

Planning and Compulsory Purchase Act 2004

**WASTE DEVELOPMENT
FRAMEWORK
CORE STRATEGY**

**PREFERRED OPTIONS
& PROPOSALS**

August 2006

Warwickshire County Council

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1. INTRODUCTION

1.1 Purpose of Waste Planning

1.1.1 The Preferred Options and Proposals paper is the third of four stages of consultation in the development of the Waste Core Strategy Development Plan Document (DPD). The Waste Core Strategy will set a long-term vision, objectives and the overall strategy for waste development across the County up to 2021, and provide the framework for waste development control.

1.1.2 This paper follows on from the previous consultation where we sought your views on a number of key issues and suggested some potential options for dealing with them in the Issues and Options consultation.

1.2 Format of Preferred Options & Proposals paper

1.2.1 In order to progress the Waste Core Strategy the County Council considered all the comments made as part of the Issues and Options consultation and refined or amended the options in the light of this feedback. In Section 3 each key issue is discussed, explaining why the alternative options were not chosen and giving reasons for any amendments that were made to the original options, where relevant. These preferred options are the subject of the current consultation.

1.2.2 The County Council has to submit its Waste Core Strategy to the Secretary of State by January 2007, by which time it must include detailed development control policies to guide the development of waste facilities. In order to facilitate this the Preferred Options and Proposals paper also includes some broad Policy Principles in Section 4, which have been developed in accordance with the general direction proposed in the preferred options. There will be a further opportunity to feed back on the specific wording of these policies between January and March 2007 – these are merely broad principles on which we are seeking your views.

1.2.3 **Appendix 2** summarises the local Warwickshire context and **Appendix 3** covers the policy context and additional key legislation that was not covered adequately in the Waste Core Strategy – Issues and Options paper. For a full copy of the Issues and Options paper please refer to our website www.warwickshire.gov.uk/wastecorestrategy or contact us using the contact details set out in paragraph 1.5. **Appendix 4** provides the technical background to the Waste Core Strategy. A **Glossary** has also been added in order to facilitate understanding of the terms used in this document.

1.3 Sustainability Appraisal

1.3.1 The Sustainability Appraisal (SA) process as defined in the 'Sustainability Appraisal of Regional Spatial Strategies and Local

Development Documents - Guidance for Regional Planning Bodies and Local Planning Authorities' (November 2005) must be applied to all Development Plan Documents and Supplementary Planning Documents. The SA process as set out in these documents is outlined below:

- Stage A: Setting the context and SA objectives, establishing the baseline and deciding on the scope;
- Stage B: Developing and refining options and assessing effects;
- Stage C: Preparing the Sustainability Appraisal Report;
- Stage D: Consulting on the draft plan and the Sustainability Appraisal Report; and
- Stage E: Monitoring implementation of the plan.

1.3.2 Having completed Stage A of the process and appraised the options in the Issues and Options paper against the SA objectives, we are now developing and refining those options and assessing the effects of the preferred options.

1.3.3 For this purpose, extracts from the Stage B report have been incorporated into the Preferred Options and Proposals paper to illustrate the effects of the preferred options when evaluated against the SA objectives. In Section 3 twelve summary tables have been included which provide a snapshot of how well the preferred option of each key issue performed against the SA objectives. A more comprehensive evaluation of the preferred option against each SA objective is included at **Appendix 5**.

1.4 Consultation Timetable (please see **Appendix 1** for full details of the Waste Core Strategy consultation timetable).

1.4.1 There is a six week consultation period for the Preferred Options and Proposals paper from 30th August to 11th October 2006. Please be aware that in contrast to the previous two consultation periods this is a statutory period of consultation as laid down in paragraph 27(2)(a) of the Town and Country Planning (Local Development)(England) Regulations 2004. **This means that we are unable to be as flexible with our deadline as previously** and that other County Council policies such as the Warwickshire Compact (which cites a 12 week consultation period with the voluntary sector) cannot apply.

1.4.2 Following the Preferred Options and Proposals consultation, all the comments will be collated and a report written summarising the findings. Each representation received during the 6 week statutory consultation period will be considered by Warwickshire County Council. These comments will then be incorporated (wherever possible) in the Submission Waste Core Strategy which will be submitted to the Secretary of State and consulted on for a 6 week period commencing in January 2007.

1.4.3 If you consider that your comments have not been taken into account upon receipt of the Submission Waste Core Strategy, please ensure that you submit your comments during the 6 week period in January 2007, as it is only these representations that will be automatically forwarded to the Inspector for his consideration during the Public Examination.

1.5 Contact Details

1.5.1 Anybody is welcome to respond to this consultation. You can either:

- Complete the questionnaire enclosed;
- Complete the on-line questionnaire;
- Obtain a copy from your local Council offices or local library;
- Telephone 01926 412061 or 412455 and request a copy that will be posted to you; or
- Write to:

Waste Core Strategy: Preferred Options and Proposals
Consultation
Planning Policy
Environment and Economy Directorate
Warwickshire County Council
PO Box 43
Shire Hall
Warwick
CV34 4SX

1.5.2 This document and additional technical information is on-line at www.warwickshire/wastecorestrategy. On-line you can click on the document and download it using Adobe Acrobat or you can use the on-line questionnaire.

2. VISION AND KEY OBJECTIVES FOR THE WASTE DEVELOPMENT FRAMEWORK

2.1 Vision Statement

2.1.1 During the Issues and Options consultation we sought your views on a proposed vision for the Waste Development Framework. Nearly 80% of respondents were satisfied with the content and direction of the vision, but a number of respondents suggested amendments to the precise wording of the vision.

The original vision statement as presented in the Issues and Options paper was as follows:

Ensure that sustainable waste management practices are delivered in accordance with the requirements of the waste hierarchy taking reasonable measures to safeguard human health and the environment and seeking opportunities to develop economic prosperity within Warwickshire.

2.1.2 Following consideration of the feedback received the vision for the Waste Development Framework has been amended to read:

Ensure that sustainable waste management practices are delivered in accordance with the priorities identified in the waste hierarchy taking all appropriate measures to safeguard existing communities, human health and the environment and seeking opportunities to develop economic prosperity within Warwickshire.

2.1.3 **Consultation Questions:**

- 1) Do you agree with this vision statement?
- 2) If no, what amendments would you make to the Waste Development Framework vision statement?

2.2 Key Objectives

2.2.1 A similarly favourable response (nearly 80%) was received from respondents to the key objectives suggested in the Issues and Options paper. However, a number of suggestions were made for additional objectives and we have evaluated these suggestions in accordance with their relevance to the key planning objectives set out in Planning Policy Statement (PPS) 10 and whether they duplicate or can be incorporated within existing objectives. PPS10 lists the following key objectives that:

- Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for;
- Provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- Help implement the national waste strategy, and supporting targets, that are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994;
- Help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- Reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;
- Protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission; and
- Ensure the design and layout of new development supports sustainable waste management.

2.2.2 The original set of key objectives as presented in the Issues and Options paper was as follows:

- To help deliver sustainable development by moving waste up the waste hierarchy, by looking to landfill disposal as a last option but one that must be adequately catered for;
- To enable sufficient and timely provision of waste management facilities to meet an identified need;
- To protect the natural and historic environment and mitigate potential adverse effects associated with the provision of facilities;
- To have regard for the most efficient means of transportation of waste in locating facilities;
- To have regard for the concerns and interests of local communities; and
- To prevent inappropriate development in the greenbelt.

2.2.3 Following consideration of the feedback received the key objectives for the Waste Development Framework have been amended to read:

- To help deliver sustainable development by moving waste up the waste hierarchy in accordance with European, national and regional guidance, by looking to disposal as a last option, but one that must be adequately catered for;
- To enable sufficient and timely provision of waste management facilities to meet an identified need;
- To conserve and enhance the natural and historic environment and mitigate potential adverse effects associated with the provision of facilities;
- To take appropriate precautionary measures to minimise the impact of climate change;
- To have regard for the most efficient means of transportation of waste in locating facilities;
- To have regard for the concerns and interests of local communities; and
- To prevent inappropriate¹ development in the greenbelt.

2.2.4 **Consultation Questions:**

3) Do you agree with the key objectives as set out in the Preferred Options and Proposals paper?

4) If no, what additional objectives should be included to guide the Preferred Options and Proposals paper?

¹ 'Inappropriate development' to be defined in explanatory notes accompanying development control policies, in accordance with national guidance as set out in PPS10.

3. PREFERRED OPTIONS

3.1 Introduction

- 3.1.1 Following on from the previous consultation on our Waste Core Strategy Issues and Options paper, Warwickshire County Council has considered all the comments received during the last consultation period, whether it be submitted comments to the formal written consultation, comments recorded at roadshows and public consultation events or issues raised at the Waste Development Forum.
- 3.1.2 Elected members have had an opportunity to debate the County Council's position in the light of all these comments received and agreed the general policy direction of the Waste Core Strategy as set out in this Preferred Options and Proposals document.
- 3.1.3 This section identifies the County Council's preferred option regarding 12 of the 13 issues identified in the Issues and Options paper, justifying its choice by explaining why the alternative options were not considered appropriate. Key Issue 13 on Monitoring Regime and Stakeholder Engagement did not include any options and is therefore not included in this paper, but will be included in the draft Waste Core Strategy submission to the Secretary of State.
- 3.1.4 Throughout this paper we have recognised that the 'proximity principle' is no longer part of national planning guidance, but have sought to retain the substance of the principle by referring to it as the principles of proximity and self-sufficiency. This decision is justified by the importance assigned to the concept of proximity in relation to the source of waste by numerous respondents.

3.2 Key Issue 1: Delivering Sustainable Waste Management Practices

- 3.2.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Support a site selection approach that conforms to the requirements of applicable legislation and good practice only (including the UK Waste Strategy and PPS 10 Planning and Sustainable Waste Management);

Option B: Allow waste management facilities to be brought forward by waste management companies / developers and respond to individual merits on a case by case basis; or

Option C: Pursue a site selection approach that fully integrates other planning policy considerations including transport, protection of the environment and a desire to secure economic prosperity. This approach would aim to deliver sites based on a quantified need linked to geography and waste production.

Following the Issues and Options consultation the preferred option was an amendment of Option C, now known as Option D.

Amended *PREFERRED OPTION D* should read:

“Pursue a site selection approach that fully integrates other planning policy considerations including transport, protection of human health, protection of the environment and a desire to secure sustainable economic prosperity. This approach would aim to deliver sites based on a quantified need linked to geography and waste production.”

3.2.2 Reason for this choice: This is the most holistic approach as it would incorporate inputs from stakeholders (community, industry, environmental groups etc) as well as international, national and regional planning policies and legislation, whilst taking into account other local policy considerations such as protection of human health as mentioned above. It is also most supportive of the sustainability objectives in the Issues and Options paper.

3.2.3 Limitations of Option A: This option was perceived very much as a minimum standard and rather reactive.

3.2.4 Limitations of Option B: It was considered that it would disenfranchise the community and also failed to provide certainty for developers.

3.2.5 Table 1 illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 1: Sustainability Appraisal of Preferred Option for Key Issue 1

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	6
+	21
0	15
-	6
--	0

3.2.6 Consultation Questions:

5a) Do you support the preferred option approach to:

Pursue a site selection approach that fully integrates other planning policy considerations including transport, protection of human health, protection of the environment and a desire to secure sustainable economic prosperity. This approach would aim to deliver sites based on a quantified need linked to geography and waste production.

5b) Reasons for not supporting this approach.

3.3 Key Issue 2: Municipal Waste Management Practices

3.3.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Whereby the provision of sub-regional municipal waste facilities is determined by a consideration of waste management developer proposals on a case by case basis but in accordance with legislation and good practice;

Option B: Whereby a quantitative approach based on the 'proximity principle' and the sub-regional need for municipal waste strategies is used to determine the location and mix of municipal waste treatment facilities; or

Option C: Where the provision of municipal waste facilities is also allied to the waste hierarchy with a view to imposing targets on the volume of each type of waste treated and that disposed.

Following the Issues and Options consultation the preferred option was a mixture of Options B and C, now known as Option D.

Amended combined PREFERRED OPTION D should read:

"Whereby a quantitative approach based on the waste hierarchy, the principles of proximity and self-sufficiency and the sub-regional need for municipal waste strategies is used to determine the location and mix of municipal waste treatment facilities."

3.3.2 **Reason for this mix:** Two important principles that respondents wanted to see included in the final option was that of the proximity principle (but is included in what is now termed environmental principles in PPS10) and the waste hierarchy. There was some concern, however, that the 'quantitative approach' (Option B) could lead to larger facilities and similarly that targets (Option C) could increase the size of a potential incinerator that would need to be provided with a specified amount of waste to continue being economically feasible.

3.3.3 **Limitations of Option A:** It was considered that this option failed to take proactive steps to encourage compliance with the waste hierarchy and that it did not take into account the regional context.

3.3.4 **Table 2** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 2: Sustainability Appraisal of Preferred Option for Key Issue 2

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	9
+	18
0	16
-	5
--	0

3.3.5 Consultation Questions:

6a) Do you support a preferred option approach:

Whereby a quantitative approach based on the waste hierarchy, the principles of proximity and self-sufficiency, and the sub-regional need for municipal waste strategies is used to determine the location and mix of municipal waste treatment facilities.

6b) Reasons for not supporting this approach.

3.4 Key Issue 3: Industrial and Commercial Waste Management Practices

3.4.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Whereby the provision of sub-regional industrial and commercial waste management facilities is determined through consideration of waste management developer proposals on a case by case basis and in accordance with legislation and good practice;

Option B: Whereby criteria is established through policy aimed at delivering the 'proximity principle' but where no specific targets are set in respect of recovery and re-use and there are no restrictions on waste being disposed to landfill; or

Option C: Strategies aimed at delivering the waste hierarchy with limitations placed on the amount of industrial and commercial waste that is sent to landfill. Limits placed on the total treatment and disposal capacity.

Following the Issues and Options consultation the preferred option was an amendment of Option C, now known as Option D.

Amended PREFERRED OPTION D should read:

"Approaches aimed at delivering the waste hierarchy and the principles of proximity and self-sufficiency in order to meet the sub-regional need, would limit the amount of industrial and commercial waste that is sent to landfill."

- 3.4.2 **Reason for this choice:** Although Option C received support from the majority of respondents there were some serious concerns with this option as to its ability to provide a workable solution. Issues raised included fears that it would inhibit employment; increase the economic burden on industries and be very difficult, if not impossible to implement. Of the options considered option C was in closest adherence to the sustainability objectives in the Issues and Options paper.
- 3.4.3 **Limitations of Option A:** This option failed to take account of the waste hierarchy and there was a need for the plan to be more proactive in order to meet a wider need than purely that of industry.
- 3.4.4 **Limitations of Option B:** It was considered that the plan should be more proactive in enabling compliance with the landfill diversion targets and targets for recovery and re-use.
- 3.4.5 **Table 3** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 3: Sustainability Appraisal of Preferred Option for Key Issue 3

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	9
+	19
0	17
-	3
--	0

3.4.6 **Consultation Questions:**

7a) Do you support a preferred option whereby:

Approaches aimed at delivering the waste hierarchy and the principles of proximity and self-sufficiency in order to meet the sub-regional need, would limit the amount of industrial and commercial waste that is sent to landfill.

7b) Reasons for not supporting this approach.

3.5 Key Issue 4: Construction and Demolition Waste Management Practices

- 3.5.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Provision of sub-regional construction and demolition waste facilities determined through a consideration of developer proposals on a case by case basis but in accordance with legislation and good practice;

Option B: Policy delivered with the aim of delivering waste management practices in accordance with the 'proximity principle'. No targets established in respect of diverting the waste away from landfill; or

Option C: Strategies aimed at delivering the waste hierarchy and limits placed on the amount of waste sent to landfill with targets set for treatment (recovery and re-use) to encourage developers to re-use construction and demolition wastes in new build where practicable.

Following the Issues and Options consultation the preferred option was an amendment of Option C, now known as Option D.

Amended PREFERRED OPTION D should read:

"Approaches aimed at delivering the waste hierarchy and the principles of proximity and self-sufficiency would limit the amount of waste sent to landfill and developers would be encouraged to re-use construction and demolition wastes in new build where practicable."

- 3.5.2 **Reason for this choice:** Option C aims to meet the requirements of the waste hierarchy, but it was felt that this option did not go far enough e.g. that more focus was needed on construction techniques to enable better re-use of demolition waste and that there was a need for sub-regional facilities to encourage the development of soil hospitals. Option C was most supportive of the sustainability objectives in the Issues and Options paper.
- 3.5.3 **Limitations of Option A:** This option failed to take account of the waste hierarchy and there was a need for the plan to be more proactive in order to achieve national policy drivers.
- 3.5.4 **Limitations of Option B:** It was considered that the plan should be more proactive in enabling compliance with the landfill diversion targets and targets for recovery and re-use.
- 3.5.5 **Table 4** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 4: Sustainability Appraisal of Preferred Option for Key Issue 4

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	5
+	24
0	19
-	0
--	0

3.5.6 Consultation Questions:

8a) Do you support a preferred option whereby:

Approaches aimed at delivering the waste hierarchy and the principles of proximity and self-sufficiency would limit the amount of waste sent to landfill and developers would be encouraged to re-use construction and demolition wastes in new build where practicable.

8b) Reasons for not supporting this approach.

