



**BARNSLEY**  
Metropolitan Borough Council

# **Municipal Waste Management Strategy**

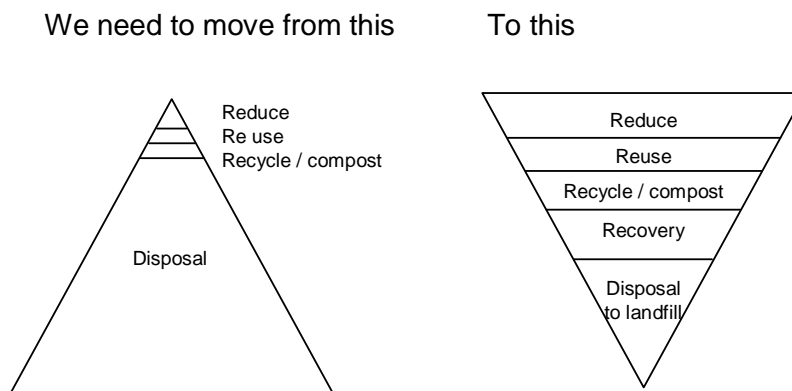
## **Sustainability Appraisal Non-Technical Summary**

**April 2007**

## Background

- 1.1 Barnsley MBC published its Draft Municipal Waste Strategy for Barnsley 2003-2020 in 2002. Recent major changes to waste management laws arising from the European Union, are fundamentally transforming household waste management in England. Because local authorities, like Barnsley, cannot continue to bury all their household waste in landfill sites. If they continue, they will be heavily fined. The fines are aimed to prevent further environmental harm from household waste rotting in landfill sites and releasing greenhouse gases, which contribute to global warming.
- 1.2 Barnsley MBC has developed a new draft Municipal Waste Management Strategy, which guide important decisions and commitments to ensure that the management of municipal waste is moved up the waste hierarchy.

**Figure 1: The Waste Hierarchy**



- 1.3 During the development of the Strategy, all realistic options that divert waste from landfill were considered on the basis of their cost, operation, social, economic and environmental effects. The options cover all tiers of the waste hierarchy and include waste reduction and re-use initiatives, recycling and composting services and energy recovery from waste.
- 1.4 Sustainable development is a commonly used phrase in Government policy and its overarching goal is to enable people to satisfy their needs and enjoy a better quality of life without comprising the ability of future generations to satisfy their needs. When we are making plans for the future, we need to ensure the plan will contribute to sustainable development by providing social, economic and environmental benefits.
- 1.5 New European and National legislation has developed a formal procedure called Strategic Environmental Assessment (SEA), which ensures that environmental considerations are integrated into plan and programme development. In order to consider all three dimensions of sustainable development, Barnsley MBC has also included social and economic aspects within the assessment of the Strategy.

1.6 SA involves are number of steps that are summarised here.

**Stage A: Setting the context and objectives, establishing the baseline and deciding the scope**

1.7 A Sustainability Appraisal (SA) framework, which covers social, economic and environmental factors and fulfils the requirements of the SEA Directive, has already been developed for Barnsley as part of its new planning framework (called the Local Development Framework (LDF)). This appraisal framework measures whether the plan and/or programme is contributing to sustainable development.

1.8 Reviewing relevant policies and legislation and collecting information on social, economic and environmental aspects of Barnsley, has identified important sustainability issues that the Strategy needs to address. For example, considerable economic and housing growth is forecasted for Barnsley and this needs to be taken into account in the development of the Strategy.

1.9 This exercise identified that the existing Barnsley MBC Appraisal framework covers all the sustainability issues relevant to the Municipal Waste Management Strategy. The appraisal of the methodology, options and the Strategy policies will therefore be rigorous and no important social, economic and environmental aspects are missing.

**Stage B: Developing and refining alternatives and assessing effects**

1.10 This SA stage involves two tasks, which are described below:

**1. Testing the Options Appraisal objectives and criteria against the SEA framework**

1.11 The Strategy was developed using a series of the Options Appraisals for each tier of the waste hierarchy (Waste Prevention and Re-use, Recycling and Composting and Residual Waste Treatment). The appraisals involved testing realistic options against their contribution towards the operational, socio-economic and environmental criteria of the appraisal framework (the preferred option positively contributes to the most criteria).

1.12 This stage was essentially a validation exercise where the social, economic and environmental factors of the Options Appraisals were compared against the SA framework to ensure that there are no missing sustainability aspects that would alter the outcome of the appraisal.

1.13 Several of the Options Appraisals had missing aspects of sustainable development, however reasons were given for their omission and they were found to be true (for example, the vast majority of the waste prevention and re-use initiatives are services and therefore the appraisal did not cover land-based topics (e.g. biodiversity, landscape etc)).

**2. Appraisal of options**

1.14 This stage involved an assessment of the social, environmental and economic effects of the different options for each tier of the waste hierarchy. The exercise identified which options provided the most social, economic and environmental benefits. The preferred option in terms of their contribution to SA objectives is identified and is summarised below.

