

# OVERVIEW AND SCRUTINY BOARD

# 28 FEBRUARY 2006

# FINAL REPORT

## - RECYCLING

### PURPOSE OF THE REPORT

1. To present the findings of the Environment Scrutiny Panel's review of recycling in Middlesbrough.

#### **BACKGROUND/AIM OF THE SCRUTINY INVESTIGATION**

- 2. Approximately 400 million tonnes of waste are produced in the United Kingdom each year. The amount of waste produced in England is growing at a rate of approximately 3-4% per year one of the fastest rates of growth in Europe. It is estimated that this figure could double by 2020. As a consequence, the associated cost of managing this growth is anticipated to double to around £3.2 billion per annum. Furthermore, it has been established that, nationally, over 50% of household waste sent to landfill sites or incinerated could be diverted from these disposal methods by recycling and composting.
- 3. The overall aims of the scrutiny exercise were to investigate the Council's involvement in recycling in the context of the overall trend of increased waste generation, to examine national developments and consider the possible development of a strategy for green waste.

## TERMS OF REFERENCE OF THE SCRUTINY INVESTIGATION

- 4. The terms of reference for the scrutiny investigation were as follows:
  - a. To gain an understanding of the issues of the national waste strategy.
  - b. To gain an understanding of the Council's current recycling initiatives.
  - c. To investigate the targets that have been set for recycling levels in Middlesbrough and to establish if the Council is meeting those targets.

- d. To investigate how the Council could develop a strategy for green waste.
- e. To investigate how the Council could encourage recycling amongst its residents.

## METHODS OF INVESTIGATION

- 5. The Environment Scrutiny Panel met on eight occasions between 22 July 2005 and 21 December 2005 to consider evidence relating to this investigation. A Scrutiny Support Officer from Performance and Policy co-ordinated and arranged the submission of written and oral evidence and arranged witnesses for the review. Meetings administration, including preparation of agenda and minutes, was undertaken by a Governance Officer from the Members Office. A detailed record of the topics discussed at Panel meetings, including agenda, minutes and reports, is available from the Council's Committee Management System (COMMIS), which can be accessed via the Council's website at www.middlesbrough.gov.uk.
- 6. A summary of the methods of investigation is outlined below:
  - (a) Detailed officer presentations, supplemented by oral evidence.
  - (b) A visit to the Energy From Waste Site at Haverton Hill
  - (c) A visit to Darlington Borough Council to examine recycling methods and results at that authority.
- 7. The report has been compiled on the basis of evidence gathered as above and from other background information, which is listed at the end of the report.

#### **MEMBERSHIP OF THE PANEL**

8. The membership of the Scrutiny Panel was as follows:

Councillor J Cole (Chair); Councillor G Rogers(Vice-Chair); and Councillors G Clark, M Heath, JA Jones, E Lancaster, J McTigue and R Regan

#### THE PANEL'S FINDINGS

9. The scrutiny panel's findings in respect of each of the terms of reference are set out below.

# TERM OF REFERENCE: "TO GAIN AN UNDERSTANDING OF THE ISSUES OF THE NATIONAL WASTE STRATEGY"

- 10. The scrutiny panel considered evidence on the Municipal Waste Strategy 2000 and the historical arrangements relating to the development of strategies at a local level.
- 11. Middlesbrough Council's current waste management strategy is based on compliance with:

- a. statutory performance requirements; and
- b. the Joint Municipal Waste Strategy which is an agreement which was drawn up with the other district authorities of the former Cleveland County during the 1990s to dispose of waste principally via the energy from waste incinerator at Haverton Hill.
- 12. Municipal Waste includes all household waste, street litter, waste delivered to council recycling points, municipal parks and garden waste, council office waste, household waste recycling centre waste and some commercial waste from shops and smaller trading estates where local authority waste collection agreements are in place.
- 13. The Government's National Landfill and Recycling Policy contains a number of key elements relating to:
  - Waste Growth
  - European Landfill Directive
  - Landfill Allowance Trading Scheme
  - Waste Hierarchy
  - Recycling Targets
- 14. In addition to considering detailed information on each of the above issues, the Panel also considered the impact, which the local Joint Waste Strategy has on waste disposal and recycling arrangements. Information was considered as follows:

#### Waste Growth

15. Government policy with regard to waste growth is in response to three main issues:

- the cost and growth of waste in the UK
- the requirement to adhere to the European Landfill Directive
- adherence to the landfill directive via the use of the waste hierarchy.