3.6 Key Issue 5: Hazardous Waste Management Practices

3.6.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy developed to guide future hazardous waste sites development through development control i.e. limited intervention other than via a case by case consideration of planning hazardous waste facilities; or

Option B: A quantitative and geographic approach establishing the type of facility and general area for hazardous waste facilities.

Following the Issues and Options consultation the preferred option was an amendment of Option B, now known as Option C.

Amended PREFERRED OPTION C should read:

“A quantitative and geographic approach taking into account the principles of proximity and self-sufficiency to establish the type of facility and general location for hazardous waste facilities.”

- 3.6.2 **Reason for this choice:** Appropriate guidance to ensure that hazardous waste sites are provided for whether within Warwickshire itself or elsewhere in the region, taking into account the principles of proximity and self-sufficiency. This is also the option which would be most supportive of the sustainability objectives in the Issues and Options paper.
- 3.6.3 **Limitations of Option A:** With regard to this specialist type of waste there is a need for a regional solution to ensure that the highest standards are maintained and the necessary economies of scale are achieved to make such a facility financially viable.
- 3.6.4 **Table 5** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 5: Sustainability Appraisal of Preferred Option for Key Issue 5

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	4
+	18
0	21
-	5
--	0

3.6.5 **Consultation Questions:**

9a) Do you support:

A quantitative and geographic approach taking into account the principles of proximity and self-sufficiency to establish the type of facility and general location for hazardous waste facilities.

9b) Reasons for not supporting this approach.

3.7 Key Issue 6: Waste Management Treatment and Disposal Options

3.7.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy focussed on the delivery of a predominantly landfill-based approach with some composting and recycling (largely of municipal waste with limited adherence to the waste hierarchy). This option would provide a framework for the management of waste that would allow Warwickshire to achieve the targets set by legislative requirements. Although these legislative requirements are primarily focused on Municipal Waste there are certain targets in the Waste

Strategy 2000 that apply to industrial waste. Although not strictly a legislative requirement Waste Strategy 2000 was used by the UK Government to demonstrate how it was going to comply with the provisions of the Landfill Directive. This option would rely on the continued use of landfill for industrial and commercial waste with reducing inputs to landfill of municipal waste. The reduction of municipal waste would come about as a result of on-going recycling initiatives and windrow composting;

Option B: Policy focussed on a mixture of alternative technologies, recycling and composting taking precedence ahead of landfill (delivery of aspects of the waste hierarchy). This option will allow for the achievement of the legislative requirements but with a wide use of alternative technologies to deliver those requirements. Such an option will result in the provision of alternative waste management arrangements such as materials recovery facilities, large-scale thermal treatment facilities (incineration), transfer stations and Mechanical Biological Treatment (MBT) plants; or

Option C: Policy focussed on predominantly advanced thermal treatment and recycling excluding landfill (full adherence to the principles of the waste hierarchy). Option C would provide for advanced technologies for the treatment of waste such as the production of refuse derived fuel, advanced thermal treatment and autoclaving.

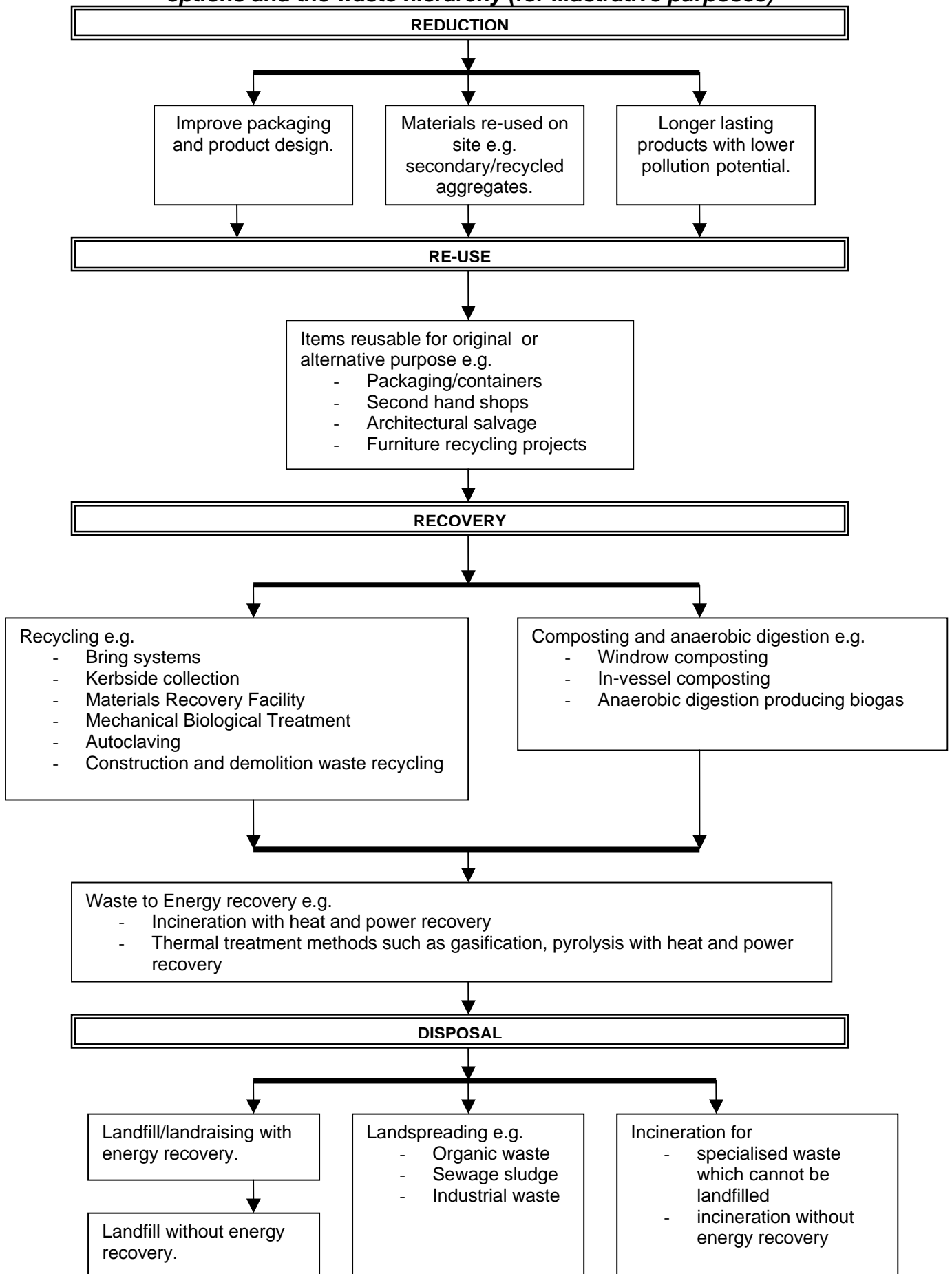
Following the Issues and Options consultation the preferred option was a mixture of Options B and C, now known as Option D.

Amended combined PREFERRED OPTION D should read:

“Policy focussed on a wide range of alternative technologies, the choice of which will need to be developed in accordance with a technology hierarchy – which in turn reflects the principles of the waste hierarchy.”

- 3.7.2 **Reason for this mix:** Option B was generally supported because it included a wide range of technologies to address the issue of waste disposal. It also provides a useful steer by promoting alternative techniques for disposing of waste ahead of landfill in accordance with the waste hierarchy. There was, however, some concern that Option B effectively excluded emerging new technologies such as advanced thermal treatment options as set out in Option C. There was also much controversy about the inclusion of incineration within Option B with a clear divide between national policy and industry supporting it and environmental groups and communities opposing it.
- 3.7.3 **Limitations of Option A:** This largely maintains the status quo and does not respond adequately to European and national policy drivers. Option A also adheres to fewer sustainability objectives than the other two options.

Figure 1: Relationship between the hierarchy of possible technology options and the waste hierarchy (for illustrative purposes)



3.7.4 **Limitations of alternative proposed option:** A new option was proposed in response to concerns that the options did not allow for an anti-incineration, and anti-landfill response. This option put forward a mixture of technologies including Mechanical Biological Treatment plants, Materials Recovery Facilities, recycling and landfilling of inactive material, energy recovery from biological processes, but no direct combustion of waste. The concerns raised around incineration have been considered in the **PREFERRED OPTION D**, by incorporating a technology hierarchy. However, a complete ban on incineration would be ill-considered for the following reasons:

- 3.7.4.1 This would eliminate a proven means of waste disposal;
- 3.7.4.2 Fails to maximise waste as a resource to produce energy;
- 3.7.4.3 Fails to recognise that our European counterparts manage to achieve far higher recycling levels than the UK within a waste strategy that promotes incineration and
- 3.7.4.4 Fails to accord with the national steer towards a waste strategy for the UK.

3.7.5 **Table 6** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 6: Sustainability Appraisal of Preferred Option for Key Issue 6

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	6
+	22
0	18
-	2
--	0

3.7.6 **Consultation Questions:**

10a) Do you support:

Policy focussed on a wide range of alternative technologies, the choice of which will need to be developed in accordance with a technology hierarchy – which in turn reflects the principles of the waste hierarchy.

10b) Reasons for not supporting this approach.

3.8 Key Issue 7: Waste Management Location Options

3.8.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy developed to focus new waste management facilities within predominantly urban locations (where proximity principle is adhered to); or

Option B: Policy developed to focus new waste management facilities within predominantly rural locations (where proximity principle is adhered to).

Following the Issues and Options consultation the preferred option was an amendment to Option A, now known as Option C.

Amended PREFERRED OPTION C should read:

“Policy developed to focus new waste management facilities normally within (but not necessarily limited to) urban locations in order to contribute to sustainable waste management practices.”

3.8.2 **Reason for this choice:** There was majority support for Option A, although it was considered to be rather simplistic and in need of further qualification in that it would not be appropriate for certain types of waste treatment or disposal options e.g. landfill and some composting facilities. This option also adhered most closely to the sustainability objectives in the Issues and Options paper.

3.8.3 **Limitations of Option B:** There was concern that this would only apply to a limited number of waste treatment and disposal options.

3.8.4 **Table 7** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 7: Sustainability Appraisal of Preferred Option for Key Issue 7

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	4
+	22
0	20
-	2
--	0

3.8.5 Consultation Questions:

11a) Do you support:

Policy developed to focus new waste management facilities normally within (but not necessarily limited to) urban locations in order to contribute to sustainable waste management practices.

11b) Reasons for not supporting this approach.

3.9 Key Issue 8: Scale of Waste Management Facilities

3.9.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy developed to focus on large, centralised facilities supported by sub-regional dispersed facilities dealing with all waste types in accordance with the proximity principle; or

Option B: Policy focussed on smaller, dispersed facilities delivered in accordance with the requirements of the proximity principle.

Following the Issues and Options consultation the preferred option was an amendment to Option A, now known as Option C.

Amended PREFERRED OPTION C should read:

"Policy developed to focus on, as appropriate, centralised facilities supported by smaller facilities dispersed across the sub-region, which in combination will deal with all waste types in accordance with the waste hierarchy and the principles of proximity and self-sufficiency."

3.9.2 **Reason for this choice:** Option A allows for economies of scale to be achieved and can accommodate other technologies and waste streams, thereby making it more flexible. However, there was some concern raised around the scale of facilities. This option would also be most supportive of the sustainability objectives in the Issues and Options paper.

3.9.3 **Limitations of Option B:** Cost was generally recognised as the significant negative factor of this option, although this option may well perform better in satisfying the principles of proximity and self-sufficiency.

3.9.4 **Table 8** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 8: Sustainability Appraisal of Preferred Option for Key Issue 8

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	3
+	21
0	22
-	2
--	0

3.9.5 Consultation Questions:

12a) Do you support:

Policy developed to focus on, as appropriate, centralised facilities supported by smaller facilities dispersed across the sub-region, which in combination will deal with all waste types in accordance with the waste hierarchy and the principles of proximity and self-sufficiency.

12b) Reasons for not supporting this approach.

3.10 Key Issue 9: Utilisation of Existing and New Sites

3.10.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy focussed on extending existing waste management facilities; or

Option B: Policy focussed on encouraging the development of new sites.

Following the Issues and Options consultation the preferred option was an amendment to Option A, now known as Option C.

Amended PREFERRED OPTION C should read:
 “Policy focussed primarily on sites where waste management activities would be compatible with the pattern of current or previous land uses (e.g. existing waste management facilities, industrial, contaminated or vacant land) and/or where sites are specifically allocated for this purpose in the Site Specific Allocations Development Plan Document.”

3.10.2 **Reason for this choice:** Option A allows for beneficial use of existing infrastructure and complements the existing land use. However, it will not be suited to all waste technologies. Option A was more supportive of the sustainability objectives than Option B in the Issues and Options paper.

3.10.3 **Limitations of Option B:** It is unlikely that the infrastructure required to develop new waste management facilities will be situated at new locations with no regard to existing waste management infrastructure.

3.10.4 **Table 9** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 9: Sustainability Appraisal of Preferred Option for Key Issue 9

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	4
+	22
0	21
-	1
--	0

3.10.5 **Consultation Questions:**

13a) Do you support:

Policy focussed primarily on sites where waste management activities would be compatible with the pattern of current or previous land uses (e.g. existing waste management facilities, industrial, contaminated or vacant land) and/or where sites are specifically allocated for this purpose in the Site Specific Allocations Development Plan Document.

13b) Reasons for not supporting this approach.

3.11 Key Issue 10: Protection of Environmental Resources

3.11.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy includes specific protection measures for sites afforded statutory protection at a national, regional or local level; or

Option B: Deliver policy that seeks to provide protection for sites of local significance as well as statutorily protected sites.

Following the Issues and Options consultation the preferred option was an amendment to Option B, now known as Option C.

Amended PREFERRED OPTION C should read:

“Deliver policy that seeks to provide protection for sites of international importance for natural, historic and environmental resources and sites with nationally recognised designations. Due consideration will also be given to sites of local significance without prejudicing an otherwise sustainable waste management development opportunity.”

3.11.2 **Reason for this choice:** We recognise that there is a statutory duty to protect sites of international importance for natural, historic and environmental resources and sites with nationally recognised designations. We also appreciate the significance of sites at the regional and local levels and would expect them to be given due consideration in the development of any new waste management infrastructure, without prejudicing an otherwise sustainable development opportunity. Option B adhered most closely to the sustainability objectives in the Issues and Options paper.

3.11.3 **Limitations of Option A:** This option does not give due consideration to sites of local significance.

3.11.4 **Table 10** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 10: Sustainability Appraisal of Preferred Option for Key Issue 10

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	2
+	19
0	27
-	0
--	0

3.11.5 Consultation Questions:

14a) Do you support the preferred option to:

Deliver policy that seeks to provide protection for sites of international importance for natural, historic and environmental resources and sites with nationally recognised designations. Due consideration will also be given to sites of local significance without prejudicing an otherwise sustainable waste management development opportunity.

14b) Reasons for not supporting this approach.

3.12 Key Issue 11: Transport Infrastructure

3.12.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Deliver policy aimed at minimising traffic impacts through siting waste management facilities in proximity to the source of waste; or

Option B: Set out specific requirements on a sustainable mix of transport strategies to be incorporated within site selection (allocation) policies but no restriction on siting waste management facilities in proximity to the source of waste.

Following the Issues and Options consultation the preferred option was a mixture between Options A and B, now known as Option C.

Amended combined PREFERRED OPTION C should read:

“Deliver policy aimed at a sustainable mix of transport strategies to be incorporated within site selection (allocation) policies, by giving due consideration to the proximity of waste management facilities to the source of waste, in an attempt to minimise traffic impacts.”

3.12.2 **Reason for this mix:** Respondents considered aspects of both options to be valid i.e. adherence to the principles of proximity and self-sufficiency and the use of comprehensive transport strategies. Option B did in fact include reference to the proximity principle, but as it appeared to be unclear to respondents the amended option C is intended to address this confusion, while still reflecting the principles of PPS10. Both options were generally supportive of the sustainability objectives in the Issues and Options paper.

3.12.3 **Table 11** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 11: Sustainability Appraisal of Preferred Option for Key Issue 11

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	1
+	17
0	30
-	0
--	0

3.12.4 Consultation Questions:

15a) Do you support the preferred option to:

Deliver policy aimed at a sustainable mix of transport strategies to be incorporated within site selection (allocation) policies, by giving due consideration to the proximity of waste management facilities to the source of waste, in an attempt to minimise traffic impacts.

15b) Reasons for not supporting this approach.

3.13 Key Issue 12: Site Decommissioning and Restoration

3.13.1 The following options were identified as possible solutions to this key issue and were considered in the Issues and Options consultation:

Option A: Policy to deliver a strategic approach to restoration in adherence to core principals for protection of natural, semi-natural and built environment; or

Option B: Policy aimed at delivering specific site decommissioning and restoration practices linked to the waste treatment and/or disposal facility type.

Following the Issues and Options consultation the preferred option was a slightly re-worded Option A.

PREFERRED OPTION: OPTION A

“Policy to deliver a strategic approach to restoration in adherence to core principles for the protection and enhancement of the natural, semi-natural and built environment.”

3.13.2 **Reason for this choice:** Taking into account the majority view of respondents that we should adopt a strategic approach to site decommissioning and restoration, rather than relying on an ad-hoc site-by-site approach to this issue. Option A would also be most supportive of the sustainability objectives in the Issues and Options paper.

3.13.3 **Limitations of Option B:** This option was considered to be lacking a strategic approach to site decommissioning and restoration.

