9.4.6 Once the checklist is completed the issues raised are used as the basis for a written Community Strategy – Sustainability Appraisal and Summary.

## **9.5 Community Strategy – Sustainability Appraisal**

- 9.5.1 The proposed service has both positive and negative effects upon the sustainability objectives set out by the Community Strategy Goals. A summary table indicating the goals applicable to the proposed service has been included below.
- 9.5.2 Please note that the Goals are numbered as shown in the Community Strategy document.
- 9.5.3 Where a positive or negative effect is either increasing or decreasing, as a result of the proposal, then arrows are included to indicate the direction of the trend.
- 9.5.4 A list of both positive and negative effects as an outcome of the proposed service has been included below.

## 9.6 Community Strategy Checklist

Key: ✓ = Sustainability Effect

↑ = Effect Increasing

↓ = Effect Decreasing

Goal No	Mid Suffolk District Council will work with its partners to:	Positive Effects	Negative Effects
1	Create social, environmental and economic conditions that lead to improvements in the health and well being of all Mid Suffolk residents	✓ ↑	✓ ↓
2	Promote more and wider opportunities for work for all sections of the community, in a diverse economy	✓ ↑	
3	Ensure that basic needs are met more locally, and to provide equal opportunity for all to access facilities, goods, services and people	✓ ↑	
4	Conserve, protect and enhance the environment in our towns, villages and countryside and create a more ecologically diverse natural environment	✓ ↑	✓ ↓
7	Make more efficient use of natural resources and produce less waste	✓ ↑	✓ ↓
8	Encourage and promote the use of renewable sources of energy and energy efficiency measures	✓ ↑	
9	Reduce levels of pollution and take steps to improve the quality of our air, land and rivers	✓ ↑	✓ ↓
10	Involve all sections of the community in the decision-making process	✓	
11	Build capacity within communities in Mid Suffolk to enable people in those communities to work towards delivering their aspirations for their local area		✓

## **9.7 Positive Effects**

- 9.7.1 An integrated refuse collection and recycling scheme, as proposed would divert approximately 10,000 tonnes of dry recyclable material from landfill. This would reduce the adverse environmental effects caused by landfill and help to conserve landfill void space.
- 9.7.2 The proposed scheme would provide benefits to the environment through conserving natural resources and reducing the energy used from extracting, transporting and converting virgin materials into products.
- 9.7.3 The proposed scheme would reduce the volume of materials that may need to be incinerated, or go through some other form of “energy recovery” process in the County, in the future.
- 9.7.4 The proposed scheme would provide a reduction in the number of car journeys that people make, simply to recycle.
- 9.7.5 The proposed scheme would enable a broader range of the Mid Suffolk population to recycle their waste, such as those people without a car.
- 9.7.6 Employment opportunities will be created locally.
- 9.7.7 The proposed scheme will allow a greater recycling rate to be achieved utilising the same number of vehicles that currently carry out the refuse collection only.
- 9.7.8 Cleaner vehicle technology can be utilised to reduce vehicle emissions in the new fleet.
- 9.7.9 More fuel-efficient vehicles can be purchased to operate the service, than those used at present.
- 9.7.10 The size of the wheeled containers provided – with a ban on side waste - will provide an effective form of waste minimisation, and encourage source segregation of waste by householders.
- 9.7.11 Vehicle journeys will be reduced, as the need for contractors to service 84 recycling centres will become unnecessary.
- 9.7.12 Eyesore, noise nuisance, vandalism and litter problems will be reduced by removal of existing recycling bring centres.
- 9.7.13 Litter and nuisance problems created by vermin, cats and foxes will be substantially reduced by utilising wheeled bins.
- 9.7.14 Householders will receive a financial benefit from a reduction in the number of black refuse sacks required, purchased over the lifetime of the wheeled bins. Typically 2.8 sacks per week X 7p X 52 weeks X 12 years = £122.30p.