#### European Landfill Directive and the Landfill Allowance Trading Scheme

- 16. Historically, waste in the UK has been disposed of via landfill. As this has been a relatively cheap and widely available method of disposal there have been few incentives for either industry or householders to consider alternatives. Currently approximately 80% of municipal waste is sent to landfill, as compared to Europe's lowest figure of 7% in Switzerland.
- 17. However, compliance with the 1999 European Landfill Directive is now a key element and a central theme of the Government's waste agenda. The landfill directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment - in particular on surface and ground water, soil, air and health. In accordance with the directive, the Government has put a limit on the level of waste which is disposed of via landfill sites and has introduced the following targets:
  - By 2010: reduce the about of Biodegradable Municipal Waste (BMW) going to landfill to 75% of that produced in 1995
  - By 2013: reduce the amount of BMW going to landfill to 50% of that produced in 1995
  - By 2020: reduce the amount of BMW going to landfill to 35% of that produced in 1995.

- 18. There are a number of environmental reasons for the targets the Government have set above, namely:
  - landfill sites account for 25% of all UK methane (a powerful greenhouse gas) emissions
  - bio-degradable waste put into landfill sites could be re-used or recycled
  - public concern over the environmental impact on areas surrounding landfill sites, such as noise, odour, litter, potential health effects and emissions.
- 19. In order to achieve the desired national landfill position the government has set up a landfill allowance-trading scheme (LATS). It believes that the introduction of a market for landfill allowances will encourage landfill diversionary waste strategies to be produced by waste authorities. Moreover, the government believes that LATS adds a degree of flexibility into the waste management system.
- 20. The basic principle is that waste authorities are allocated a level of LATS allowance. However, the total level of LATS allowances will only equal the level of landfill required to hit the European Landfill Directive and, hence, will gradually reduce as targets become tighter. Local authorities have the ability to trade, bank or borrow allowances within limits.
- 21. Authorities that are in a position where their level of Biodegradable Municipal Waste (BMW) landfill is below the level of their LATS allowances can trade their surplus allowance to those who are in a deficit position.
- 22. The scheme also allows banking and borrowing LATS allowances e.g. when changes in disposal systems require the saving of present allowances for times of disruption to non-landfill disposal methods. For example, in Middlesbrough's case, this could be the closure of the incinerator for maintenance. Conversely, LATS allowances may be borrowed in expectation of new waste disposal methods allowing landfill reduction in future years (for example the introduction of recycling/ composting schemes).
- 23. Landfill sites in the south east and north west of the country are becoming increasingly scarce due to pressures on land use and proximity to settlements. This has resulted in waste being transported further distances, with the road transport used having a further impact on the environment.
- 24. The Government has agreed to the landfill directive and as such has set tight targets with regard to national levels of the use of landfill to dispose of waste. A landfill tax, which is payable per tonne of waste sent to landfill, has also been introduced. As Middlesbrough currently landfills less than 20% of its waste as compared to an average of 80% across the UK the Council is therefore currently in a more favourable position than a lot of local authorities, which use landfill as their main waste disposal method. It is recognised however, that future national policy on waste disposal could alter and change this position.
- 25. Middlesbrough's landfill position (in common with our Tees Valley waste partners) has been to minimise the use of landfill as a disposal route through use of the energy from waste (EFW) incinerator at Haverton Hill. The consequence of this has been to deliver financial benefits to the Council through lower landfill tax payments. This has brought a

further benefit in that the small proportion of Middlesbrough's waste which is disposed of via landfill means that it is significantly below the level set for authorities elsewhere as part of its contribution to the landfill directive. This means that between 2005/6 and 2009/10 the Council's allowances will actually increase to move the Council towards a position of equal responsibility for achieving the landfill directive by 2010. Although all local authority allowance levels will then begin to fall, even by 2020 Middlesbrough's allowance level will be higher than 2005/6 allowances.

- 26. Therefore, as long as the Council maintains its present waste strategy and uses energy from waste (ie incineration) as its principal waste disposal method, it is likely that Middlesbrough will be in a position of being able to trade part of its LATS allowance - subject to the level of waste continuing to grow in the future. This appears to be an anomaly in terms of Government policy - that is to allow a surplus to exist when overall policy ambition is for a reduction. However, the allocations given under LATS last until 2020. In that time frame Middlesbrough may move from its present waste strategy and require what is at present spare allocation.
- 27. In Middlesbrough, the landfilling of municipal waste will be reduced to the practicable minimum by :
- transporting all incinerable municipal waste to the energy from waste plant as a first option
- increasing the recycling of incinerator bottom ash, rubble and soil
- co-operating with recyclers to find applications for recycled materials within the local area.
- 28. Even though residue from the incinerator is recycled this can no longer be counted towards Council recycling targets (see para. 58).