3.13.4 **Table 12** illustrates that most of the significant effects of the preferred option are either positive or have a neutral impact on the SA objectives. For further details please see **Appendix 5**.

Table 12: Sustainability Appraisal of Preferred Option for Key Issue 12

Summary of Sustainability Appraisal	
Nature of Effect	Number of Occurrences of Significant Effects for Preferred Option
++	2
+	14
0	32
-	0
--	0

3.13.5 Consultation Questions:

16a) Do you support:

Policy to deliver a strategic approach to restoration in adherence to core principles for the protection and enhancement of the natural, semi-natural and built environment.

16b) Reasons for not supporting this approach.

4. POLICY PRINCIPLES

- 4.1 The following Policy Principles have been devised in response to the feedback received during the consultation on the Waste Core Strategy – Issues & Options paper. They are intended to provide further detail around the substance of the preferred options.

- 4.2 They are not detailed policies governing development control, but are intended to provide sufficient detail to stimulate discussion around the policy direction of the Waste Core Strategy – Preferred Options & Proposals. Detailed wording of policies will be the subject of further consultation when the plan is submitted to the Secretary of State.

Policy Principle 1 General Principles

The following factors will form part of the assessment in considering the suitability of a planning application:

Waste hierarchy and sustainability

- *The proposal must represent the most sustainable method of disposal. This may require an explanation of why alternative technologies (as illustrated in **Figure 1**) higher up the hierarchy of proposed technology options are less sustainable; or*
- *The applicant must demonstrate that there is an overriding need for:*
 - *additional capacity for this particular type of waste disposal having regard to the waste hierarchy; and*
 - *this particular location of the facility due to its proximity to the waste source and its markets, taking into account the availability of suitable infrastructure.*

Predominantly urban location of facilities

- *Consideration of locating facilities firstly within or adjacent to urban areas within the Core Development Area and Rugby as the sub-regional focus, (where appropriate for the chosen waste technology) in accordance with the strategy identified in the Coventry Solihull Warwickshire Forum's 'Advice to West Midlands Regional Planning Partnership regarding input to Phase 2 of Regional Spatial Strategy Revision'; or*
- *Where the identified urban areas are demonstrated to be inappropriate or unsuitable the applicant must demonstrate that the waste management activities would be compatible* with the pattern of current or previous land uses.*

Protection of amenity

- *Ensure that the proposal does not have a significant adverse impact on the character of the locality or amenity of local occupiers, by reason of odour, noise, dust, local visual intrusion and/or health, having regard to the sensitivity of adjoining land uses and the proximity of residential property. Applicants must demonstrate that the proposals will not have a significant adverse impact on all aspects of amenity mentioned previously as they relate to acceptable levels of disturbance, which are set out in acknowledged national standards;*
- *Proposals which are located outside of a rural setting must ensure that all activities likely to generate levels of noise, dust or odour and likely to adversely affect the amenity of local residents are contained as far as is reasonable within buildings; or*
- *Maintain highway safety and ensure that traffic will not have a significant adverse environmental impact when traversing the routes which generated traffic is likely to take.*

*Compatible uses would follow the guidance on identification of suitable areas in PPS10 and include the following considerations:

- Locate waste management facilities on industrial sites, particularly where this would facilitate complementary activities;
- Make use of derelict or contaminated land previously used for industrial purposes;
- Provide facilities for on-site management of waste where it arises;
- Where the proposal forms an integral part of established waste disposal facilities.

Policy Principle 1 General Principles (continued)

Protection of the environment

- *The presumption that proposals are located outside the Greenbelt, unless waste management activities would be compatible* with the pattern of current or previous land uses;*
- *The presumption that the most stringent level of protection will be applied to areas with international statutory protection, or of international importance (e.g. Special Protection Areas, Special Areas of Conservation or Ramsar Sites) unless there are imperative reasons for the development which are of overriding public interest;*
- *The presumption that the most stringent level of protection will be applied to areas with national statutory protection, or of national importance (e.g. the Area of Outstanding National Beauty, Sites of Special Scientific Interest, National Nature Reserves, Scheduled Ancient Monuments, Listed Buildings, Registered Parks, Gardens or Battlefields or Conservation Areas) unless the development can be demonstrated to be in the public interest;*
- *The presumption that the protection of areas of acknowledged regional or local importance will be given due consideration unless the development can be demonstrated to be in the public interest;*
- *Ensure that a proposal meets all appropriate pollution control, ground water protection, water conservation and flood control requirements;*
- *The proposal must not involve significant loss of or damage to agricultural land within grades 1, 2 or 3a. Where there is an overriding need for such land to be developed, land of the lowest grade will, wherever possible, be used first;*
- *Consideration must be given to transporting waste by modes other than by road, wherever practically viable; or*
- *Encourage the on-site provision of renewable energy as a proportion of the predicted energy requirements of the development. Types of renewable energy that will be acceptable include biomass, hydro power, passive solar design, photovoltaics, wind, solar water heating and some forms of energy from waste (including anaerobic digestion, landfill/sewage gas, pyrolysis, gasification, but not energy from domestic or industrial waste).*

*Compatible uses would follow the guidance on identification of suitable areas in PPS10 and include the following considerations:

- Locate waste management facilities on industrial sites, particularly where this would facilitate complementary activities;
- Make use of derelict or contaminated land previously used for industrial purposes;
- Provide facilities for on-site management of waste where it arises; or
- Where the proposal forms an integral part of established waste disposal facilities.

Consultation Questions:

17a) Do you agree with our requirements for demonstrating adherence to the principles of the waste hierarchy and sustainable development?

17b) Reasons for answer.

18a) Is the policy principle suitable for setting the location criteria of facilities?

18b) Reasons for answer.

19a) Do you agree with our definition of compatible land uses?

19b) Reasons for answer.

19c) Are there any other compatible land uses that would be suitable for locating waste management facilities?

20a) Is the policy principle suitable for providing guidance on protecting amenity?

20b) Reasons for answer.

21a) Is the policy principle suitable for providing guidance on protecting the environment?

21b) Reasons for answer.

22a) Following Government's national guidance on Renewable Energy there is a requirement for planning authorities to, "include policies in their development plans that require a percentage of the energy in new developments to come from on-site renewables, where it is viable." Would such a policy be appropriate for developing waste management facilities?

22b) What type(s) of waste management facility(ies) would be more suited to on-site renewables?

22c) What percentage would be appropriate for sites where the inclusion of on-site renewables would be viable?

23) Do you have any further comments on Policy Principle 1?

**Policy Principle 2
Alternative Criteria as Additional
Considerations to Policy Principle 1**

Proposals for facilities which meet the following criteria will be considered in conjunction with and, where appropriate, as an exception to Policy Principle 1:

- *Where the proposal is for either a Materials Recovery Facility, Transfer Station or In-vessel Biological Processing facility and is located in redundant rural buildings;*
- *Where the proposal is for either a Materials Recovery Facility or Transfer Station and is located on voids created by mineral working.*
- *Proposals for facilities for the thermal treatment of waste must demonstrate that they include the efficient recovery of energy from the thermal treatment process and that recyclables (for which there are economically viable markets) have been removed prior to the thermal treatment process, wherever feasible.*
- *Where the proposal is associated with a disposal of waste to land activity, the life of the activity will be limited to the life of the disposal of waste to land operation.*
- *Proposals for windrow composting facilities and disposal of waste to land operations will be approved in locations that have a rural setting and are remote from towns or villages as an exception to the guidance in Policy Principle 1. or*
- *Proposals for in-vessel composting and anaerobic digestion facilities may be approved in locations that have a rural setting and are remote from towns or villages as an exception to the guidance in Policy Principle 1, provided that the proposal can demonstrate that urban locations have been considered in the first instance and deemed inappropriate.*

Consultation Questions:

24a) Is the policy principle suitable for setting additional technology-specific criteria?

24b) Reasons for answer.

25) Do you have any further comments on Policy Principle 2?

**Policy Principle 3
Planning Conditions and Agreements**

Scope of conditions and agreements

- *Measures to mitigate visual intrusion, noise, odour, dust and significant health impacts to acceptable levels;*
- *Measures to influence the means of transport of waste to the site and/or the routing of vehicles to and from the site;*
- *Measures to protect, promote, enhance (and where appropriate to mitigate any adverse impact upon) biodiversity, geodiversity and the historic environment within the site and its environs;*
- *Measures to secure energy recovery wherever appropriate; or*
- *Measures for the restoration of the site to a suitable beneficial after use in consultation with the affected community groups, industry and environmental interest groups.*

Consultation Questions:

26a) Is the policy principle suitable for setting out the scope of conditions and agreements?

26b) Reasons for answer.

27) Do you have any further comments on Policy Principle 3?

**Policy Principle 4
Disposing Residual Waste to Land**

Criteria for permitting disposal of residual waste to land operations

- *The proposal secures the reclamation of contaminated or otherwise damaged land or for the restoration of a mineral working;*
- *It has been demonstrated that the waste to land operation is needed to facilitate the disposal of residues of an on-site or adjacent treatment facility, which would not otherwise be economically viable;*
- *Where the proposal is an extension to an already permitted disposal of residual waste to land operation; or*
- *The visual impact of the completed project would make a positive contribution in its landscape context.*

Consultation Questions:

28a) Is the policy principle suitable for setting criteria for permitting disposal of residual waste to land operations?

28b) Reasons for answer.

29) Do you have any further comments on Policy Principle 4?

Policy 5
Waste Generation by New Development

- *District and Borough Councils in Warwickshire should make provision in their Local Development Frameworks to secure the proper management of recycling and waste generation in the demolition and construction of new sites and during the life of the proposed land use by ensuring that Site Waste Management Plans are in place prior to the commencement of development.*
- *District and Borough Councils should also ensure in their Local Development Frameworks that, where appropriate, suitable provision is made on new developments for:*
 - *facilities for the public to deliver recyclable waste;*
 - *there are facilities for the source separation and safe storage of different types of waste awaiting collection.*
- *The level of provision made will take into account the scale, type and location of existing and proposed facilities in the locality and, where appropriate, the Recycling Plan or Municipal Waste Management Strategy relevant to the area concerned.*
- *Planning applications for development which is expected to generate significant quantities of waste should be accompanied by a waste audit.*

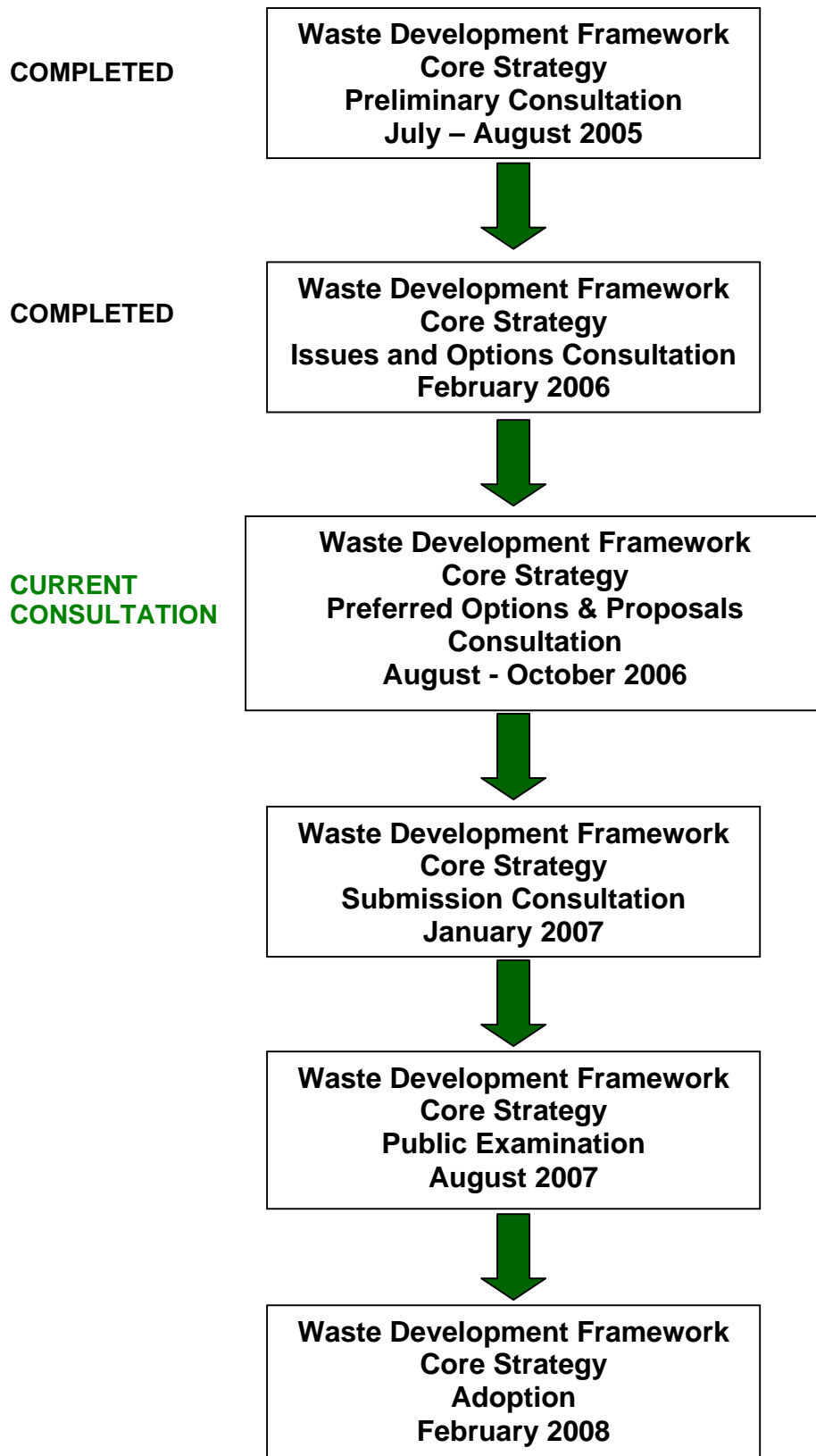
Consultation Questions:

30a) Is the policy principle suitable for providing guidance on dealing with waste generation by new development?

30b) Reasons for answer.

31) Do you have any further comments on Policy Principle 5?

Appendix 1: Consultation Timetable of the Waste Development Framework Core Strategy Development Plan Document (DPD)



Appendix 2: Local Warwickshire Context

A2.1 As part of considering the issues and options for sustainable waste management and disposal, it is important to consider the context, in which these issues arise.

A2.2 The key contextual factors influencing the future waste management and disposal requirements are:

- Growth of population, number of households;
- Changes in employment, businesses;
- Waste arisings.

A2.3 Population Context

A2.3.1 Warwickshire has a population of 519,301² and covers an area of 1,975km with just under a quarter of a million households. The bulk of Warwickshire's population lives in the north and centre of the county, that has traditionally been industrial; with towns such as Nuneaton, Bedworth and Rugby whose established industries include (or included) coal mining, textiles, cement production, and engineering. In the centre and west of Warwickshire lie the prosperous towns of Leamington Spa, Warwick, Kenilworth, and Stratford-upon-Avon.

A2.3.2 The South of the county is largely rural and sparsely populated. The largest towns in Warwickshire as of 2004 are: Nuneaton (pop. 77,500), Rugby (62,000), Leamington Spa (42,300), and Bedworth (32,500).

Table A1: Population of Warwickshire

Districts	Population	Number of Households
West Midlands	5,267,308	2,219,893
North Warwickshire	61,900	26,118
Nuneaton and Bedworth	120,300	51,410
Rugby	89,200	39,333
Stratford-on-Avon	115,200	47,000
Warwick	132,700	56,700
Warwickshire	519,300	220,561

Source: Census 2001, partly updated by Districts/Boroughs where figures available.

A2.3.3 The population of Warwickshire has grown by 11% over the past 30 years and is projected to increase by a further 3.6% over the period of 2000-2010. The largest predicted growth over this period is in North Warwickshire followed by Warwick, Stratford and Rugby, however, population decline is projected in Nuneaton and Bedworth over the same interval.

A2.4 Economic Context

² Based on 2003 population estimates

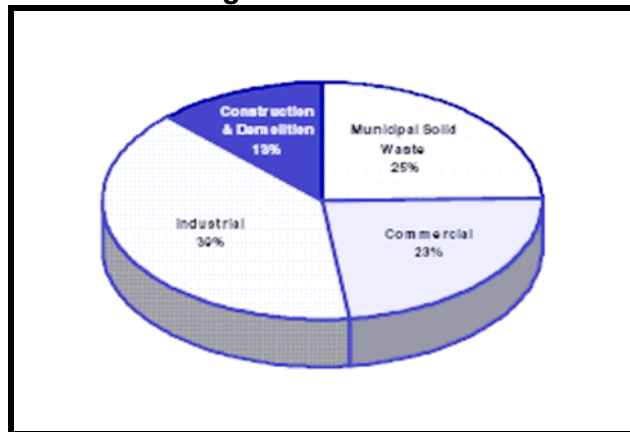
A2.4.1 The economic climate of an area is an influencing factor for the generation of waste. Gross Value Added (GVA) is a measure of the total economic activity in a region and provides an indication of the health of the region's economy.

A2.4.2 Warwickshire is ranked third behind Birmingham and Solihull in terms of per capita GVA. Between 1995 and 2002 the Warwickshire economy has grown by an average annual rate of 5.9%, that compares favourably with the UK average of 5.1% and the West Midlands figure of 4.6%.