### The Options Appraisal

<b>Greatest Contribution to Sustainable Development</b>	<b>Minimal Contribution to Sustainable Development</b>
<b>Waste Prevention &amp; Re-use</b>	
<p><b>Promotion of all initiatives, through a waste awareness campaign</b></p> <p><i>Reasons:</i> The overall sustainability issue is to reduce the amount of waste produced and therefore protect natural resources and the environment.</p> <p>A smaller municipal waste stream would also mean that new waste management facilities could be smaller in scale.</p> <p>The campaign would aim to educate the public on waste issues.</p>	<p>None as many of the initiatives are already in operation in the Borough.</p>
<b>Recycling &amp; Composting</b>	
<p><b>Increase recycling/composting to 45%</b></p>	<p><b>Roll out segregated collection service but do nothing more</b></p>
<p><i>Reasons:</i> Achieving high recycling rates will safeguard non-renewable resources and promote the re-use of primary resources.</p>	<p><i>Reasons:</i> This will encourage recycling and therefore help to protect natural resources, however many materials will be left in the residual waste stream that could be effectively recycled/composted.</p>
<b>Residual Waste Management</b>	
<p><b>Gasification or Energy from Waste</b></p>	<p><b>Continue to use landfill</b></p>
<p><i>Reasons:</i> Gasification is slightly preferred as greater levels of recycling are achieved at the plant compared to Energy from Waste. Both technologies benefit from energy recovery and divert significant quantities of waste from landfill and energy recovery means non-renewable resources are preserved and the natural environment is protected.</p>	<p><i>Reasons:</i> Continuing to send residual waste to landfill will cause significant harm to the environment in the form of greenhouse gas emissions, risk of water pollution, degradation of soil resources and impact local amenity.</p> <p>This Option does not safeguard non-renewable resources or promote re-use.</p>

1.15 The Strategy only relates to waste management technologies and is not site specific. The new Waste Management Sites Development Plan Documents will identify sites for waste management purposes. Consideration of land-based aspects of the SA framework (e.g. biodiversity, landscape, the built environment and historic environments) can be given greater consideration at this stage.

1.16 This SA stage overlapped with the Options Appraisals that developed the Strategy. Information was transferred between the two to ensure consistency. The Options Appraisals were wider in scope because they considered

operational aspects, maturity of technology in the UK, public acceptance and ability to meet further Central Government targets.

**Stage C: Preparing the SA Report**

- 1.17 This stage involves an appraisal of the ten policies as set out in the MWMS Headline Strategy. These policies are designed to implement the Strategy and are derived from the results of the Options Appraisals.
- 1.18 This Appraisal predicted both positive and negative effects of the policies and devised prevention and mitigation measures to overcome any negative effects. The key findings are outlined below.

**The Appraisal of the MWMS Policies**

Effect	Key findings
<p><b>Positive Contributions</b></p>	<ul style="list-style-type: none"> <li>• Move the management of municipal waste up the waste hierarchy.</li> <li>• Educate the public on waste issues and the need to management their waste responsibly.</li> <li>• Decrease waste arisings by waste reduction and re-use initiatives and lobbying Central Government, Manufacturers and Retailers.</li> <li>• Increase recycling/composting performance to safeguard natural resources.</li> <li>• Continue to work with the local reprocessing market to ensure collected materials are effectively recycled.</li> <li>• Significantly reduce the quantities of material being sent to landfill (and releasing greenhouse gas emissions).</li> <li>• Develop an in-vessel composting facility in the Borough to safeguard natural resources and prevent regional/local transport and air quality impacts.</li> <li>• Develop a residual waste management facility to recover energy from waste.</li> </ul>
<p><b>Negative Contributions</b></p>	<ul style="list-style-type: none"> <li>• Limited opportunities for employment or wealth creation through the implementation of the strategy.</li> </ul>
<p><b>Prevention and Mitigation Measures</b></p>	<ul style="list-style-type: none"> <li>• Consideration should be made to the nature of the form of communication in order to minimise the environmental impact of the campaign itself.</li> <li>• Waste management sites DPDs will be developed as part of the LDF for Barnsley</li> </ul>

	<p>and will allocate sites suitable for waste management purposes.</p> <ul style="list-style-type: none"> <li>• BMBC will work with the local recycling industry to ensure that materials are effectively recycled and the end-products put to a beneficial use.</li> <li>• Operational and management co-ordination is required to prevent traffic impacts from collection round duplication.</li> </ul>
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1.19 The Strategy policies are designed to move the management of municipal waste up the waste hierarchy through the delivery of sustainable management practices. It will also remove Barnsley's reliance on landfill. They positively contribute to the three areas of sustainable development, especially relating to the protection of natural resources and energy efficiency. Measures are proposed to prevent/reduce any potential negative effects.

**Stage D: Consulting on the draft MWMS and the SA Report**

1.20 A lot of consultation has already been undertaken, as part of the development of the SA Framework for the new planning framework, and this SA has drawn heavily on that work.

1.21 An integrated approach to consultation has taken place with the Strategy (Consultation Draft) and the SA being consulted together in September to October 2006. The Environment Agency and Natural England (formerly English Nature and Countryside Agency) made comments on the draft SA Report. We reviewed these comments and made changes to the SA where necessary.

**1.22 Stage E: Monitor the significant effects of implementing the plan on the environment**

1.23 A Monitoring Programme has been developed to manage and monitor the implementation of the Strategy. This Monitoring Plan has been reviewed and no important social, economic and environmental factors are missing.

1.24 In addition, a monitoring programme for the LDF has been developed and includes specific indicators and targets for all objectives of the SA/SEA framework. This monitoring will be done on an annual basis and will monitor the effects of the new Waste Management Sites DPDs.