#### Waste Hierarchy

- 29. The Government's stance on landfill has resulted in development of a waste hierarchy that is used when analysing waste management options. The hierarchy which is shown below illustrates that landfill is the least favoured waste management option:
  - Reduce waste produced
  - Re-Use
  - Recycling and composting
  - Energy recovery with heat and power
  - Energy recovery
  - Landfill with energy recovery
  - Landfill
- 30. However, as producing goods from recycled materials uses less energy than using raw materials to produce something new (and therefore has obvious environmental benefits) recycling is also to be supported.

#### **Recycling Targets**

31. The Municipal Waste Strategy 2000 set recycling targets for all authorities in the UK, based upon previous years' recycling rates. Middlesbrough's recycling targets are as follows:

Year	Target for Recycling
2005	18%
2010	30%
2012	33%

- 32. In 2004/05 a recycling rate of 10.2% was achieved in Middlesbrough. The 18% target for 2005 will not be achieved.
- 33. The average local authority recycling rate in England is 12% (compared to 52% in Germany and 47% in Holland).

#### The Joint Municipal Waste Strategy

- 34. The four unitary authorities of Middlesbrough, Hartlepool, Redcar and Cleveland and Stockton on Tees are the successor Waste Disposal Authorities to Cleveland County Council. The authorities share a contract with SITA (the operators of the Haverton Hill Energy from Waste plant) and Cleveland Waste Management (CWM) Ltd for the disposal of municipal waste at the Haverton Hill site. The contract runs until July 2020.
- 35. The four authorities manage their municipal waste streams jointly through a Waste Management Group of senior officers, with one representative of each authority. Overall, this is managed by a Waste Management Development Officer, employed by the lead authority, Stockton Borough Council. The joint arrangement includes for provision of a Joint Waste Strategy and co-ordination of waste stream information as well as the management of the waste disposal contract.
- 36. The aims of the strategy are:
  - to enable the partner authorities to achieve the statutory recycling and composting targets for local authorities that are specified in the National Waste Strategy 2000.
  - to build on the partner authorities' considerable contribution to reducing the national reliance on landfill and meeting the national requirements of the EC Landfill directive.
  - To identify sources of funding available to implement the strategy and achieve the targets at minimal additional cost to the partner authorities..
  - To manage waste so as to minimise adverse local and global environmental effects.
  - To make waste management facilities as widely accessible to the population as possible, particularly those without cars.
  - To minimise waste through education, awareness raising and the judicious application of refuse collection and recycling procedures.

- 37. The Joint Waste Strategy contains targets which were drawn up to reflect the direction of National Waste Strategy advice. These are not performance indicators but are targets that the four local district authorities are striving to achieve, as follows:
  - Target T1: A minimum of 45% of all waste deposited at civic amenity sites recycled or composted by 2005/6 and 50% by 2010/11.
  - Target T2: Total household waste generated to be stabilised at or below 2010/11 levels after 2010.
  - Target T3: 15% of all householders to be making compost at their homes by 2005 and 20% by 2010.
  - Target T4: Government targets for recycling of domestic waste by 2003/4 and 2005/6 to be achieved.
  - Target T5: Municipal waste landfilled to be reduced to less than 8% of the total by 2003/4 and less than 5% of the total by 2010/11.
- 38. An inventory of municipal waste from samples of homes in the former Cleveland County area (2 samples per authority) was carried out during 1999/2000. This exercise found that, on average, each household produces 0.95 tonnes of waste per year for collection. If material disposed of at civic amenity sites and additional household waste is also included, waste produced rises to just over 1 tonne per year per household. The inventory project also found that there were significant differences in the quantity and composition of wastes thrown away from households from different socioeconomic backgrounds and at different times of the year. Households in the same areas as those chosen for the sampling were also invited to complete a questionnaire about refuse collection, civic amenity and recycling services. One of the results of this survey was that householders in less affluent areas do not use civic amenity sites as much as those in more affluent areas - partly because fewer of them have access to a car. Consequently, such households have to rely on local authority services for bulky waste collections.
- 39. The Cleveland area has three civic amenity sites at Burn Road in Hartlepool, Haverton Hill, adjacent to the Energy from Waste Plant in Stockton and at Dunsdale near Guisborough. The Haverton Hill facility serves the residents of both Stockton and Middlesbrough. Soil, rubble and - in the case of Hartlepool, Stockton and Middlesbrough - also green waste are separated at the civic amenity sites and recycled using local contractors. Civic amenity operations have been organised to maximise the separation of wastes for recycling and composting, so as to achieve a minimum of 45% recycling by 2004/5.

#### **Comparative Costs of Recycling and Waste Disposal**

- 40. Historically, recycling has not been budgeted for separately within the Council as overall "waste disposal" budgets have covered both recycled waste and incinerated/landfilled waste. However, a separate budget (currently £379,000) has now been established to cover the costs of the extended kerbside recycling scheme.
- 41. Household waste disposal costs are required to be calculated in accordance with a best value performance indicator (BVPI87). This performance indicator includes actual disposal cost at the incinerator (ie the "gate fee" payable to the incinerator operator) plus all other costs attributed to the waste disposal operation such as transport and staff costs. Under BVPI87 waste disposal costs are currently £41.96 per tonne. The cost of waste disposal only at the incinerator (ie excluding oncosts) is approximately £28.30 per tonne.