A2.5 Waste Arisings

A2.5.1 The estimated total arisings of controlled waste from the municipal, industrial, commercial and construction and demolition sectors in Warwickshire in 2003/04 were about 1,202,000 tonnes. **Figure A1** shows the estimated proportion of these controlled waste streams in Warwickshire. The municipal waste arisings of 297,000 tonnes represented about 25% of total controlled waste arisings in Warwickshire in 2003/04.³

Figure A1: Estimated Arisings of controlled Waste in warwickshire (2003/04)



Source: Warwickshire Waste Partnership - Warwickshire's Municipal Waste Management Strategy (October 2005)

A2.5.2 Contemporary information on waste arisings is not easily accessible for waste types other than municipal as it is no longer the responsibility of the Local Planning Authorities to collect, but **Table A2** does provide a tentative picture of waste arisings in Warwickshire.

Table A2: Total Waste Arisings in Warwickshire

	2005	2010	2015	2020
Commercial & Industrial	717,644	694,570	694,464	694,354
Construction & Demolition	760,885	605,739	566,840	566,840

Source: Information on construction and demolition waste arisings is published in the Waste Scenarios Study (Enviros, 2005)

³ Waste Partnership - Warwickshire's Municipal Waste Management Strategy October 2005

A2.5.3 The Enviros Waste Scenarios Study (July 2005) identifies commercial and industrial waste arisings across the West Midlands region of 1.4 million tonnes that will require managing during 2005. It is suggested that there will be a decline in this figure to 1.37 million tonnes by 2020.

A2.5.4 Similarly it is reported that construction and demolition waste arisings across the region are 1.54 million tonnes in 2005 falling to 1.07 million tonnes by 2020.

Appendix 3: Policy Context and Key Legislation

- A3.1 The policy context and key European and national legislation has already been covered in the previous consultation document i.e. the Waste Core Strategy – Issues and Options paper. For a copy of the document please see our website for details at www.warwickshire.gov.uk/wastecorestrategy or contact us using the contact details set out in paragraph 1.5.
- A3.2 Where the consultation highlighted shortcomings in the Council’s consideration of the policy context we have endeavoured to make the necessary additions in order to provide comprehensive coverage of relevant policies and legislation as follows:

PPS22: Renewable Energy

The purpose of this PPS is to encourage Local Planning Authorities to consider devising policies that would facilitate the inclusion of on-site renewable energy provision as part of new developments, as well as promoting stand-alone renewable energy projects. These stand-alone projects are clearly not within the remit of a Waste Planning Authority, but we are being encouraged to require on-site provision as a proportion of energy that would be required to operate the site and/or provide energy supplies to the National Grid.

PPS23: Planning and Pollution Control

This PPS and its Annexes covering ‘Pollution Control, Air and Water Quality’ and ‘Development on Land Affected by Contamination’ must all be read in conjunction with the Pollution Prevention and Control Act (1999) and the PPC Regulations (2000). Local Planning Authorities must ensure that a range of pollution-related matters are considered as part of devising policies in their Development Plan Documents (DPDs) e.g. consideration of the, “impact of potentially polluting development on land use, including effects on health, the natural environment or general amenity.” (Appendix A, PPS23)

West Midlands Regional Forestry Framework: Growing our Future

The purpose of this strategy is to ensure that the management of woodlands and forests is carried out within the context of sustainable development. There are clear areas of overlap between this and the Waste Core Strategy in its aim of developing opportunities to promote waste minimisation and recycling by working with organisations such as the Waste Resources Action Programme (WRAP), the construction industry and the Regional Assembly by contributing to the Regional Waste Strategy.

Appendix 4: Technical Background

A4.1 The Waste Core Strategy – Issues and Options paper included a range of technical information drawn from regional and national research. Some data has been amended and other information will be updated as it becomes available.

A4.2 Waste Growth

A4.2.1 Household waste currently represents about 70% of total Municipal Solid Waste arisings in Warwickshire. **Table A3** provides an indication of the effects of waste growth in Warwickshire and the challenge that this places upon sustainable methods of waste treatment.

Table A3: Projected Waste Growth Rates in Warwickshire

Year	Household Waste Growth Rate (%)	Other Waste Growth Rate (%)	Overall Waste Growth Rate (%)
2003	2.1	0.3	0.6
2004	0.9	1.4	1.3
2005	0.9	1.4	1.3
2006	0.9	1.4	1.3
2007	0.9	1.4	1.3
2008	0.9	1.4	1.3
2009	0.9	1.3	1.2
2010	0.9	1.3	1.2
2011	0.9	1.3	1.2
2012	0.8	1.2	1.1
2013-2019	0.8	1.2	1.1
2020-2032	0.8	1.1	1.0

Source: Household and Other waste Growth Rates were derived from the WCC / DEFRA Waste Implementation Programme (LASU) June 2005

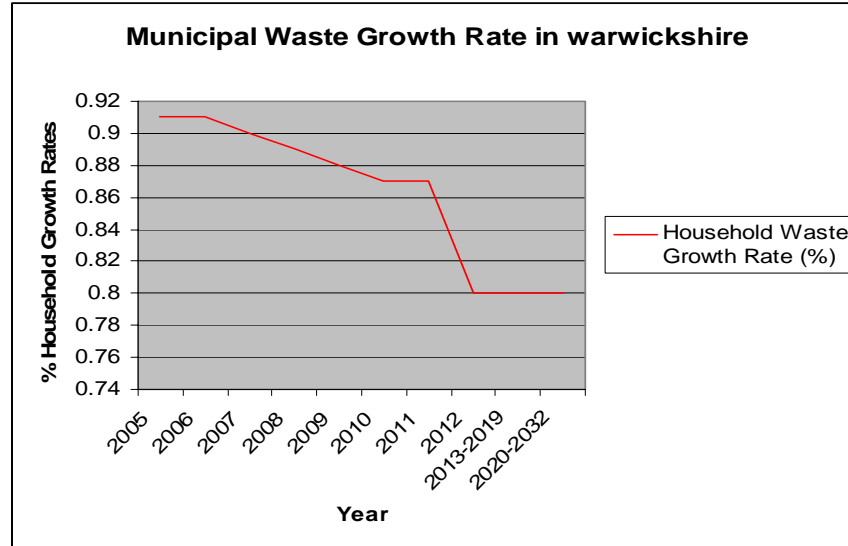
A4.2.2 The table indicates a gradual slowing in growth rate of household waste, although there is a relatively constant level of growth during the period 2003 – 2008 in respect of other waste streams. Notwithstanding this slowing in overall growth, there is an expected additional burden on existing waste management facilities and a need for future modes of sustainable treatment and disposal.

A4.3 Municipal Waste

A4.3.1 Municipal waste includes household and other wastes that are collected by the Waste Collection Authorities within Warwickshire. Warwickshire County Council is the Waste Disposal Authority with a responsibility for the disposal of waste once collected. **Figure A2** and

Table A4 illustrate the projected growth rates for municipal wastes within Warwickshire.

Figure A2: Municipal Waste Growth Forecast within Warwickshire



Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005

A4.3.2 **Figure A2** illustrates a possible growth scenario for municipal solid waste within Warwickshire. The red line indicates a gradual slowing in total growth rates over time.

Table A4: Municipal Waste Growth Rates in Warwickshire

Year	Household Growth Rate (%)
2005	0.91
2006	0.91
2007	0.90
2008	0.89
2009	0.88
2010	0.87
2011	0.87
2012	0.8
2013-2019	0.8
2020-2032	0.8

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005

A4.3.3 As a figure, the cumulative quantity of municipal waste that is likely to be generated within Warwickshire between the periods 2001 and 2021 has been calculated at 6,253,000 tonnes. This is likely to place a considerable burden on the existing facilities within Warwickshire. The additional capacity required has been calculated and is included within the following tables captured within the WCC / DEFRA documents.

Table A5: Additional Capacity and Facilities Required to Treat / Recover Municipal Waste by 2005 and 2021 ('000 tonnes)

Additional Capacity Required by 2005	Equivalent Number of Facilities (@250ktpa)	Equivalent Number of Facilities (@25ktpa)	Additional Capacity Required by 2021	Equivalent Number of Facilities (@250ktpa)	Equivalent Number of Facilities (@25ktpa)
58	0	2	116	1	5

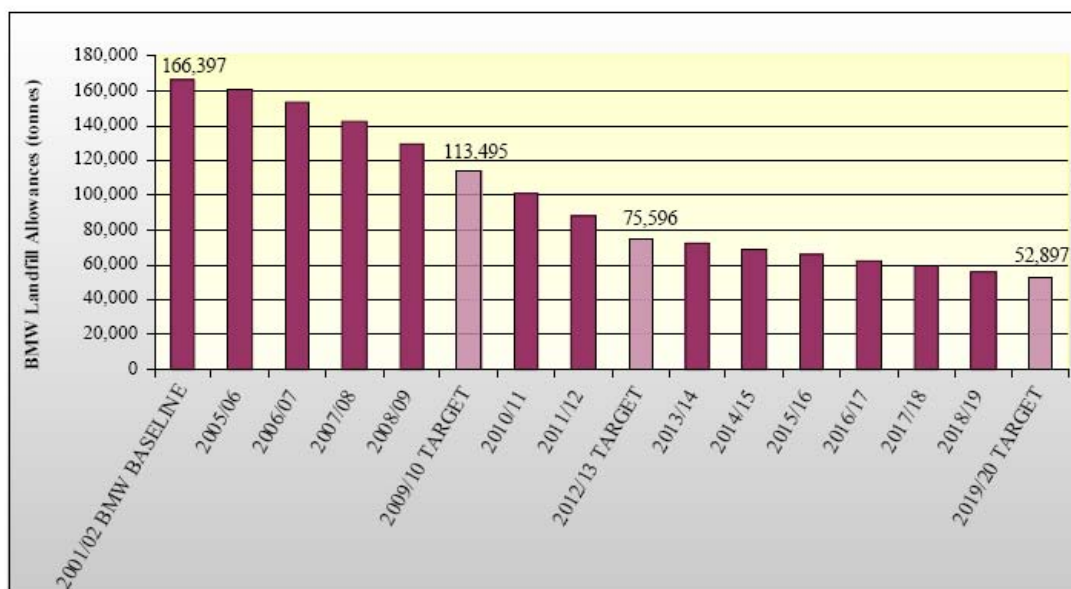
Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A6: Indicative Minimum Cumulative Annual Landfill Capacity Required to Dispose of Municipal Waste 2001-2021 ('000 tonnes)

Capacity 2005	Capacity 2010	Capacity 2015	Capacity 2021
1,112	2,017	2,679	3,210

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Figure A3: Landfill Allowance Allocation for Warwickshire County Council



Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005

Table A7: Indicative Cumulative Minimum Annual Throughput Capacity Required to Recycle or Compost Municipal Waste 2001-2021 ('000 tonnes)

Capacity 2005	Capacity 2010	Capacity 2015	Capacity 2021
75	104	117	119

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.3.4 Recycling targets have been established for Warwickshire through DEFRA's Waste Implementation Programme. The following table captures these targets and indicates the extent of the shortfall in terms of the target and the rate achieved during 2003 / 2004.

Table A8: Recycling Targets for Warwickshire

	Recycling Target				
	Recycling rate achieved 2003/04	2003/04	2005/06	2010/11	2015/16
Waste strategy 2000			25%	30%	33%
BVPI and Warwickshire's municipal waste strategy	21.5%	16%	24%	35-45%	

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.4 Industrial and Commercial Waste

A4.4.1 The Environment Agency Strategic Waste Management Assessment Study conducted during 2000 estimated that there was approximately 683,000 tonnes of commercial and industrial waste produced in Warwickshire, of that , 430,000 tonnes was industrial waste and 253,000 tonnes commercial waste.

A4.4.2 In respect of treatment, the following table provides a summary of current facility capacity for industrial and commercial wastes.

Table A9: Deposits of Commercial and Industrial Waste at Open Gate Facilities ('000s tonnes)

Biological Waste	Metal Recycling Waste	Physical Treatment Waste	Thermal Treatment Waste	Total Waste Deposits
104	59	0	36	199

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.4.3 Predictions for industrial and commercial waste growth are identified in the following table.

Table A10: Commercial and Industrial Waste Predictions up to 2020 in tonnes (Phase 2 Report)

Growth at 2005	Growth at 2010	Growth at 2015	Growth at 2020
1,434,000	1,377,000	1,377,000	1,377,000

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.4.4 The additional capacity required to address this industrial and commercial waste through conventional means and the equivalent number of facilities is identified in the following tables.

Table A11: Indicative Additional Capacity Required to Recycle and Recover Industrial & Commercial Waste 2005 and 2021 ('000 tonnes)

Capacity 2005	Capacity 2010	Capacity 2015	Capacity 2021
413	424	435	446

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A12: Indicative Minimum Cumulative Landfill Capacity Required to Dispose of Industrial and Commercial Waste 2001 - 2021 ('000 tonnes)

Capacity 2001 - 2005	Capacity 2001 - 2010	Capacity 2001 - 2015	Capacity 2001 - 2021
2,102	3,969	5,759	7,506

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A13: Additional Capacity and Facilities Required to Recycle and Treat Industrial and Commercial Waste 2005 & 2021 ('000 tonnes)

Capacity 2005	Equivalent Number of Facilities @25,000 tonnes / year	Capacity 2021	Equivalent Number of Facilities @25,000 tonnes / year
206	8	239	10

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.5 Construction and Demolition Waste

A4.5.1 In addition to the easily recognisable inert components of construction and demolition wastes other components will include asbestos and paper as well as general commercial and industrial wastes. Within Warwickshire, the total volume of construction and demolition waste at 2005 has been evaluated as 1,542,000 tonnes. The following tables

identify the breakdown of the additional waste types that may be included as construction and demolition waste and future growth scenarios.

Table A14: Type of Construction and Demolition Waste Produced ('000 tonnes)

Inert	Asbestos (C&D)	Paper & Card	Food	General Commercial	General Industrial	Mineral Waste & Residues	Metals & Scrap	Chemical & Other
15	21	40	19	185	103	10	65	200

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A15: Cumulative Construction and Demolition Waste Growth Predictions (tonnes)

2005	2010	2015	2020
1,542,000	1,179,000	1,066,000	1,066,000

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.5.2 The above table indicates that it is anticipated that there will be an increasing growth to the end of 2010 with a gradual lessening in growth between 2010 and 2020. The following tables illustrate the additional capacity that would be required in order to address the construction and demolition waste produced within Warwickshire to 2021.

Table A16: Minimum Capacity Required to Recycle C&D Waste 2005-2021 ('000 tonnes)

Annual Capacity Required by 2005	Annual Capacity Required by 2010	Annual Capacity Required to 2015	Annual Capacity Required to 2021
594	500	490	490

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A17: Indicative Non-Hazardous Landfill Capacity Required to Dispose of C&D Waste 2001-2021 ('000 tonnes)

Cumulative Void Capacity Required by 2005	Cumulative Void Capacity Required by 2010	Cumulative Void Capacity Required 2015	Cumulative Void Capacity Required by 2020
303	588	844	1,099

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A18: Additional Capacity and Facilities Required to Recycle C&D Waste 2005 and 2021 ('000 tonnes)

Capacity Required by 2005	Equivalent No. of Facilities (@100ktpa)	Additional Capacity Required by 2021	Equivalent no. of Facilities (@100ktpa)
594	6	490	5

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.6 Hazardous Waste

A4.6.1 The cumulative quantity of hazardous waste arising within Warwickshire for the period 2001 to 2021 has been estimated at 1,379,000 tonnes. Due to its nature this waste is difficult to treat and dispose of.

A4.6.2 The following tables provide an indication of the additional capacity required to re-use and recycle hazardous waste and the indicative cumulative landfill capacity that would be required.

Table A19: Indicative Capacity Required to Re-Use and Recycle Hazardous Waste 2001-2021 ('000 tonnes)

Annual Capacity Required by 2005	Annual Capacity Required by 2010	Annual Capacity Required by 2015	Annual Capacity Required by 2021
15	18	18	18

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A20: Indicative Cumulative Landfill Capacity Required to Dispose of Hazardous Waste 2001-2021 ('000 tonnes)

Cumulative Capacity Required by 2005	Cumulative Capacity Required by 2010	Cumulative Capacity Required by 2015	Cumulative Capacity Required by 2020
430	871	1,294	1,717

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A21: Additional Capacity Required to Recycle and Treat Hazardous Waste by 2005 and 2021 ('000 tonnes)

Additional Capacity Required by 2005	Equivalent No. of Facilities (@25ktpa)	Additional Capacity Required by 2020	Equivalent No. of Facilities (@25ktpa)
15	1	18	1

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.7 Number of Facilities Required

A4.7.1 The West Midlands Regional Assembly carried out a study into future capacity requirements across the region in the report entitled 'West Midlands Waste Facilities: Phase 2: Future Capacity Requirements' (Shropshire County Council, 2004). Table 20 extracts the requirements for Warwickshire, setting out the number of facilities required in Warwickshire in order to make adequate provision for waste disposal between 2001 and 2021.

A4.7.2 Most of the facilities will have to deal with approximately 25,000 tonnes of waste per annum, but there is also a requirement for one construction and demolition recycling facility to deal with 100,000 tonnes per annum and one municipal recovery facility to deal with 250,000 tonnes per annum.