- 9.7.15 The Council can utilise the media for publicising and promoting the new scheme, to promote the back door collection service for those disabled or infirm who are unable to take their refuse to the curtilage.
- 9.7.16 The physical stresses placed upon refuse collection operatives through manually lifting sacks and bins will be removed.
- 9.7.17 Officers provide talks, presentations and educational support to a wide range of Community Groups on waste minimisation and recycling issues. This is carried out on request from local groups. Officers have contributed in the past to Slim Your Bin, Buy Recycled, Schools Waste Action Club and the Suffolk Local Authorities waste education exhibition at the Suffolk Show. Mid Suffolk has also contributed in the past to work done by the Suffolk Recycling Officers Group. The Council has produced a range of publications distributed to residents providing information and encouraging householders to reduce, reuse, recycle their waste. Publications such as the Council's Recyclopedia and Environmental Wall Planner have been very well received. In addition Officers have provided radio interviews on recycling issues, and produced articles in the press and Council newsletters. This important work can restart by employing a Waste Management Officer.
- 9.7.18 Mid Suffolk is a corporate member of the national waste charity organisation Wastewatch. This organisation conducts research into waste/recycling issues that is a valuable source of information to local authorities. Wastewatch also manage the Schools Waste Action Club programme in Suffolk.
- 9.7.19 The Council is a partner with four other Suffolk local authorities in providing subsidised cost home compost bins to householders, as part of its waste minimisation programme. To date the Council has distributed approximately 4160 compost units to MSDC residents. The proposed scheme could be used as a vehicle to re-launch the provision of home compost units at a time when the waste issue will be at the forefront of many householder minds.
- 9.7.20 The refuse collection and recycling service is certified to ISO14001 for environmental management, as part of the corporate certification. This ensures that environmental considerations are built into the way the service operates, and monitors continual improvement through twice yearly external audit.
- 9.7.21 The need to establish recycling centres in certain villages where these sites are unpopular will be removed.
- 9.7.22 A glass recycling service will enable contamination of the dry recyclable fraction to be reduced, minimising the need to landfill contaminated loads.
- 9.7.23 A dedicated glass recycling service will reduce the scope for confusion by householders, regarding materials they are and are not able to recycle in the twin bins.

- 9.7.24 A dedicated glass collection service will reduce the scope for injury to sorting staff at the Materials Reclamation Facility.
- 9.7.25 MSDC provides a bulky collection service to residents, for which a charge is made. The Council can continue not to make a charge for this service for those residents in receipt of benefits.
- 9.7.26 Procedures can be put in place whereby householders are able to contact a dedicated line for furniture and other items, suitable for re-use. This can be promoted through the promotional information that will be sent out as part of the introduction to the new service format.
- 9.7.27 MSDC has agreed to meet National targets for recycling and composting, within the Council's Community Strategy and in its Environmental Policy, monitored through ISO14001. Those targets will be reached with the implementation of the proposed service.
- 9.7.28 The Council could facilitate the establishment of community composting sites with a dedicated Waste Management Officer in post.
- 9.7.29 The wheeled bins required will comprise approximately 50% recycled polymer content.
- 9.7.30 The Orange Sack service can be reconfigured to improve distribution network, reduce bag costs and to make the service more equitable. Biodegradable sacks can be supplied instead of plastic. The service would have to be provided on the residual waste week only.

## **9.8 Negative Effects**

- 9.8.1 The Council will continue to dispose of 16,000 tonnes of household waste directly into landfill. Household waste disposed of in landfill has a negative environmental impact. Future additions to the service format, e.g. garden waste collection could reduce the amount disposed of in landfill further.
- 9.8.2 The proposed service format does not tackle compostable waste such as garden waste, currently sent to landfill. This can be adjusted in the future, without increasing capital costs, by providing additional collection rounds utilising the same collection vehicles.
- 9.8.3 The proposed service will require 3 additional vehicles to operate the glass collection service and an additional vehicle for the 1 extra refuse collection/recycling round needed.
- 9.8.4 The wheeled bins required will not contain 100% recycled polymer content. The maximum recycled plastic content will be 50% as the strength of the bins is compromised by including a higher percentage of post consumer plastic waste.
- 9.8.5 The proposed service will not make use of the composting facility located at Creeting St Mary. It will be possible to adapt the service in the future to make use of that facility and reduce the volume of compostable waste sent to landfill.
- 9.8.6 Approximately 8000 additional tonnes of recyclable materials will be transported for reprocessing, with associated energy costs.
- 9.8.7 Local Community Groups registered as Community Recyclers will lose an income stream currently generated through the Recycling Credit system, as the recycling bring centres in the district are removed through a sharp reduction in use. It will be necessary to remove bring centres in order to ensure that maximum volume of materials are recovered through the twin bin scheme, in order to offset the cost of the service.
- 9.8.8 There will be a residual waste left from the dry recyclable waste delivered to the MRF, after sorting. This will contain materials unsuitable for recycling, which must then be sent to landfill for final disposal. It is estimated that residual waste will range from 5 – 15% of the dry recyclable waste stream.