- 42. Although there has been no budget to cover recycling and no BVPI requirement to calculate recycling costs these have been calculated over an eight month period (from April to November 2005), as £41.30 per tonne. This cost is based only on the total cost charged to the Council by the recycling operators (which varies depending on the material being processed) divided by the total tonnage of material recycled and does not include any oncosts.
- 43. The Panel noted that there is no need to calculate recycling costs for BVPI purposes and therefore no requirement to calculate any oncosts in relation to the cost identified above. Direct comparison of the costs of waste disposal and recycling is therefore not straightforward as it is not a direct comparison of "like with like". A further factor is that any increase in recycling tonnages does not necessarily result in a direct reduction in waste collection tonnages.
- 44. In considering this term of reference the scrutiny panel also examined details of other national waste initiatives in the context of the National waste Strategy, as follows:
- Waste and Resources Action Programme (WRAP) which is aimed at promoting sustainable waste management.
- EC Directive on Waste Electrical and Electronic Equipment (WEEE) which is aimed at increasing producer responsibility in relation to disposing of such equipment.
- Waste Data Flow a Government system to provide comprehensive returns from local authorities in relation to waste tonnages
- 45. The scrutiny panel considers that issues arising from consideration of this term of reference relate to the need to reduce waste, comply with national policies on waste disposal and to take action to meet recycling targets.

# TERM OF REFERENCE: "TO GAIN AN UNDERSTANDING OF THE COUNCIL'S CURRENT RECYCLING INITIATIVES"

- 46. The scrutiny panel considered evidence on current recycling methods in Middlesbrough, which were highlighted as:
  - a household waste recycling site
  - a kerbside blue bag collection scheme for paper
  - "bring sites" where the public can take recyclable materials.
  - Middlesbrough Environment City's Home Composting Scheme
  - a pilot kerbside "black box" collection scheme for glass, cans and textiles
- 47. The pilot "black box" scheme is operational across a quarter of homes in Middlesbrough. Glass, cans and textiles can be deposited in the black box by householders and are collected on a fortnightly basis alongside the blue bags. It is planned to extend the scheme across the remainder of the Borough early in 2006, in line with the blue bag scheme that currently covers 98% of households. It is

anticipated that extending the kerbside box scheme will increase the level of recycling in Middlesbrough to 14 -15%, which will still fall short of the Council's 2006 target of 18%.

- 48. A number of local and national initiatives have been taken or are planned to promote waste awareness and environmental education. A pilot environmental programme for schools, "Greener Futures", is funded through landfill tax credits and has been running since 2001. The partner authorities participate in a Regional Waste Awareness Initiative and a multi-media campaign is to be implemented to promote awareness and highlight the need to minimise household waste. Waste minimisation will be further promoted by also considering restricting the quantities of waste collected from households at the same time as providing kerbside and home composting facilities. All the partner authorities offer residents subsidised home composting equipment. The partner authorities will attempt to stabilise total per capita household waste generated at or below 2010/11 levels.
- 49. There are approximately 90 public recycling facilities in the former Cleveland County. All four local authorities have a network of public recycling facilities ("bring sites"), which they are seeking to extend. These accept mainly waste paper, cans (both steel and aluminium) and glass bottles. In addition, textiles and books can be recycled at deposit facilities operated by charities and there are four oil recovery tanks. All four Councils have "blue bag" waste paper kerbside recycling schemes throughout their areas. The partner authorities will continue educating their own staff and extending internal recycling facilities for office waste and parks/garden waste.
- 50. A number of voluntary sector organisations carry out recycling schemes, including a number of charities that collect textiles for sorting and sale through charity shops. SFS and FRADE collect and re-distribute unwanted furniture. Hartlepool and Middlesbrough have Community RePaint Schemes for the re-use of unwanted paint by voluntary organisations. The partner authorities subsidise charities by providing free waste disposal facilities instead of paying recycling credits. Community composting schemes are another means by which the partner authorities are engaging local communities. Community composting has been operated in Middlesbrough in conjunction with Middlesbrough Environment City (see also paras. 73-75).
- 51. Extending the existing recycling schemes and increasing the recycling from civic amenity sites may increase average diversion rates for waste (excluding rubble, bottom ash from the Energy From Waste Plant and abandoned vehicles) to up to 7-10%, depending on the separation of green waste at civic amenity sites for composting. In order to move towards achieving the Government's targets additional recycling and composting measures will have to be taken, which could include:
  - For the short to medium term: implement kerbside collections of "commingled dry recyclables" (this includes glass bottles and jars, steel and aluminium cans, textiles and possibly certain grades of waste paper and plastic bottles). This would entail separating materials either at the side of the collection vehicle or later at a Materials Reclamation Facility. Scrap household batteries could also be collected by the same means.