Table A22: Additional Waste Management Facilities Required to Manage Waste in the West Midlands Region by Type of Capacity 2001-2021 ('000 tonnes)

Municipal Recycling Facilities	Municipal Recovery Facility	Municipal Recovery Facility	Industrial & Commercial Recycling and Recovery	Construction & Demolition Recycling	Construction & Demolition Engineering & Voids	Hazardous Waste Recycling & Recovery	Non-Hazardous Landfill	Hazardous Landfill
25	25	250	25	100	(Cumulative Void)	25	(Cumulative Void)	(Cumulative Void)
4 No	5 No	1 No	10 No	5 No	4,336	1 No	1,114	1,717

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.7.3 The following tables provide an indication of the future capacity requirement to 2021 for Warwickshire.

Table A23: Indicative Future Capacity Required 2001 – 2021 ('000 tonnes)

Future Requirement by Type of Capacity	Existing Capacity (2001)	Capacity required at 2005	Capacity Required at 2010	Capacity Required at 2015	Capacity Required at 2021
Recycling / Recovery and Treatment					
Municipal Recycling	14	75	104	117	119
Municipal Recovery	0	58	49	114	116
Industrial and Commercial Recycling and Recovery	207	413	424	435	446
Construction and Demolition Recycling	0	594	500	490	490
Construction and Demolition Engineering Uses	705	1,500	2,289	2,908	3,527
Hazardous Recycling and Recovery	0	15	18	18	18
Disposal					
Non-Hazardous	9,260	2,995	5,689	8,049	10,374
Hazardous	0	430	871	1,294	1,717

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

Table A24: Number of Additional Recycling and Recovery Facilities Required 2005 and 2020 ('000 tonnes)

Future Requirement by Type of Capacity	Existing Capacity	Additional Capacity Required by 2005	Equivalent No. of Facilities	Additional Capacity Required by 2021	Equivalent No. Facilities
Municipal Recycling	0	61	2(3)	105	4(5)
Municipal Recovery (Recycling)	0	58	2(3)	116	5
Industrial and Commercial Recycling and Recovery	207	206	8(9)	239	10
Construction and Demolition Recycling	0	594	6	490	5
Hazardous Recycling and Recovery	0	15	1	18	1
Total	207	934	19(22)	968	25(26)

Source: WCC / DEFRA Waste Implementation Programme (LASU) June 2005 and WMRA Scenarios Study

A4.7.4 The following table outlines the existing facilities in Warwickshire used for municipal waste disposal and treatment (facilities outside Warwickshire are also used, but not recorded in this table). It also includes facilities required for future management of the county's municipal waste as identified in the Municipal Waste Management Strategy.

Table A25: Plans for New Facilities for Municipal Waste

Existing Facilities	Proposed Facilities
5 x landfill sites 3 x treatment / transfer stations 3 x green waste composting sites	3 x in-vessel composting facilities proposed 1 x transfer facility 1 x thermal treatment facility

Source: Warwickshire County Council, 2006

A4.8 Waste Treatment Processes

A4.8.1 The main waste treatment processes are biological, mechanical, thermal, advance thermal and landfill. The following section provides additional detail on these treatment processes to supplement consideration of the preferred option for this issue.

Biological Processes

This section provides details on the biological processes that have been considered in developing options for this issue.

A4.8.2 Windrow Composting

This is the aerobic decomposition of mixed and shredded organic waste using open linear heaps called “windrows”, that stand at approximately 3 metres in height and 4 to 6 metres across the base. This composting process involves the mechanical turning of waste until the desired temperature and residence times are achieved to enable effective degradation with the process taking about three months. The result of this process is a bulk-reduced, stabilised residue known as compost although it would be better described as a soil improver. Windrow composting can take place outside or in a large building.

A4.8.3 In-vessel Composting

In-vessel composting involves aerobic digestion undertaken within an enclosed container and the control systems for material degradation are fully automated. The odour, moisture and temperature can be regulated and the resultant product is biologically stable compost. This process is quicker than windrow composting. It is more common for this process to be used for the composting of food waste including those from animal sources.

A4.8.4 Anaerobic Composting (Digestion)

This is a process in that biodegradable material is encouraged to break down in the absence of oxygen. The waste is broken down in an enclosed vessel under controlled conditions that results in the production of digestate and biogas. The biogas is captured and converted to energy. The digestate can be used as a soil improver either directly as a liquid or dried and then applied as a dried solid.

Mechanical Processes

This section outlines the available options in respect of mechanical processes for waste treatment.

A4.8.5 Clean/Dry Materials Recovery Facility (MRF)

This is where dry recyclables are taken to a purposely-designed building for secondary sorting and processing prior to export to

specialist industry processing facilities. Sorting is often undertaken manually but with improved technology mechanical sorting will become commonplace.

A4.8.6 Mechanical Biological Treatment (MBT)

Mechanical Biological treatment (MBT) is a term that encompasses a very wide range of technologies, that aim to process waste by a mixture of mechanical and biological separation. The two approaches are:

- Mechanical biological (MBT) – Waste is mechanically sorted followed by composting or anaerobic digestion (AD) of the separated biodegradable fraction;
- Biological mechanical (BMT) – Biological treatment (biological drying through composting) of the waste stream is undertaken before mechanical sorting of the waste.

Generally, the outputs from the MBT processes are:

- Recyclable materials such as metals and glass;
- An organic rich fraction that can be composted or treated in AD to produce a compost product/digestate;
- A fuel product that can either be burnt in an on site combustion unit, sent for combustion off-site such as cement kilns, power stations, or treated by gasification to produce a gas that is then burnt to produce electricity;
- Rejects that have to be landfilled.

There are three main types of MBT process:

- Production of both a refuse derived fuel (RDF) product and a compost product;
- Production of an RDF product;
- Production of a compost product.

Thermal Processes

The following section identifies the predominant thermal processes that have been considered within this issues and options report.

A4.8.7 Large-scale Thermal Treatment (Incineration)

A4.8.7.1 The most common Energy from Waste (EfW) systems are based on grate technology and are capable of burning waste that has not been pre-treated. Other technologies such as rotary and oscillating kilns are also used with untreated waste. The waste is delivered to the site where it is tipped into a concrete pit. From there it is loaded by grab-crane into a hopper. From the hopper the waste is fed onto the grate, where it burns in an updraft of air blown into the combustion zone by fans from below. Combustion air is also added to the combustion chamber above the grate to burn the volatile gases evolved. Waste continuously enters one end of the furnace and ash is continuously discharged at the other. The hot combustion gases then flow across

banks of boiler tubes where heat is transferred to water, generating steam. The steam can be passed through a steam turbine that can be used to drive an electrical generator, may be supplied to heating networks, or in combination as Combined Heat and Power (CHP).

A4.8.7.2 An alternative is fluidised bed combustion (FBC). In fluidised beds the burning fuel is suspended in an upward flowing stream of air. This takes place in a furnace section containing a bed of refractory sand or limestone supported by an air distributor plate or nozzle system. The bed resembles a violently boiling liquid. The refractory sand or limestone bed material is usually present in larger quantities than the waste itself, and this gives it a high thermal mass, that allows operation with waste of highly variable properties.

Advanced Thermal Processes

A4.8.8 Pyrolysis

Pyrolysis is thermal degradation of a material in the complete absence of an oxidising agent (e.g. air or oxygen). In practice, complete elimination of air is very difficult and some oxidation is likely to occur. Typically the process occurs at temperatures in the range 400-800°C. When applied to waste materials, the action of heat breaks complex molecules into simpler ones. This results in the production of gas, liquid and chars. These products can have several uses depending on the nature of the feedstock, however for waste based feedstocks the most likely use is as a fuel for energy generation.

A4.8.9 Gasification

Gasification is the conversion of a solid or liquid feedstock into a gas by partial oxidation under the application of heat. Partial oxidation is achieved by restricting the supply of oxidant that is normally air. For organic based feedstock's, such as most wastes, the resultant gas is typically a mixture of carbon monoxide, carbon dioxide, hydrogen, methane, water, nitrogen and small amounts of higher hydrocarbons. However, the gas will contain tars and particulate matter, that may need to be removed before the gas is suitable for combustion. The degree of this contamination will depend on the gasification technology used.

A4.8.10 Steam treatment (Autoclave)

A4.8.10.1 The main type of steam treatment process uses an autoclave system, where waste and steam are fed into a drum together. The combination of water and heat provided by the steam causes the paper and organic materials in the waste to break down and produce a "crumb" type of material. This process is undertaken in batches and takes about 45 minutes. The processed waste is discharged from the drum and fed into a mechanical sorting circuit that segregates a paper/organic product (Refuse Derived Fuel), glass, plastic and metal for recycling.

A4.8.10.2 An alternative approach is to use a combination of water and heat rather than steam. The residual waste is initially mixed with water and the heat is provided by warm air. These differences allow the process to operate continuously rather than in a batch mode. Once this stage of the processing has been completed the remaining mechanical sorting circuit will be the same as for the steam treatment.

Other Processes

A4.8.11 Household Waste Recycling Centres (Civic Amenity Sites)

A Household Waste Recycling Centre is a facility where the public can dispose of bulky household waste. They include the provision of recycling points for the opportunity to recycle a range of materials.

A4.8.12 Bring Sites

Bring sites include bottle and paper banks and are facilities provided at supermarkets and other locations that are visited regularly by householders in that recyclable waste may be deposited.

A4.8.13 Waste Transfer Stations

This is a facility that waste is delivered to for bulking / handling / sorting prior to transfer to another place for recycling, treatment or disposal. Waste from collection vehicles may be stored temporarily prior to onward movement in bulk to a treatment or disposal site.

A4.8.14 Landfill

Landfill is the controlled deposit of waste into or onto land. Minerals workings and extraction sites are used as landfills providing a means to restore the land. Where excavations for landfill are not available it may be possible to deposit waste onto the ground surface and create a waste disposal site – this is known as landraising.

Appendix 5: Key Issue 1: Delivering Sustainable Waste Management Practices

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
1	Conserve and enhance biodiversity	Likely that local biodiversity would be protected as a result of holistic planning approach, despite additional waste management sites being developed.	In the short term there is unlikely to be a benefit to local biodiversity.	0	+	++	Beneficial effects will not be realised immediately.	Good opportunity for siting on brownfield land, thereby improving the local biodiversity. Care should be taken to preserve the 18 ⁴ Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 ⁵ Country Parks, 62 ⁶ Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2	Protect and improve water resources	Despite a contribution to local water resources there is the opportunity to incorporate improvements. Opportunity to improve water resources.	Because additional sites will need to be developed, there is potential for both positive and negative effects on water resources.	0	+	+	Benefits to water resources will need to be outweighed by demand arising from additional sites being developed as well as contribution of these sites to the local water environment.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Site selection is critical in this regard.	+	+	+	Flood risk will be managed despite additional sites being developed	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.

⁴ www.english-nature.org.uk

⁵ www.warwickshire.gov.uk

⁶ www.english-nature.org.uk

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0,-, -/-)					
			ST	MT	LT			
4	To safeguard environmental quality in order to minimise potential impacts on community health	Prudent site selection will serve to enhance the environment as well as protect human health.	Site selection is critical for this SA Objective to be achieved.	+	+	+	Promotes sustainable waste management.	Consultation will seek to incorporate any concerns the public may have with additional sites being developed. It is key that new sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	This option seeks to integrate planning policy considerations as well as protect the environment. Proper site development should enhance the local townscape or landscape in the long term.	Probable that the development of new sites would have a minor negative impact on landscape and townscape particularly in the short term.	-	0	+	Short term impact on the character of the landscape or townscape.	Site selection as well as site development is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the 112 Conservation areas and 5913 listed buildings. Warwickshire has a substantial cultural heritage resource.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
7	Protect soil resources	Integrated planning should protect soil resources by the promotion of brownfield development	Soil resources is unlikely to be protected in the short term, should greenfield sites be developed over appropriate brownfield sites.	0	0	+	Likely that soil resources will not be impacted in the short and medium term. In the longer term however, there may be the opportunity to enhance soil resources through brownfield development.	Opportunity to develop brownfield sites thereby improving soil resources.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	The selection of energy efficient equipment is key to meeting this objective of cleaner production.	Likely that the operation of additional sites would not contribute to the overall goal of carbon reduction targets. This however should be minimised some what by the reduction in rate of waste generation in the longer term.	0	0	-	The selection of energy efficient equipment is key to meeting this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
10	Reduce consumption of natural resources	Over time the amount of waste generated will decrease as the drive to push waste up the waste hierarchy is achieved.	In the long term there should be a reduced rate of growth in the amount of waste generated. In the short and medium term however there would be an increase in the consumption of natural resources as a result of additional sites being developed.	-	-	0	The addition of new sites will increase the consumption of natural resources in the short and medium term.	Increase the quantity of waste being recycled or re-used.
11	To promote adherence to the movement of waste up the waste hierarchy	In the long term waste should be moved up the waste hierarchy.	The addition of new sites would increase the quantity of waste being appropriately managed. It would therefore not be as critical to enforce waste being moved up the waste hierarchy, in comparison to these additional sites being developed.	-	-	0	In the short or medium term more waste will need to be treated. In the long term however, the rate of growth in waste produced should decline.	Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to integrate planning policy considerations as well as protect human health and the environment. Likely that the local community would be consulted at key stages of site development.	Important that the local community be consulted to ensure that comments and concerns are taken on board at an early stage.	+	+	+	By consulting with the public at an early stage, concerns which they may have will be addressed at an early stage and creates opportunities to improve their local environment.	Ensure full community support through early consultation.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
13	Improve accessibility to waste management services and facilities	This option seeks to integrate planning policy considerations including transport. It is likely that this SA Objective will be met.	Transport related impacts should be addressed through appropriate site selection and provision for adequate transport related infrastructure to meet future long term demands.	+	+	+	Site selection should aim to reduce the distance required to travel to waste management facilities.	The selection of brownfield sites would improve upon any existing infrastructure, thereby reducing the number of new roads required.
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate planning policy considerations with transport, human health, the environment and sustainable economic growth.		+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire.	With good site selection, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The Plan would meet this SA objective.		++	++	++	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	In the short and medium term this SA Objective will be met, it is important however that this is kept in line with new technologies.	Ensure environmental technologies used are kept in line with current cleaner technology advancements.	++	++	+	The benefits to be derived in the short and medium term are substantial.	

Key Issue 2: Municipal Waste Management Practices

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
1	Conserve and enhance biodiversity	Once waste management sites are selected based on preservation of the local biodiversity assets over the proximity principle, it is likely that this SA Objective will be met and a beneficial impact be realised as a result of self sufficiency, proximity and diversification of waste management facilities (reduced reliance on landfill).	Any impact on local biodiversity would be dependant on the location of waste management facilities. Not only will the proximity principle need to be applied, but more importantly the local biodiversity resource need to be protected.	0	+	+	Beneficial effects will be realised in the medium and long term.	Diversification of waste management facilities will place less reliance on landfill. The objectives of self-sufficiency and proximity would seek to enhance biodiversity, once appropriate and diligent site selection is performed. Care should be taken to preserve the 18 Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 Country Parks, 62 Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2	Protect and improve water resources	Generally cleaner technologies should be adopted in new waste management facilities and should protect and improve local water resources in the long term.	Because additional sites will need to be developed, there will be a contribution to local water resources both in the short and medium terms.	0	0	+	Benefits to water resources will need to be outweighed by demand arising from additional sites being developed as well as contribution of these sites to the local water environment.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Because additional waste management sites will be required, proper site selection is critical to reduce and manage flood risk.	+	+	+	Flood risk will be managed despite additional sites being developed, as a result of appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0,-, -/)					
			ST	MT	LT			
4	To safeguard environmental quality in order to minimise potential impacts on community health	Prudent site selection will serve to enhance the environment as well as protect human health.	Site selection is critical for this SA Objective to be achieved.	+	+	+	Promotes sustainable waste management.	Consultation will seek to incorporate any concerns the public may have with additional sites being developed. It is key that new sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the long term less reliance on landfill (as a result of diversification) would have a positive impact on the County's landscape and townscape.	In the short term the need for additional waste management treatment sites would have an impact on the landscape/townscape (the extent would largely depend on the location of additional sites). In the medium term the development of additional waste management sites should balance the reduced reliance on landfill.	-	0	+	Short term impact on the character of the landscape or townscape.	Site selection as well as site development is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the 112 Conservation areas and 5913 listed buildings.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0,-, -/-)					
			ST	MT	LT			
7	Protect soil resources	Integrated planning should protect soil resources by the promotion of brownfield development. The diversification of waste management facilities should place less reliance on landfill and thereby reduce the extent of potential impacts associated with soil resources.	Potential impacts on soil resources as a result of additional sites being required will be balanced off by the reduced reliance on landfill.	0	+	+	Likely that soil resources will not be impacted in the short term. In the medium and longer term however, there may be the opportunity to enhance soil resources through brownfield development and through less reliance on landfill.	Opportunity to diversify waste management facilities thereby placing less reliance on landfill and over time improving soil resources.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	The selection of energy efficient equipment is key to meeting this objective of reduced carbon emissions. The diversification of waste management practices means there is great opportunity to meet this SA Objective as a result of new treatment facilities opening up novel opportunities and in addition reducing the reliance on landfill.	Likely that the need for additional sites would not contribute in the short term to the overall goal of carbon reduction targets. This however should change in the medium and long term as reduced transport requirements should bring about beneficial impacts.	0	+	++	The addition of new sites may increase the overall carbon load, but this may be offset by reduced transport. The selection of energy efficient equipment is key to meeting this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.
10	Reduce consumption of natural resources	In the long term proximity coupled with self sufficiency should have a beneficial impact with regard to consumption of natural resources, through initiatives such as energy from waste and applying the waste hierarchy.	In the short term there would be an increase in the consumption of natural resources as a result of additional sites being developed. In the medium term the consumption should balance the energy generated.	-	0	+	The addition of new sites will increase the consumption of natural resources in the short term.	Increase the quantity of waste being recycled or re-used. Sites becoming self-sufficient and closer to the origin, coupled with less reliance on landfill would all achieve a beneficial impact with regard to reduced consumption of natural resources.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
11	To promote adherence to the movement of waste up the waste hierarchy	In the long term waste should be moved up the waste hierarchy as a result of recycling targets and municipal growth rates reducing over time.	The addition of new sites would increase the quantity of waste being appropriately managed. It would therefore not be as critical to enforce waste being moved up the waste hierarchy, in comparison to these additional sites not being developed.	-	-	0	In the short or medium term more waste will need to be treated. In the long term however, the rate of growth in waste produced should decline and the recycling targets met.	Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to diversify waste management, improve self-sufficiency and incorporate the principles of proximity. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	0	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment.	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	This option seeks to promote the proximity principle which should improve accessibility to facilities. Once the most appropriate sites have been identified, proximity and improved accessibility would ensure that this SA Objective will be met.	Transport related impacts should be addressed through appropriate site selection and provision for adequate transport related infrastructure to meet future long term demands.	+	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	The selection of brownfield sites would improve upon any existing infrastructure, thereby reducing the number of new roads required.
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency and diversity which should contribute to sustainable economic growth.		+	++	++	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		++	++	++	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment facilities, self sufficiency as a result of waste to energy contributions as well as proximity.	Ensure environmental technologies used are kept in line with advancements in cleaner technology.	++	++	++	The benefits to be derived are substantial.	