## **9.9 Summary**

- 9.9.1 The most significant positive environmental effects offered by the proposed service format are from the substantial reduction of the total amount of household waste disposed of to landfill each year. This can be achieved without drastically increasing the number of vehicles and miles driven to collect the same amount of household waste. In addition, the proposed service will contribute toward reducing the requirement for incineration with energy recovery in Suffolk.
- 9.9.2 Other significant positive effects will arise from reducing the vehicle journeys from collecting recyclable materials from recycling bring centres, and from car journeys made by householders simply to recycle.
- 9.9.3 Additional positive effects arise from enabling householders without access to a car to recycle their waste, at the same time as indirectly raising environmental awareness through an everyday activity.
- 9.9.4 The most significant negative environmental effects arise from the omission of a compostable waste collection from the proposed service format and from the need to employ three dedicated glass collection vehicles to avoid contamination of dry recyclable waste.
- 9.9.5 It will be possible to reconfigure the proposed service at a point in the future in order to collect compostable waste, without increasing the need for additional vehicles. However there will be a requirement to increase the vehicle miles driven to accomplish that service format.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 10**

#### **Conclusions**

**Mountford in Partnership**

## Part 10 Conclusions

- 10.1 It is appreciated that an increase of approximately [REDACTED] in the cost of Refuse Collection is a high order of additional funding and represents a substantial increase in costs. The cost increase represents a need for the Council to move from the most basic of services - historically Mid Suffolk has operated a particularly low cost operation relying on householders to provide their own refuse bags and bins - to a 21st Century service designed to meet statutory targets.
- 10.2 All authorities entering into segregated waste schemes are faced with a similar order of cost. Many have not included glass for their own reasons, and that is an option Mid Suffolk may wish to consider. If a separate glass collection service is excluded, Mid Suffolk would still meet its targets but may encounter many operational problems in the interim.
- 10.3 [REDACTED]
- 10.4 Implementing the scheme can either be accomplished in one issue of bins and a total start-up across the whole service or phased over 3-6-9 months. Both are valid. The total start-up from the beginning reduces long-term supervision, allowing all problems to be simultaneously solved. The phased approach requires overall greater supervision but is slightly less hectic. It is recommended that Mid Suffolk Officers and Members decide on the most appropriate method for Mid Suffolk in due course.
- 10.5 [REDACTED]
- 10.6 If Mid Suffolk adopt this scheme, they are ensuring that they will meet all foreseeable recycling targets and at the same time prepare to tackle Landfill Directive targets for biodegradable waste, which will fall within the lifetime of a renewed contract.

# **Mid Suffolk District Council**

## **Segregated Waste Scheme**

### **Feasibility Study**

#### **Part 11**

#### **Recommendations**

**Mountford in Partnership**

## **Part 11 Recommendations**

Having completed the Feasibility Study and on the assumption that members accept the scheme the recommendations are that –

1. The Segregated Waste Scheme by way of a twin bin kerbside collection as explained be adopted.
2. A separate glass collection service as described be agreed and be put out to tender.
3. Negotiations with [REDACTED], be commenced for a new contract for a period of [REDACTED] and that the excellent performance as reported in the Best Value Review of the current service be noted.
4. The provision of wheeled bins as described be sought by way of tender.
5. Member and Officers press Suffolk County Council to intervene and ensure an early solution to the present deadlock in order that Mid Suffolk District Council can invite [REDACTED] together with others to tender for the processing of Mid Suffolk's anticipated 10,970 tonnes of clean dry recyclables.
6. It be noted that as a result of the Consultation Exercise there is a clear indication that 80% of the population will participate.
7. Arrangements are put in hand to secure the provision of 36,000 plastic containers for glass recycling.
8. Members note that biodegradable waste will need to be addressed within the lifetime of a renewed contract as EU Landfill Directives take effect in 2010.
9. The new contract with [REDACTED] acknowledges the intention of Mid Suffolk District Council to increase utilisation of the Refuse Vehicles to collect green and biodegradable waste in an out of hours and Saturday service at a future date, to be decided.
10. Members note that 9 above will have cost implications when introduced.
11. Members to note as a result of the new service the average cost of Waste Collection will rise from [REDACTED] per household to [REDACTED] an increase of [REDACTED] per household per annum.
12. Members also note that during the consultation exercise the participants expected the current service to cost £91 (mean average) per household per annum.
13. An officer, i.e. "Waste Management Officer" be added to the client team to oversee the issue and control of 70,000 wheeled bins.

14. Members to note that growing numbers of Local Authorities are turning to a kerbside twin bin collection as the only practicable and reliable method of achieving recycling targets as directed.