(cont....)

- For the medium to long term: mechanically separating biodegradable waste (and ferrous materials and possibly other recyclable materials) from municipal solid waste and using this material as a soil improver or as a raw material for compost. Separate kerbside collections of biodegradable kitchen and garden waste may also be considered, as part of a Green Waste Strategy.
- 52. Although the Government has made available some additional funding for increased waste management costs, it has mostly not been earmarked for recycling.
- 53. The authorities have to deal with a number of other special and difficult waste streams, including abandoned vehicles, batteries, tyres, asbestos, clinical waste, domestic appliances containing chlorinated fluorocarbons (CFCs) and waste oil. When they arise, they are dealt with:
  - a) in compliance with the relevant legislation, and
  - b) so as to ensure that the waste is recycled or recovered and that disposal is only used as a last option.
- 54. A private members bill in the House of Lords has introduced strict legislation on methods of waste collection to separate doorstep collection of at least two recyclable products. The Bill calls for the collection of at least two types of recyclable waste, together or individually separate from the rest of household waste, by December 31<sup>st</sup> 2010.
- 55. The scrutiny panel considers that issues arising from consideration of this term of reference relate to the need to ensure that participation in recycling is maximised in order to increase recycling rates.

#### TERM OF REFERENCE: "TO INVESTIGATE THE TARGETS THAT HAVE BEEN SET FOR RECYCLING LEVELS IN MIDDLESBROUGH AND TO ESTABLISH IF THE COUNCIL IS MEETING THOSE TARGETS"

- 56. The Scrutiny Panel sought to examine current recycling targets and determine what is being done to meet these. The Council's recycling rate for 2004/05 was 10.2%. The target of 18% for 2005/06 will not be achieved (see also paras. 31-32).
- 57. Middlesbrough's recycling rates need to be considered in light of the methodology for the calculation of recycling rates. In recent years, incineration has gone out of favour with central government, which has placed an increased emphasis on focussing policy on the upper end of the waste hierarchy i.e. *reduce, reuse, recycle*.
- 58. This has resulted in significant changes in the way in which waste is classified, in that some items that used to be considered to be recycled material and which could therefore be included in recycling rates are not now classified as such. In the case of Middlesbrough, the removal of "bottom ash" (ie the ash which remains at the bottom of the Energy From Waste incinerator at the end of the incineration process) from the classification of recycled materials has had a significant effect on recycling rates. Bottom ash is an inert material which is effectively recycled through use in the construction industry for the building or roads etc. Its use reduces the need for natural

aggregates to be exploited. If bottom ash was to be included in Middlesbrough's overall recycling rate this would immediately rise to over 30%.

- 59. Middlesbrough's waste strategy policy has focused on diverting waste from landfill through incineration/energy recovery. The fact that the only 20% of waste is landfilled (in contrast with levels of landfill at most other local authority) is a direct result of this policy. However, this has resulted in a position where the Council has aimed to reach recycling targets but has not yet looked to go beyond them.
- 60. Late in the review process (mid-January 2006) the Panel was advised that DEFRA had announced that its Waste Strategy 2006 would be published in the next few weeks. Although firm details are awaited, indications are that the Government's new long term plan will be to steer behavioural change in the way waste is dealt with, hinting at a use of incentives to boost diversion from landfill.DEFRA officials have indicated that there will be a greater focus on the waste hierarchy and also on recovery of energy from waste.

#### The Wider Implications of Recycling Targets

- 61. At the time of drawing up the terms of reference for the scrutiny review, an important link was identified between recycling targets and the Council's Comprehensive Performance Assessment (CPA) rating. Accordingly, arrangements were made for Karen Robinson, the Council's Corporate Performance Manager to make a presentation to the Panel on this issue.
- 62. The Corporate Performance Manager informed the Panel that the CPA model has recently been amended and that changes in the assessment procedure have implications for the Council as a whole. A CPA consultation document published earlier in 2005 contained proposals to introduce special rules in relation to a series of Best Value Performance Indicators (BVPIs), including the recycling performance indicator BVPI82b. Had this rule been introduced, the effect would have been that failing to meet the Council's recycling targets could result in the authority's overall CPA rating being downgraded. It has recently been confirmed, however, that the special rule relating to BVPI82b is not, now to be introduced which means that the Council's CPA rating will not be affected by failing to meet recycling targets. The Corporate Performance Manager advised that, despite this change, it will still be important for the Council to work towards achieving the requirements of the recycling best value performance indicator, subject to consideration of costs versus benefits.
- 63. Officers from Environment confirmed that recycling performance indicators were currently low and that more work will be needed to increase the amount of waste being reduced, reused and recycled. It is important to note, however, that increased financial investment may not improve PIs significantly. Some authorities which have introduced kerbside recycling collection schemes and/or a green waste collection service have seen an increase in the overall amount of household waste being produced for example as householders utilise increased space in their bins.
- 64. At the present time it is unclear whether the Government proposes to take any action against local authorities who fail to meet recycling targets.
- 65. The scrutiny panel considers that the key issue arising from consideration of this term of reference relate to the need to take action to comply with Governmet targets on recycling.