Key Issue 3: Industrial and Commercial Waste Management Practices

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/-)				
				ST	MT	LT		
1	Conserve and enhance biodiversity	Once waste management sites are selected based on preservation of the local biodiversity assets over the proximity principle, it is likely that this SA Objective will be met and a beneficial impact be realised as a result of self sufficiency, proximity and diversion from landfill sites. In the long term a beneficial impact will be realised with respect to this objective, as less industrial and commercial waste would be sent to landfill and such facilities become self-sufficient.	Any impact on local biodiversity would be dependant on the location of industrial and commercial waste management facilities. Not only will the proximity principle need to be applied, but more importantly the local biodiversity resources need to be protected.	0	0	+	Beneficial effects will be realised in the long term.	Diversion of industrial and commercial waste from landfill coupled with self-sufficiency and proximity would seek to enhance biodiversity, once appropriate and diligent site selection is performed. Care should be taken to preserve the 18 Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 Country Parks, 62 Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2	Protect and improve water resources	Less industrial and commercial contributions to landfill should put less demand on water resources. Generally cleaner technologies should be adopted in new waste management facilities to treat such waste and this in addition to proximity and self sufficiency should essentially protect and improve local water resources in the long term.	Because additional sites will need to be developed or existing sites expanded, there may be positive and negative effects on local water resources both in the short and medium terms.	0	0	+	Benefits to water resources will need to be outweighed by demand (arising from additional sites being developed or existing sites expanded as well as contribution of these sites to the local water environment).	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Because additional waste management sites may be required or existing sites expanded, proper site selection is critical to reduce and manage flood risk.	+	+	+	Flood risk will be managed despite additional sites being developed, as a result of appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
							risk.	
4	To safeguard environmental quality in order to minimise potential impacts on community health	Prudent site selection will serve to enhance the environment as well as protect human health.	Site selection is critical for this SA Objective to be achieved.	+	+	+	Promotes sustainable waste management as more industrial and commercial waste is diverted from landfill.	Consultation will seek to incorporate any concerns the public may have with additional sites being developed. It is key that new sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the long term less reliance on landfill (as a result of diversion) would have a positive impact on the County's landscape and townscape.	In the short term the need for additional industrial and commercial waste management treatment sites would have an impact on the landscape/townscape (the extent would largely depend on the location of additional sites). In the medium term the development of additional waste management sites should balance the reduced reliance on landfill.	-	0	+	Short term impact on the character of the landscape or townscape.	Site selection as well as site development is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
7	Protect soil resources	Integrated planning should protect soil resources by the promotion of brownfield development. The diversion of industrial and commercial waste will place less reliance on landfill and thereby reduce the extent of potential impacts associated with soil resources.	Potential impacts on soil resources as a result of additional sites being required will be balanced off by the reduced reliance on landfill.	0	+	+	Likely that soil resources will not be impacted in the short term. In the medium and longer term however, there may be the opportunity to enhance soil resources through brownfield development and through less reliance on landfill.	Opportunity to diversify waste management facilities thereby placing less reliance on landfill and over time improving soil resources.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	The selection of energy efficient equipment is key to meeting this objective of reduced carbon emissions. The diversification of waste management practices means there is great opportunity to meet this SA Objective as a result of new treatment facilities opening up novel opportunities and in addition reducing the reliance on landfill.	Likely that the need for additional sites would not contribute in the short term to the overall goal of carbon reduction targets. This however should change in the medium and long term through less reliance on landfill and reduced transportation requirements.	0	+	++	The addition of new sites will increase the overall carbon load. The selection of energy efficient equipment is key to meeting this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
10	Reduce consumption of natural resources	In the long term proximity coupled with self sufficiency should have a beneficial impact with regard to consumption of natural resources, through initiatives such as energy from waste and applying the waste hierarchy.	In the short term there would be an increase in the consumption of natural resources as a result of additional sites being developed. In the medium term the recovery and re-use consumption should balance.	-	0	+	The addition of new sites will increase the consumption of natural resources in the short term.	Increase the quantity of waste being recycled or re-used. Sites becoming self-sufficient and closer to the origin, coupled with less reliance on landfill would all achieve a beneficial impact with regard to reduced consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	In the long and medium term waste should be moved up the waste hierarchy as a result of recycling targets being met over time.	The addition of new sites would increase the quantity of waste being appropriately managed. It would therefore not be as critical to enforce waste being moved up the waste hierarchy, as compared to these additional sites not being developed.	0	+	+	In the medium and long term the rate of growth in industrial and commercial waste being produced should decline.	Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to diversify waste management, improve self-sufficiency and incorporate the principles of proximity. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	0	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment.	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	This option seeks to promote the proximity principle which should improve accessibility to industrial and commercial waste management facilities. Once the most appropriate sites have been identified, proximity and improved accessibility would ensure that this SA Objective will be met.	Transport related impacts should be addressed through appropriate site selection and provision for adequate transport related infrastructure to meet future long term demands.	+	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	The selection of brownfield sites would improve upon any existing infrastructure, thereby reducing the number of new roads required.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency and diversity which should contribute to sustainable economic growth.		+	++	++	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		++	++	++	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment facilities, self sufficiency as a result of waste to energy contributions as well as proximity.	Ensure environmental technologies used are kept in line with advancements in cleaner technology.	++	++	++	The benefits to be derived are substantial.	

Key Issue 4: Construction and Demolition Waste Management Practices

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
			Effect (+/, +, 0, -, -/)				
			ST	MT	LT		
1 Conserve and enhance biodiversity	This option seeks to minimise the volume of construction and demolition waste sent to landfill by actively encouraging its re-use in new builds. In the short and medium term it is likely that there would be benefits to local biodiversity as a result of proximity, self-sufficiency and active diversion from landfill sites. This should be more pronounced in the long term.	Incentives and other means of encouraging the re-use of construction and demolition waste should be sufficient to achieve a significant diversion from landfill. Regular review should be encouraged to ensure that this objective is being met.	+	+	++	Beneficial effects will be realised in the short and medium term, but more so in the long term.	Diversion of construction and demolition waste from landfill coupled with self-sufficiency and proximity would seek to enhance local diversity, once appropriate incentives are developed. Care should be taken to preserve the 18 Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 Country Parks, 62 Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2 Protect and improve water resources	Less construction and demolition contribution to landfill should put less demand on water resources, indirectly. The proximity and self-sufficiency objectives should essentially protect and improve local water resources in the medium and long term.	It is unlikely that any benefits achieved in the short term will be significant enough to have an overall beneficial impact.	0	+	+	Benefits to water resources should be outweighed by demand, particularly in the medium and long terms.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3 Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Because additional waste management sites may be required or existing sites expanded, proper site selection is critical to reduce and manage flood risk.	+	+	+	Flood risk will be managed despite additional sites having to be developed, as a result of appropriate site selection. Also, there is less likelihood of flood risk, as an ever increasing quantity of construction and demolition waste will be diverted away from landfill.	Any further sites that may become necessary should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
4	To safeguard environmental quality in order to minimise potential impacts on community health	Likely that this objective will serve to enhance the environment as well as protect human health.	Once proper monitoring is done to ensure that this objective is achieving the required benefits, it is unlikely that there would be negative effects on community health.	+	+	+	Promotes sustainable waste management as more construction and demolition waste is diverted from landfill.	Consultation will seek to incorporate any concerns the public may have with this option.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the medium and long term less reliance will be placed on landfill (as a result of diversion) which would have a positive impact on the County's landscape and townscape.	In the short term it is unlikely that any associated benefits will be significant enough to have an overall impact on Warwickshire's landscape and townscape.	0	+	+	Beneficial medium and long term impact on the character of the landscape or townscape.	Potential impacts to the landscape and townscape should be minimised through an increasing volume of construction and demolition waste being diverted from landfill. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of the core objectives of this Option being realised.	The local historical architectural and archaeological assets should be identified in the event that additional waste management sites become necessary.	0	0	0	Likely that such assets will be preserved and possibly improved, where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource and it is unlikely that this option would have a negative impact on any of the Conservation areas or listed buildings.
7	Protect soil resources	The diversion of construction and demolition waste will place less reliance on landfill and thereby reduce the extent of potential impacts associated with soil resources.	Potential impacts on soil resources as a result of additional sites being required should be balanced off by the marked reduced reliance on landfill.	0	+	+	Likely that soil resources will not be impacted in the short term. In the medium and longer term however beneficial impacts will be more significant.	Opportunity to improve local soil resources by placing less reliance on landfill.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through this option as the primary objective is to reduce the quantity of construction and demolition waste sent to landfill.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
9	To promote the delivery of energy efficiency and carbon reduction targets	In the medium and long term less construction and demolition waste will be directed to landfill (as a result of re-use in new builds) which would have a positive impact on the County's energy efficiency and contribute to carbon reduction targets.	Likely that any benefits derived would not be significant enough have a marked impact on the County's overall goal of carbon reduction and energy efficiency targets. This however should change in the medium and long term as more construction and demolition waste is re-used and less demand is therefore placed on natural resources for new construction material.	0	+	++	It is likely that the objectives identified under this option would promote energy efficiency and carbon reduction targets.	Regular monitoring is key to ensure targets are achieved.
10	Reduce consumption of natural resources	In the medium and long term, proximity, self sufficiency and a drive to re-use construction and demolition waste should have a beneficial impact with regard to reduced consumption of natural resources.	In the short term any beneficial impact would not be significant enough to have an overall effect on the County.	0	+	+	This option should significantly reduce the consumption of natural resources in the medium and long term.	Increase the quantity of construction and demolition waste being re-used. Operations becoming self-sufficient and closer to the origin, coupled with less contribution towards landfill would all achieve a beneficial impact with regard to reduced consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	This option should efficiently move waste up the waste hierarchy as a result of increased re-use of construction and demolition waste in new builds.		+	+	++	In the long term the re-use of construction and demolition waste should be significant enough to move waste up the waste hierarchy.	
12	Enfranchise the community in improving the local environment	This option seeks to increase the amount of waste that is re-used, improve self-sufficiency and incorporate the principles of proximity.		0	0	0	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment.	Ensure full community support through early consultation.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
13	Improve accessibility to waste management services and facilities	This option seeks to promote the proximity principle which should improve accessibility to related waste management facilities.	In the short and medium term it is unlikely that there would be a net beneficial impact on accessibility to waste management services and facilities.	0	0	+		
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to promote re-use, self-sufficiency and proximity, which should contribute to sustainable economic growth.		+	++	++	Likely that this Option would contribute to sustainable economic development for Warwickshire.	
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This option is likely to have no significant impact with respect to the encouragement of new and innovative environmental technologies.		0	0	0		

Key Issue 5: Hazardous Waste Management Practices

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/-)				
				S T	MT	LT		
1	Conserve and enhance biodiversity	Once hazardous waste management sites are selected based on preservation of the local biodiversity assets over the proximity principle, it is likely that this SA Objective will be met in the long term. Beneficial impacts may also be arise from the objectives of self sufficiency, proximity and diversion of hazardous wastes away from landfill sites.	In the short term there may be a negative impact associated with local biodiversity, the extent largely dependant on the proposed location of hazardous waste management sites and spatial extent. In the medium term such negative impacts may be balanced by positive impacts associated with less dependency on landfill sites, thereby achieving a neutral impact.	-	0	+	Beneficial effects resulting from additional hazardous waste management facilities should be realised in the long term.	Diversion of hazardous waste from landfill coupled with aims of self-sufficiency and proximity would seek to enhance diversity in the long term, once appropriate and diligent site selection is performed. Care should be taken to preserve the 18 Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 Country Parks, 62 Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2	Protect and improve water resources	Less hazardous waste contributions to landfill should put less demand on water resources. Generally cleaner technologies should be adopted in new hazardous waste management facilities and this in addition to proximity and self sufficiency should essentially protect and improve local water resources in the long term.	Because additional hazardous waste treatment sites will be required, there may be some construction related effects to local water resources in the short term. In the medium term however, the negative impact relating to additional sites being developed is balanced by the benefits to be derived from less hazardous waste being treated at landfill sites.	-	0	+	Benefits to water resources (as a result of less hazardous waste being treated at landfills) will need to be outweighed by demand (arising from additional sites being developed as well as contribution of these sites to the local water environment).	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Because additional hazardous waste management sites may be required, proper site selection is critical to reduce and manage flood risk.	0	0	0	Flood risk will be managed despite additional sites being developed, as a result of holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/)				
				S T	MT	LT		
4	To safeguard environmental quality in order to minimise potential impacts on community health	Prudent site selection will serve to enhance the environment as well as protect human health. In the long term it is likely that the benefits derived from diverting hazardous waste away from landfill will be significant.	Proper site selection is critical for this SA Objective to be achieved.	0	0	+	Promotes sustainable waste management as more hazardous waste is diverted from landfill.	Consultation will seek to incorporate any concerns the public may have with additional hazardous waste management sites being developed. It is key that new sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the long term less reliance on landfill (as a result of diversion) would have a positive impact on the County's landscape and townscape.	In the short term the need for additional hazardous waste management treatment sites would have an impact on the landscape/townscape (the extent would largely depend on the location and extent of additional sites). In the medium term the development of additional waste management sites should balance the reduced reliance on landfill.	-	0	+	Short term negative impact on the character of the landscape or townscape.	Site selection is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/)				
				S T	MT	LT		
7	Protect soil resources	The diversion of more hazardous waste from landfill should reduce the extent of potential impacts associated with soil resources.	Potential impacts on soil resources as a result of additional hazardous waste management sites being required will be balanced off by the reduced contribution of hazardous waste to landfill.	0	+	+	Likely that soil resources will not be impacted in the short term. In the medium and longer term however, there may be an overall beneficial impact on soil resources as hazardous waste management sites (directly reduce the reliance on landfill) become self-sufficient and closer to sources of origin.	Opportunity to diversify waste management facilities thereby placing less reliance on landfill and over time improving soil resources.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	The selection of energy efficient equipment is key to meeting this objective of reduced carbon emissions. The diversification of waste management practices means there is great opportunity to meet this SA Objective as a result of new treatment facilities opening up novel opportunities and in addition reducing the reliance on landfill.	Likely that the need for additional sites would not contribute in the short term to the overall goal of carbon reduction targets. This however should change in the medium and long term through less reliance on landfill and reduced transportation requirements.	0	+	++	The addition of new hazardous waste management sites will increase the overall carbon load. This will be balanced by reduced transportation. The selection of energy efficient equipment and self-sufficiency is key to meeting this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.
10	Reduce consumption of natural resources	In the long term proximity coupled with self sufficiency should have a beneficial impact with regard to consumption of natural resources, through initiatives such as energy from waste and applying the waste hierarchy	In the short term there would be an increase in the consumption of natural resources as a result of additional hazardous waste management sites being developed. In the medium term the recovery and re-use consumption should balance.	-	0	+	The addition of new hazardous waste management sites will increase the consumption of natural resources in the short term.	Sites becoming self-sufficient and closer to the origin of waste, coupled with less reliance on landfill would all achieve a beneficial impact with regard to reduced consumption of natural resources.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/-)				
				S T	MT	LT		
11	To promote adherence to the movement of waste up the waste hierarchy	In the long and medium term waste should be moved up the waste hierarchy as a result of diversification of management practices.	The addition of new hazardous waste management sites would increase the quantity of waste being appropriately managed. It would therefore not be as critical to enforce waste being moved up the waste hierarchy, as compared to these additional sites not being developed.	0	0	+	In the long term the efficiency of hazardous waste being managed should increase.	Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to diversify waste management, improve self-sufficiency and incorporate the principles of proximity. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	+	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment.	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	This option seeks to promote the waste hierarchy which should improve accessibility to hazardous waste management facilities. Once the most appropriate sites have been identified, proximity and improved accessibility should ensure that this SA Objective will be met.	Transport related impacts should be addressed through appropriate site selection and provision for adequate infrastructure to meet future long term demands.	0	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation			
			Effect (+/+, +, 0, -, -/)							
			S T	MT	LT					
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency and diversity which should contribute to sustainable economic growth.				+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.				+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment facilities, self sufficiency as a result of waste to energy contributions as well as proximity.	Ensure environmental technologies used are kept in line with advancements in cleaner technology.			++	++	++	The benefits to be derived are substantial.	