#### TERM OF REFERENCE: "TO INVESTIGATE HOW THE COUNCIL COULD DEVELOP A STRATEGY FOR GREEN WASTE"

- 66. The panel considered detailed information on the role which composting can play in achieving municipal waste/recycling targets.
- 67. As has been indicated earlier in the report (para 47) it is hoped that the forthcoming expansion of the black box kerbside recycling scheme borough-wide will increase recycling rates locally from 10% to approximately 14 15%. As this figure would still be well below the Government's 18% target for Middlesbrough for 2005/06, careful consideration needs to be given to all areas of waste, including composting of organic matter and the possible development of a Council Green Waste Strategy, in order to address the remaining deficit. Nationally, within the last ten years, composting has emerged as an important element of recycling and, as a result, local authorities have included this as a central aspect of waste management strategies. In local authority areas where composting schemes have been introduced, the take up rate for composting and recycling schemes had been between 30% and 40%. It is expected that a similar level could be achieved in Middlesbrough.
- 68. It has been identified that a typical household bin contains 32% paper and card and 21% kitchen and garden waste, contributing to a total of 53% biodegradable waste which could be composted. The composting of biodegradable waste involves the use of an "invessel" facility. This is more complex than the system which is used to compost green waste as the process involves tighter controls to prevent contamination within the food chain. The option to compost biodegradable waste is not currently available locally.
- 69. Officers have examined options for introducing a green waste collection scheme in Middlesbrough. Matters which would need to be resolved include operational issues (such as whether a collection would be operated "in house" by the Council), collection methods, whether disposable sacks or permanent bins would be issued to households and how/where green waste would be processed. A green waste scheme would be likely to result in large volumes of materials for processing. Given this fact, the SITA Haverton Hill waste disposal site which already carries out composting on a large scale would be likely to be the most cost effective method of composting for the Council.
- 70. Detailed costs of introducing a green waste collection scheme would need to be identified and would include containers, collection, promotion, management, disposal, composting and the "gate fees" payable to the site operator. As compost currently produced at the Haverton Hill site is of the highest BSI standard, the possibility of it being purchased by a DIY chain for re-sale is currently being investigated. The sale of any compost produced would offset Council costs.
- 71. The potential benefits of introducing a green waste strategy/composting scheme need to be considered against the costs and risks involved. These include:
  - Poor take up rate with residents
  - High drop out rate following initial enthusiasm about new scheme
  - Poor quality of material from residents (possible contamination with food stuff) (cont...)

- Market for compost becomes saturated, revenue stream reduces and disposal costs rise
- Volume of household waste collected does not necessarily reduce following introduction of a green waste collection service (eg householders might fill up empty bin space with other waste materials)
- 72. Detailed costings have not been identified but could initially be of the order of £250,000 to cover set up costs, operational costs (including promotion and support), the "gate fees" charged for use of the Haverton Hill site, vehicle costs and provision of sacks.
- 73. The scrutiny panel also examined **Middlesbrough Environment City's Composting Scheme.** Middlesbrough Environment City (MEC) is an independent, community based, environmental charity which was established in 1992. The organisation works in partnership to promote environmental sustainability in Middlesbrough. The Director of MEC presented detailed information to the panel on its "Compost Crew " home and community composting scheme.
- 74. Under the scheme, 2,000 home composting bins have been distributed in Middlesbrough and 10 tonnes of green waste have been collected from the kerbside. Funding has been secured which will allow the project to increase in scope and continue until May 2007. This will involve a stronger emphasis on home composting, using a range of methods, and kerbside collection rounds for garden waste will become larger.
- 75. Advantages of MEC's approach to composting are that there is a strong focus on education and disadvantaged communities are engaged in a worthwhile project which is externally funded. However, the organisation's work is driven by funding schemes and the home composting scheme is not financially viable in its own right. In addition, the tonnages of waste collected are not maximised and the output from home composting has not been measured. In future, however, households are to be asked to provide details that would allow MEC to calculate the amount of waste being home composted, although this cannot be counted towards Council recycling targets.
- 76. The scrutiny panel considers that the main issue arising from consideration of this term of reference is to the need to determine whether the introduction of a green waste strategy should be pursued and whether this is the most effective or efficient means of increasing recycling rates further.

# TERM OF REFERENCE: "TO INVESTIGATE HOW THE COUNCIL COULD ENCOURAGE RECYCLING AMONGST RESIDENTS"

- 77. The panel considered information on current and possible future recycling schemes and initiatives with a view to determining how the Council can move towards achieving 2010 Government targets.
- 78. It is acknowledged that a cultural shift is needed nationally in terms of encouraging recycling and that this will not be achieved in the short term. There has been a recent increased Government emphasis on recycling, which is illustrated by current national radio and television campaigns. Education, publicity and marketing campaigns will also be necessary at a more local level. Increased public commitment will be a key factor

and recycling participation rates will need to be maximised if targets are to be achieved.

- 79. Results of kerbside recycling collections by other local authorities (for example Darlington see para. 83) have shown that collection rates can vary widely from ward to ward, based on local demographics and socio-economic groupings. This is an issue which will need to be addressed in Middlesbrough. Darlington Borough Council has had success in school education campaigns, particularly in children encouraging their families to participate in recycling. It is intended to establish a post of Waste Awareness Officer in Middlesbrough and it is anticipated that the postholder will be involved in education initiatives throughout the borough.
- 80. The kerbside box recycling scheme, which has operated as a pilot scheme in some areas of the Borough (see paragraph 47), is to be extended Borough-wide early in 2006. Each household will receive a "black box" container to recycle glass bottles/containers, cans and textiles. Boxes will be collected fortnightly, together with the "blue bags" which are used for waste paper recycling. A publicity campaign will be undertaken prior to introduction of the black boxes, with each household receiving written instructions and a calendar detailing collection dates at the same time as their box is delivered. Targets have been set for collected. Collection rates will be closely monitored and areas which deliver below target rates will be targeted to increase participation levels.
- 81. Other local authorities have adopted a range of methods to help increase participation including the introduction of compulsory recycling in the London Borough of Barnet. Details of the Barnet scheme were considered, although the panel was advised that there are no plans to introduce compulsory recycling in Middlesbrough. Locally the Council has been involved in a glass recycling prize incentive scheme ("Message in a Bottle"). Recycling participation levels and results will need to be carefully monitored and careful consideration will need to be given as to which approaches could be most effective in Middlesbrough.
- 82. Interaction with schools and community groups is an important aspect of the Council's work and it is hoped to establish a post of Waste Awareness Officer to take responsibility for this in the near future. A post of Recycling Officer is also to be established. Adequate publicity for all recycling schemes will also be important in order to maximise participation rates.
- 83. As part of its investigation of recycling rates, the scrutiny panel visited Darlington Borough Council to investigate its recycling methods and to hear whether introducing a kerbside recycling collection scheme had impacted on recycling rates. P Scrafton (Waste Minimisation and Recycling Officer) and M Walls (Refuse Supervisor) of Darlington BC made an informative presentation in respect of the borough's recycling arrangements. Key points arising from the presentation were as follows:
  - Darlington landfills 70% of its waste (via County Durham's waste disposal arrangements)
  - The Council's 2004 recycling target of 17% was met and exceeded the 2005 rate was 18.75%.

(cont....)

- Introduction of a kerbside recycling collection scheme has been the fundamental factor in this increase.
- Paper, glass and cans are the main recycled commodities, although some plastics are now accepted (difficulties relating to the high volume of plastics versus low tonnages were highlighted). There is also a small amount of cardboard recycling.
- There is no general, free green waste collection service although a chargeable green waste collection is offered to households during the summer.
- Green waste taken by householders to the Darlington civic amenity site has yielded large tonnages.
- In order to maximise participation in the kerbside scheme, assisted collections are available for the elderly/infirm. A smaller/lighter box, which some householders find easier to manage, is also available on request.
- Participation rates between different areas are a concern. Collection rates are highest in more affluent areas - the lowest participation rate for some estates is 15%. Education campaigns have been identified as important, beginning in schools to raise awareness at an early age. Virtually all of the Borough's schools have been covered to date.
- Experience has shown that providing a good recycling service encourages higher levels of participation.
- 84. The scrutiny panel considers that the main issue arising from consideration of this term of reference is the need to determine how recycling participation is maximised, particularly in light of extending the kerbside recycling scheme.