Key Issue 6: Waste Management Treatment and Disposal Options

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
1	Conserve and enhance biodiversity	This option seeks to incorporate a mixture of technologies including: Mechanical Biological Treatment plants; Materials Recovery Facilities; recycling and land filling of inactive material; energy recovery from biological processes; and most importantly incorporating a technology hierarchy which reflects the principles of the waste hierarchy. In the medium and long term this option is likely to promote beneficial impacts on local biodiversity.	In the short term it is likely that there will be no net impact on biodiversity.	0	+	++	This option diversifies future waste management, treatment and disposal measures by incorporating a wide range of alternative technologies all indirectly centred around waste hierarchy.	Diversification of alternative technologies should seek to enhance diversity in the medium and long term, once appropriate and diligent site selection is performed. Care should be taken to preserve the 18 Local Nature Reserves (LNR), one site of International Importance the Ensor's Pool SAC, 8 Country Parks, 62 Sites of Special Scientific Interest (SSSIs), part of the Cotswolds AONB.
2	Protect and improve water resources	It is anticipated that this option would bring about beneficial impacts associated with local water resources.	In the short term it is likely that there will be no net impact on local water resources.	0	+	++	This option seeks to strike the right balance between traditional and alternative technology dependant on the waste hierarchy. This makes potential impacts more predictable.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible.	Because additional waste management sites may be required, proper site selection is critical to reduce and manage flood risk.	0	0	0	Flood risk will be managed despite additional sites being developed, as a result of holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/)				
				ST	MT	LT		
4	To safeguard environmental quality in order to minimise potential impacts on community health	In terms of additional waste management site, prudent site selection will serve to enhance the environment as well as protect human health. Consultation is key to address any concerns the public may have with respect to community health. This may be particularly important in terms of alternative technologies where preconceived concerns may be an issue. In the medium and long term it is likely that benefits to community health will be realised.	In the short term no net beneficial impact is predicted in terms of community health.	0	+	+	This option promotes sustainable waste management through technology hierarchy which reflects the principles of the waste hierarchy.	Consultation will seek to incorporate any concerns the public may have in terms of alternative technologies being introduced. It is key that such technologies do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	Likely that diversification of waste treatment and disposal options would have a beneficial impact on the County's landscape and townscape in the medium and long term.	In the short term no net negative impact is predicted in terms of landscape and townscape.	0	+	+	Any alternative technology to be adopted would be sensitive to the County's assets in terms of landscape and townscape features.	Site selection and design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection and design as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0, -, -/)				
				ST	MT	LT		
7	Protect soil resources	This option seeks to diversify the treatment and disposal of waste by means of alternative and traditional means. The diversion of more waste from landfill in addition to more emphasis on energy recovery and recycling, should reduce the extent of potential impacts associated with soil resources. Opportunities exist particularly with respect to the biological and mechanical processes to improve soil conditions.		+	+	++	In the short, medium and longer term there is likely to be a significant beneficial impact on soil resources. This being a result of technological hierarchy of waste management treatment and disposal options.	Opportunity to diversify waste management facilities thereby placing less reliance on landfill and over time improving soil resources.
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	This Option seeks to promote alternative technologies in keeping with the waste hierarchy. Some of these technologies support energy recovery as part of waste treatment process.	Likely that the need for additional waste treatment and disposal sites would not contribute in the short term to the overall goal of carbon reduction targets. This however should change in the medium and long term as opportunities for more energy efficient process are realised. This compounded by less reliance on landfill should bring about beneficial impacts in the medium and long term.	0	+	+	The technology hierarchy which reflects the waste hierarchy is key in achieving this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
10	Reduce consumption of natural resources	In the long term this option should have a beneficial impact with regard to consumption of natural resources, through initiatives such as energy from waste and applying the waste hierarchy.	In the short term there would be an increase in the consumption of natural resources as a result of additional waste treatment and disposal sites being developed. In the medium term the recovery and re-use consumption should balance.	-	0	+	This Option seeks to strike a balance between traditional and alternative technology to bring about waste moving up the waste hierarchy.	Monitoring is key to ensure alternative technologies do in fact harvest energy and heat from waste and therefore reduce the consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	In the long and medium term waste should be moved up the waste hierarchy as a result of diversification of treatment and disposal technologies.	The addition of new waste treatment and disposal sites would increase the quantity of waste being appropriately managed. This diversification of technologies however is in line with the waste hierarchy and would meet this SA Objective in the medium and long term.	0	+	+		Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to diversify waste treatment and disposal through alternative technologies. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	+	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment.	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	This option seeks to promote the diversification of waste treatment and disposal. Once the most appropriate sites have been identified, this SA Objective should be met, as the technology hierarchy reflects the waste hierarchy.	Transport related impacts should be addressed through appropriate site selection and provision for adequate infrastructure to meet future long term demands.	0	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary/ Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation		
				Effect (+/+, +, 0,-, -/-)						
				ST	MT	LT				
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency, energy efficiency and diversity of treatment and disposal measures, which should contribute to sustainable economic growth.				+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.				+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment and disposal options.	Ensure environmental technologies used are kept in line with advancements in cleaner technology in the long term.			++	++	++	The benefits to be derived are substantial.	

Key Issue 7: Waste Management Location Options

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
			Effect (+/+, +, 0,-, -/-)				
			ST	MT	LT		
1 Conserve and enhance biodiversity	This option largely promotes waste management facilities to be developed in urban areas, except under some circumstances (such as landfill and composting facilities) where rural development may be more appropriate.	In the short term it is likely that there will be no net impact on biodiversity.	0	+	++	This option seeks to preserve local biodiversity by focussing facilities on the already developed urban areas.	Care should be taken to preserve the local biodiversity assets.
2 Protect and improve water resources	It is anticipated that this option would bring about beneficial impacts associated with local water resources.	In the short term it is likely that there will be no net impact on local water resources.	0	+	+	This option seeks to protect water resources by focussing facilities on already developed urban areas. This should place less demands on water resources in rural areas.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3 Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible, through control measures and appropriate drainage design urban areas.	In the short term no net effect is anticipated in terms of flood risk.	0	+	+	Flood risk will be managed despite additional sites being developed for landfill or composting in rural areas. This would be achieved through holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4 To safeguard environmental quality in order to minimise potential impacts on community health	In terms of additional waste management sites being developed in rural locations, prudent site selection will serve to enhance the environment as well as protect human health. However, with respect to waste management facilities being developed in urban areas, consultation is key to address any concerns the public may have with respect to community health. This may be particularly important in terms of alternative technologies where preconceived concerns may be an issue.	In the short, medium and long term it is not possible to determine whether there would be adverse impacts. This would be addressed through EIA.	0	0	0	This option promotes the development of waste management sites in urban areas. EIA would determine impacts at a local level.	Consultation will seek to incorporate any concerns the public may have in terms of alternative technologies being introduced. It is key that such technologies do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/+, +, 0,-, -/-)				
				ST	MT	LT		
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the medium and long term this option is likely to have a beneficial impact on the County's landscape and townscape.	In the short term not net impact is predicted in terms of landscape and townscape.	0	+	+	Any waste management facilities to be developed either in urban or rural areas would need to be sensitive to the County's assets in terms of landscape and townscape features.	Site selection and design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection and design as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.
7	Protect soil resources	This option seeks to concentrate waste disposal and treatment facilities in urban areas with the exception of landfill and composting facilities which would be better suited in rural areas. This is likely to have a beneficial impact on soil resources in the medium and long term, as less greenfield development is required.	In the short term no net impact is predicted for local soil resources.	0	+	+		
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	It is likely that this Option would bring about energy efficiency and carbon reduction in the long and medium term. This would largely be due to a diversification of waste treatment and disposal facilities,	In the short term no net impact is predicted in terms of energy efficiency and carbon reduction.	0	+	+	The appropriate use of technology, which reflects the waste hierarchy is key in achieving this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			ST	MT	LT			
		spread over largely urban but also some rural locations.						
10	Reduce consumption of natural resources	In the medium and long term this option should have a neutral impact with regard to consumption of natural resources, as energy and heat from waste is harvested and reused.	In the short term there would be an increase in the consumption of natural resources as a result of additional waste treatment and disposal sites being developed.	-	0	0		Monitoring is key to ensure alternative technologies do in fact harvest energy and heat from waste and therefore reduce the consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	In the long and medium term waste should be moved up the waste hierarchy as a result of diversification of treatment and disposal technologies. The location of facilities is secondary in achieving this objective.	The addition of new waste treatment and disposal sites would increase the quantity of waste being appropriately managed. This diversification of technologies however is in line with the waste hierarchy and would meet this SA Objective in the medium and long term.	0	+	+		Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to concentrate facilities in urban areas especially with respect to the diversification of waste treatment and disposal through alternative technologies. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices, particularly if these are to be developed in urban areas.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	+	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment. In the long term it is likely that a beneficial impact would be achieved.	Ensure full community support through early consultation.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+ / +, +, 0, -, - / -)				
				ST	MT	LT		
13	Improve accessibility to waste management services and facilities	This option seeks to promote the development of waste treatment and disposal facilities in urban areas. Once the most appropriate sites have been identified, this SA Objective should be met, as the appropriate use of technology should reflect the waste hierarchy.	Transport related impacts should be addressed through appropriate site selection and provision for adequate infrastructure to meet future long term demands.	0	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency, energy efficiency and diversity of treatment and disposal measures, which should contribute to sustainable economic growth particularly as facilities are primarily focussed on urban areas (with landfill and composting facilities being targeted for rural locations).		+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the employment opportunities generated as well as waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment and disposal options.	Ensure environmental technologies used are kept in line with advancements in cleaner technology in the long term.	++	++	++	The benefits to be derived are substantial.	

Key Issue 8: Scale of Waste Management Facilities

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/+, +, 0,-, -/-)					
			S T	M T	LT			
1	Conserve and enhance biodiversity	This option promotes larger centralised waste management facilities to be supported by smaller facilities. It is anticipated that local biodiversity would be enhanced in the long terms as such facilities would be developed in suitable urban locations.	In the short and medium term it is likely that there will be no net impact on biodiversity.	0	0	+	This option seeks to preserve local biodiversity by designing an appropriate scale of facility for the receiving environment.	Care should be taken to preserve the local biodiversity assets.
2	Protect and improve water resources	It is anticipated that that larger centralised facilities, supported by smaller facilities would bring about beneficial impacts associated with local water resources in the medium and long term, especially if these are to be developed in urban areas.	In the short term it is likely that there will be no net impact on local water resources.	0	+	+	This option seeks to protect water resources by focussing larger centralised facilities where water management will be an integral element of design.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible, especially as centralised waste management sites will provide for a high level of water management.	In the short term no net effect is anticipated in terms of flood risk.	0	+	+	Flood risk will be managed despite additional sites being developed for landfill or composting in rural areas. This would be achieved through holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4	To safeguard environmental quality in order to minimise potential impacts on community health	In terms of additional centralised waste management site being developed in rural locations, prudent site selection will serve to enhance the environment as well as protect human health. However, with respect to centralised waste management facilities being developed in urban areas, consultation is key to address any concerns the public may have with respect to community health.	In the short and medium term no net impact is predicted for local community health.	0	0	+	This option promotes the development of large centralised waste management sites supported by smaller facilities. In the short and medium term beneficial impacts on biodiversity and proximity may be balanced off by the close proximity to residential areas.	Consultation will seek to incorporate any concerns the public may have in terms of alternative technologies being introduced. It is key that such technologies do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0,-, -/-)					
			S T	M T	LT			
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the medium and long term this option of larger centralised facilities is likely to have a beneficial impact on the County's landscape and townscape.	In the short term no net impact is predicted in terms of landscape and townscape.	0	+	+	Any waste management facilities to be developed either in urban or rural areas would need to be sensitive to the County's assets in terms of landscape and townscape features.	Site selection and design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection and design as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.
7	Protect soil resources	This option seeks to concentrate on naturalised facilities supporting smaller facilities. This is likely to have a beneficial impact on soil resources in the medium and long term, as less cumulative greenfield development is likely to be required.	In the short term not net impact is predicted for local soil resources.	0	+	+		
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0,-, -/-)					
			S T	M T	LT			
9	To promote the delivery of energy efficiency and carbon reduction targets	It is likely that this Option would bring about energy efficiency and carbon reduction in the long term. This would largely be due to a diversification of waste treatment and disposal facilities, spread over largely urban but also some rural locations, with particular emphasis on larger centralised facilities.	In the short and medium term no net impact is predicted in terms of energy efficiency and carbon reduction.	0	0	+	The appropriate use of technology, which reflects the waste hierarchy is key in achieving this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.
10	Reduce consumption of natural resources	In the medium and long term this option should have a neutral impact with regard to consumption of natural resources, as energy management is effectively controlled for larger facilities.	In the short term there would be an increase in the consumption of natural resources as a result of additional waste treatment and disposal sites being developed.	-	0	0		Monitoring is key to ensure alternative technologies do in fact harvest energy and heat from waste and therefore reduce the consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	In the long term waste should be moved up the waste hierarchy as a result of diversification of treatment and disposal technologies. The scale of facilities is secondary in achieving this objective.	The addition of new waste treatment and disposal sites would increase the quantity of waste being appropriately managed. This diversification of technologies however is in line with the waste hierarchy and would meet this SA Objective in the long term.	0	0	+		Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	This option seeks to promote the development of centralised waste treatment and disposal facilities. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices, particularly if these are to be developed in urban areas.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	-	0	+	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment. In the long term it is likely that a beneficial impact would be achieved.	Ensure full community support through early consultation.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0,-, -/-)				
				S T	M T	LT		
13	Improve accessibility to waste management services and facilities	This option seeks to promote the development of centralised waste treatment and disposal facilities. Once the most appropriate sites have been identified, this SA Objective should be met, as the scale of treatment facility should more closely match accessibility needs reflects the waste hierarchy.	Transport related impacts should be addressed through appropriate site selection and provision for adequate infrastructure to meet future long term demands.	0	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to incorporate self-sufficiency, energy efficiency and diversity of treatment and disposal measures, which should contribute to sustainable economic growth particularly as facilities are primarily focussed on urban areas (with landfill and composting facilities being targeted for rural locations).		+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the employment opportunities generated as well as waste to energy contributions.	With good site selection and energy efficient equipment, economic development can be achieved while protecting the environment and community.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment and disposal options.	Ensure environmental technologies used are kept in line with advancements in cleaner technology in the long term.	++	++	++	The benefits to be derived are substantial.	