## CONCLUSIONS

85. Based on evidence considered during its investigation the Panel concluded that:

- 1. Action is necessary to address the increasing levels of waste being produced nationally.
- 2. Local policy and waste reduction and recycling targets are governed by national policies and directives. This has resulted in the current recycling regime being driven principally by the need to meet Government targets and performance indicators.
- 3. Waste minimisation is the optimum means of reducing levels of waste for disposal but, as producing goods from recycled materials uses less energy than using raw materials, recycling is also important and should be supported.
- 4. Due to a focus on reducing landfill by the use of waste incineration, Middlesbrough is not meeting recycling targets. However, expansion of the kerbside recycling scheme will increase recycling rates.
- 5. The Council is in a strong position to act as a "recycling champion" to promote recycling locally and deliver a clear message to the public on the benefits of recycling.

(cont....)

- 6. The Council should aim to set an example on recycling although recycled materials from Council Buildings etc cannot be included in recycling targets, every effort should be made to recycle this material.
- 7. Although nationally the aim is to encourage recycling to reduce levels of landfill from an average of 80% of waste disposed of via that method, Middlesbrough currently disposes of less than 20% of waste via landfill due to use of the energy from waste incinerator. Materials recovered from incineration at the energy from waste plant cannot currently be included in recycling rates even though a high volume of materials from the incinerator is recycled (although this may be subject to change/clarification depending on the content of the forthcoming Waste Strategy 2006).
- 8. A number of good recycling schemes and initiatives are already in place in the borough but additional facilities are needed to increase recycling rates. It is anticipated that the extension of the kerbside recycling scheme across the Borough will achieve this.
- 9. Every effort should be made to maximise participation rates in the kerbside recycling scheme education, promotion and publicity will be key elements of this and of increasing recycling rates in general. Participation and collection rates will need to be closely monitored.
- 10. Recycling rates could be increased further by the introduction of a Green Waste Strategy although an assessment would need to be made of costs and benefits.
- The cost-effectiveness of increasing recycling rates will also need to be considered

   there is a need to ensure that a balance is struck between expenditure and
   increasing recycling rates.

## **RECOMMENDATIONS FOR SUBMISSION TO THE EXECUTIVE**

- That the Council endorses the objectives (as contained in the Department for Environment, Food and Rural Affairs (DEFRA) Waste Hierarchy) of waste minimisation and re-use as the best waste management options but also recognises and promotes the environmental benefits of recycling.
- 2. That these objectives are supported principally on environmental grounds and not solely due to the need for local authorities to meet Government targets/performance indicators on recycling.
- 3. That a targeted, borough wide education programme is established to promote these objectives.
- 4. That the importance of recycling, and also all local recycling schemes, is/are publicised via all appropriate means, including the Council's website, Middlesbrough News, press releases, posters and leaflets.

(cont...)

- 5. That the impact of extending the kerbside recycling scheme on recycling levels and participation rates is assessed before determining whether the introduction of further recycling initiatives (including a green waste strategy) are necessary to meet Government targets, or whether other measures to increase recycling rates should be considered.
- 6. That detailed options for dealing with green waste including potential costs are considered following action at 5. above.
- 7. That the forthcoming DEFRA Waste Strategy 2006 is awaited, together with any resultant changes in the recycling regime. Following this, and if necessary, representations be made to DEFRA regarding the fact that waste materials which are recycled from the Energy From Waste incinerator cannot currently be included in recycling targets even though such use (for example the use of bottom ash in the construction industry) reduces the need to exploit natural resources.
- 8. That the possibility of developing a programme to maximise waste recycled from Council buildings and services is examined.

#### ACKNOWLEDGEMENTS

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  - Dr Mark Fishpool, Director, Middlesbrough Environment City
  - Paul Rabbits, Policy and Development Manager, Environment
  - Karen Robinson, Corporate Performance Manager, Performance and Policy
  - Phillipa Scrafton, Waste Minimisation and Recycling Manager, Darlington -**Borough Council**
  - Michael Walls, Refuse Supervisor, Darlington Borough Council -
  - SITA Ltd, Energy from Waste Plant, Haverton Hill
  - Cleveland Waste Management Ltd, Energy from Waste Plant, Haverton Hill \_

#### COUNCILLOR JOHN COLE CHAIR OF THE ENVIRONMENT SCRUTINY PANEL

15<sup>th</sup> February 2006

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## **BACKGROUND PAPERS**

The following background papers were consulted or referred to in the preparation of this report:

- (a) Minutes of Environment Scrutiny Panel Meetings: June December 2005
- (b) Reports submitted to Environment Scrutiny Panel Meetings: June December 2005
- (c) "Waste Not, Want Not, A Strategy for Tackling the Waste Problem in England" -Cabinet Office Strategy Unit, November 2002
- (d) Middlesbrough Environment City Annual Report 2004/05
- (e) Middlesbrough Environment City Information Leaflet on Home Composting Scheme
- (f) Department for Environment, Food and Rural Affairs (DEFRA) report "Guidance on Municipal Waste Management Strategies"