Key Issue 9: Utilisation of Existing Sites and New Sites

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
			Effect (+/-, +, 0, -, -/-)				
			ST	MT	LT		
1 Conserve and enhance biodiversity	This option promotes a fit for purpose approach to sites being developed. This option seeks to extend existing waste management facilities, industrial, contaminated or vacant land. This Option provides enormous scope for improving conditions thereby enhancing local biodiversity.		+	+	++	This option seeks to preserve local biodiversity by developing waste management facilities on brownfield land, which provides opportunities for improvement.	
2 Protect and improve water resources	It is anticipated that by utilising brownfield land for additional waste treatment and disposal facilities, beneficial impact should be realised with respect to local water resources in the medium and long term.	In the short term it is likely that there will be no net impact on local water resources.	0	+	+	This option seeks to protect water resources by focussing facility development on brownfield sites. This should improve localised ground conditions thereby improving water resources.	Continual monitoring will be required to ensure water resources are not compromised, in particular the Avon Catchment and the Tame Catchment.
3 Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible, especially as waste management sites will be focussed largely on brownfield areas.	In the short and medium term no net effect is anticipated in terms of flood risk.	0	0	+	Flood risk will be managed despite additional sites being developed. This would be achieved through holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4 To safeguard environmental quality in order to minimise potential impacts on community health	Additional waste management sites are to be largely developed on brownfield sites and should serve to enhance the environment as well as protect human health. However, consultation is key to address any concerns the public may have with respect to community health.	In the short term no net impact is predicted for local community health.	0	+	+	This option promotes the development of waste management sites on sites fit for purpose. This should bring about beneficial impacts in the medium and long term.	Consultation will seek to incorporate any concerns the public may have in terms of alternative technologies being introduced. It is key that such technologies do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0, -, -/)					
			ST	MT	LT			
5	To conserve and enhance the character and quality of the County's landscape and townscapes	In the medium and long term this option of facilities being developed on brownfield land, is likely to have a beneficial impact on the County's landscape and townscape.	In the short term no net impact is predicted in terms of landscape and townscape.	0	+	+	Any waste management facilities to be developed either in urban or rural areas would need to be sensitive to the County's assets in terms of landscape and townscape features.	Design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	These SA Objectives should be met as a result of integrated planning policy considerations.	The local historical architectural and archaeological assets should be identified at an early stage to ensure their protection as well as influence site selection and design as necessary.	0	0	0	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource. Timely walkover surveys should be performed in areas where archaeological assets are likely to be found. This would serve to identify and protect the Conservation areas and listed buildings.
7	Protect soil resources	This option seeks to develop waste disposal and treatment facilities on brownfield land, fit for purpose. This is likely to have a beneficial impact on soil resources in the medium and long term, as less greenfield development will be required.	In the short term no net impact is predicted for local soil resources.	0	+	+		
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	It is likely that this Option would bring about energy efficiency and carbon reduction in the long term. This would largely be due to opportunities to enhance existing waste management practices.	In the short and medium term no net impact is predicted in terms of energy efficiency and carbon reduction.	0	0	+	The appropriate use of technology .which reflects the waste hierarchy is key in achieving this SA Objective.	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0, -, -/)					
			ST	MT	LT			
10	Reduce consumption of natural resources	In the medium and long term this option should have a neutral impact with regard to consumption of natural resources, as opportunities to enhance existing treatment processes will be sought.	In the short term there would be an increase in the consumption of natural resources as a result of additional waste treatment and disposal sites being developed.	-	0	0	Monitoring is key to ensure alternative technologies do in fact harvest energy and heat from waste and therefore reduce the consumption of natural resources.	
11	To promote adherence to the movement of waste up the waste hierarchy	In the long term waste should be moved up the waste hierarchy as a result of diversification of treatment and disposal technologies. The location of facilities is secondary in achieving this objective.	The addition of new waste treatment and disposal sites would increase the quantity of waste being appropriately managed. This diversification of technologies however is in line with the waste hierarchy and would meet this SA Objective in the long term.	0	0	+	Create incentives that will encourage the timely movement of waste up the waste hierarchy.	
12	Enfranchise the community in improving the local environment	This option seeks to concentrate facilities on brownfield land. In the short term it is anticipated that close community involvement would be key, as there may be uninformed objections to some waste management practices, particularly if these are to be developed in urban areas.	Important that the local community be consulted at the earliest stage possible, to ensure that their concerns are taken on board in a timely fashion.	0	0	+	By consulting with the public at an early stage, concerns which they may have will be addressed thereby creating opportunities to improve the local environment. In the long term it is likely that a beneficial impact would be achieved.	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	This option seeks to promote the development waste treatment and disposal facilities on brownfield areas. This SA Objective should be met as there should already be some level of existing transport infrastructure.	Transport related impacts should be addressed through appropriate site selection and provision for adequate infrastructure to meet future long term demands.	0	+	+	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.	

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	This option seeks to promote the redevelopment of brownfield sites, which should contribute to sustainable economic growth.		+	+	+	Likely that this Option would contribute to sustainable economic development for Warwickshire. In particular the employment opportunities generated as well as waste to energy contributions.	Economic development in addition to improvement of local ground conditions could be achieved by means of this Option.
15	To explore linkages between the waste and minerals sectors	The plan achieves this SA objective.		+	+	+	The MWDF seeks to link the minerals and waste sectors as far as possible.	
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	This SA Objective will be met by means of the diversification of waste treatment and disposal options.	Ensure environmental technologies used are kept in line with advancements in cleaner technology in the long term.	++	++	++	The benefits to be derived are substantial.	

Key Issue 10: Protection of Environmental Resources

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0, -, -/)					
			ST	MT	LT			
1	Conserve and enhance biodiversity	This option recognises the statutory duty to protect international, national as well as sites of local significance. It is likely that this option would enhance local biodiversity.					This option seeks to preserve local biodiversity by the sensitive selection of sites for the development of waste management facilities.	
2	Protect and improve water resources	This option through the sensitive selection of sites for waste management facilities can indirectly improve local water resources.					This option seeks to protect water resources by appropriate site selection.	
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible, especially as the development of waste management sites will seek to preserve protected sites.	In the short term no net effect is anticipated in terms of flood risk.	0	+	+	Flood risk will be managed despite additional sites being developed. This would be achieved through holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4	To safeguard environmental quality in order to minimise potential impacts on community health	Additional waste management sites are to be largely developed in a manner to minimise potential impacts on community health.						It is key that additional waste management sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation			
			Effect (+/, +, 0,-, -/-)							
			ST	MT	LT					
5	To conserve and enhance the character and quality of the County's landscape and townscapes	This option would seek to protect Warwickshire's landscape and townscape by means of site selection aimed to protect the natural, historic and environmental resources.				+	+	++	Any waste management facilities to be developed either in urban or rural areas would need to be sensitive to the County's assets in terms of landscape and townscape features.	Design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	This Option would achieve this SA Objective through site selection aimed to protect not only the natural and environmental resources, but also the historic assets of the County.				+	+	+	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource.
7	Protect soil resources	This option seeks to develop waste disposal and treatment facilities by means of proper consideration for natural, historic and environmental resources. This would include protection of land with high agricultural value and measures to prevent soil erosion.	In the short term no net impact is predicted for local soil resources.			0	+	+		
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection, which this option seeks.	In the short term no net impact is predicted for geological conservation.			0	+	+	This short term neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
9	To promote the delivery of energy efficiency and carbon reduction targets	Likely that this option will not directly impact energy efficiency and carbon reduction targets.		0	0	0		Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.
10	Reduce consumption of natural resources	Likely that this option will not directly impact the reduced consumption of natural resources.		0	0	0		Monitoring is key to ensure alternative technologies do in fact harvest energy and heat from waste and therefore reduce the consumption of natural resources.
11	To promote adherence to the movement of waste up the waste hierarchy	Likely that this option will not directly impact the movement of waste up the waste hierarchy.		0	0	0		Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	Likely that this option will not directly impact this SA Objective.		0	0	0		Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	Likely that this option will not directly impact this SA Objective.		0	0	0	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health as well.	
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	Likely that this option will not directly impact this SA Objective.		0	0	0		

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
15	To explore linkages between the waste and minerals sectors	Likely that this option will not directly impact this SA Objective.		0	0	0		
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	Likely that this option will not directly impact this SA Objective.		0	0	0		

Key Issue 11: Transport Infrastructure

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0, -, -/)					
			ST	MT	LT			
1	Conserve and enhance biodiversity	This option supports the principles of proximity as well as diversification of transport strategies. It is likely that this option would enhance local biodiversity in the medium and long term.	In the short term no net effect is anticipated in terms of biodiversity.	0	+	+	This option seeks to preserve local biodiversity by encouraging self-sufficiency and proximity with respect to transport infrastructure.	
2	Protect and improve water resources	This option through the principles of self-sufficiency, proximity and diversification of transport infrastructure should protect local water resources.		+	+	+	This option seeks to protect water resources by self-sufficiency, proximity and a sustainable mix of transport strategies.	
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible as a result of proper site selection and application of proximity principle.	In the short term no net effect is anticipated in terms of flood risk.	0	+	+	Flood risk will be managed despite additional sites being developed. This would be achieved through holistic planning and appropriate site selection.	Sites should be diligently chosen with respect to their potential impacts on environment including flood risk, population and economy. The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4	To safeguard environmental quality in order to minimise potential impacts on community health	Additional waste management sites are to be largely developed in a manner to minimise potential impacts on community health, through the proximity principle and a sustainable mix of transport strategies.	In the short and medium term no net effect is anticipated in terms of impacts on community health.	0	0	+		It is key that additional waste management sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation	
			Effect (+/, +, 0, -, -/)					
			ST	MT	LT			
5	To conserve and enhance the character and quality of the County's landscape and townscapes	This option would seek to protect Warwickshire's landscape and townscape in particular through the means of the proximity principle.	In the short and medium term no net effect is anticipated in terms of impacts on landscape and townscape.	0	0	+	Any waste management facilities to be developed either in urban or rural areas would need to be sensitive to the County's assets in terms of landscape and townscape features.	Design is key in ensuring that impacts to the landscape and townscape are minimised. In particular the Cotswolds Area of Outstanding Natural Beauty in the Stratford-upon-Avon District. This is the third largest protected landscape in the UK. Land of high agricultural value (Grade 3a and above) should not be identified for site development.
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	This Option would achieve this SA Objective through proximity as well as sustainable mix of transport strategies being adopted.	In the short and medium term no net effect is anticipated in terms of impacts to historic resources.	0	0	+	Likely that such assets will be preserved and where the opportunity exists to improve these.	Warwickshire has a substantial cultural heritage resource which should be protected.
7	Protect soil resources	Soil resources should be protected through the proximity principle as well as a sustainable mix of transport strategies to be adopted.	In the short and medium term no net effect is anticipated in terms of impacts to soil resources.	0	0	+		
8	To preserve and protect geological features and promote geological conservation	Geological conservation should be achieved through integrated planning and appropriate alternative site selection.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
			Effect (+/, +, 0, -, -/)				
			ST	MT	LT		
9	To promote the delivery of energy efficiency and carbon reduction targets	In the medium and long term the proximity principles as well as sustainable transport strategies to be realised through this Option should increase energy efficiency and contribute to carbon reduction targets.	In the short term no net effect is anticipated in terms of energy efficiency and carbon reduction.	0	+	+	Regular maintenance and monitoring is key to ensuring targets are met. Ensure that energy efficiency and emissions are continually monitored.
10	Reduce consumption of natural resources	Likely that this option will reduce the consumption of natural resources in the medium and long term as a result of proximity principle being applied in addition to sustainable transport strategies.	In the short term no net effect is anticipated in terms of consumption of natural resources.	0	+	+	Monitoring is key to ensuring this SA Objective is being met.
11	To promote adherence to the movement of waste up the waste hierarchy	Likely that this option will not directly impact the movement of waste up the waste hierarchy.		0	0	0	Create incentives that will encourage the timely movement of waste up the waste hierarchy.
12	Enfranchise the community in improving the local environment	Likely that this option will not directly impact this SA Objective.		0	0	0	Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	Likely that this option will improve accessibility to waste management facilities in the medium and long term.	In the short term no net effect is anticipated in terms of improved accessibility.	0	+	++	Site selection should aim not only to reduce the distance required to travel to waste management facilities, but also consider potential impacts to the environment and human health.

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation			
			Effect (+/, +, 0, -, -/)							
			ST	MT	LT					
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	Likely that this option will not directly impact this SA Objective.				0	0	0		
15	To explore linkages between the waste and minerals sectors	Likely that this option will not directly impact this SA Objective.				0	0	0		
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	In the long term this option should achieve this SA Objective, through sustainable mix of transport strategies.	Likely that this option will not directly impact this SA Objective in the short and medium term.			0	0	+		

Key Issue 12: Site Decommissioning and Restoration

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0,-, -/-)				
				ST	MT	LT		
1	Conserve and enhance biodiversity	This option supports a strategic approach over an ad-hoc approach. This should bring about beneficial impacts in the long and medium term with respect to local biodiversity enhancements.	In the short term no net effect is anticipated in terms of biodiversity.	0	+	++	This option seeks to preserve local biodiversity by encouraging a strategic approach to restoration of the environment.	
2	Protect and improve water resources	This option through the a strategic approach to restoration of the environment should protect local water resources in the medium and long term.	In the short term no net effect is anticipated in terms of protection of water resources.	0	+	+	This option seeks to protect water resources by adopting a strategic approach to restoration.	
3	Avoid, reduce and manage flood risk	Likely that flood risk will be minimised as far as possible as a result of a strategic approach to restoration being adopted for the County.	In the short term no net effect is anticipated in terms of flood risk.	0	+	+	Flood risk will be managed through a strategic approach to restoration being adopted.	The region is particularly prone to flooding and diligent site selection is key to minimise this risk.
4	To safeguard environmental quality in order to minimise potential impacts on community health	Waste management sites are to be decommissioned and restored in a strategic approach, which should minimise potential impacts on community health.	In the short term no net effect is anticipated in terms of impacts on community health.	0	+	+		It is key that additional waste management sites do not jeopardise the community health as currently Warwickshire compares favourably with England and Wales in this respect.
5	To conserve and enhance the character and quality of the County's landscape and townscapes	This option seeks to protect Warwickshire's landscape and townscape by means of adopting a strategic approach to restoration of the environment.	In the short term no net effect is anticipated in terms of impacts on landscape and townscape.	0	+	++		

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation
				Effect (+/, +, 0, -, -/)				
				ST	MT	LT		
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings		In the short, medium and long term no net effect is anticipated in terms of impacts to historic resources.	0	0	0		Warwickshire has a substantial cultural heritage resource which should be protected.
7	Protect soil resources	Soil resources should be protected through a strategic approach being adopted to restoration.	In the short term no net effect is anticipated in terms of impacts to soil resources.	0	+	+		
8	To preserve and protect geological features and promote geological conservation	Likely that this option will not directly impact this SA Objective.		0	0	0	This neutral impact confirms that geological resources are not negatively impacted.	The Regionally Important Geological and Geomorphological Sites (RIGS) should be protected as far as possible.
9	To promote the delivery of energy efficiency and carbon reduction targets	Likely that this option will not directly impact this SA Objective.		0	0	0		
10	Reduce consumption of natural resources	Likely that this option will not directly impact this SA Objective.		0	0	0		
11	To promote adherence to the movement of waste up the waste hierarchy	Likely that this option will not directly impact the movement of waste up the waste hierarchy.		0	0	0		
12	Enfranchise the community in improving the local environment	Likely that this option will bring about beneficial impacts to the local environment in the medium and long term.	In the short term no net effect is anticipated in terms of improving the local environment.	0	+	+		Ensure full community support through early consultation.
13	Improve accessibility to waste management services and facilities	Likely that this option will not directly impact this SA Objective.		0	0	0		

SA Objective	Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Preferred Option			Commentary / Explanation <i>Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities</i>	Enhancement and mitigation			
			Effect (+/, +, 0, -, -/)							
			ST	MT	LT					
14	To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire	Likely that this option will not directly impact this SA Objective.				0	0	0		
15	To explore linkages between the waste and minerals sectors	Likely that this option will bring about beneficial impacts to this SA Objective in the medium and long term.	In the short term no net effect is anticipated.			0	+	+		
16	To encourage waste and minerals operators to explore new and innovative environmental technologies.	Likely that this option will not directly impact this SA Objective.				0	0	0		

Glossary

Anaerobic Composting (Digestion)	A waste treatment process whereby biodegradable material is encouraged to break down in the absence of oxygen. The waste is broken down in an enclosed vessel under controlled conditions that results in the production of digestate and biogas. The biogas is captured and converted to energy. The digestate can be used as a soil improver either directly as a liquid or dried and then applied as a dried solid.
Area of Outstanding Natural Beauty (AONB)	These are statutory designations under the National Parks and Access to the Countryside Act 1949. The primary objective is the conservation of the natural beauty of the landscape.
Arisings	See Waste Arisings
Bring Sites	Bring sites include bottle and paper banks and are facilities provided at supermarkets and other locations that are visited regularly by householders in that recyclable waste may be deposited.
Combined Heat and Power (CHP)	A process whereby the heat from locally-centred electricity generation can be used to provide district heating, utilising waste materials as a fuel source.
Commercial waste	Waste from premises used mainly for trade, business, sport, recreation or entertainment. (1990 EPA 5.75(7))
Composting	See Windrow Composting
Contaminated land	This means that land has been so polluted that it cannot be put to a useful purpose without removing the contamination first.
Demolition waste	Masonry and rubble wastes arising from the demolition or reconstruction of buildings or other civil engineering structures.
Development Control	Processing and decision-making in relation to planning applications together with enforcement of planning control under Town and Country Planning legislation.
Domestic waste	Waste or refuse that arises from private houses, synonymous with household waste.
Energy from Waste	Many wastes are combustible, with relatively high calorific values – this energy can be recovered through, for example, incineration with electricity generation.
Greenfield	Land which has never been affected by development.
Groundwater	Water held within soil or rocks below the ground surface but is usually taken to mean water in the saturated zone.
Hazardous waste	A waste that has an unacceptable impact on the environment or endangering health. The term only applies to wastes that contain sufficient quantities of hazardous materials to render the waste as a whole hazardous.
Household waste	See Domestic waste
Household Waste Recycling Centre (HWRC)	A Household Waste Recycling Centre is a facility where the public can dispose of bulky household waste. They include the provision of recycling points for the opportunity to recycle a range of materials.
Industrial waste	Waste from any of the following: any factory; premises for the provision to the public of transport services (land, water and air); premises for the

	purpose of connection of the supply to the public of gas, water, electricity or provision of sewerage services; premises for provision to the public of postal or telecommunication services (1990 EPA 5.75 (6)).
Inert waste	Waste which will not easily decompose e.g. uncontaminated top soil; subsoil; clay; sand; brickwork; stone; silica and glass.
Landfill	Landfill is the controlled deposit of waste into or onto land. Minerals workings and extraction sites are used as landfills providing a means to restore the land. Where excavations for landfill are not available it may be possible to deposit waste onto the ground surface and create a waste disposal site – this is known as landraising.
Municipal waste	This is household waste plus the trade waste collected by District Councils, plus the inert building waste we receive at Household Waste Recycling Centres.
Odour	The often unpleasant smell of a material.
Planning Condition	A condition attached to a planning permission, subject to which the permission has been granted.
Planning Policy Statements (PPS)	Sets out the government's policies on different aspects of planning. They range from key objectives, operational principles to guidance and advice on more specific issues. It is expected that Local Planning Authorities must adhere to their guidance in preparing Local Development Frameworks.
Previously Developed Land (PDL)	Land previously affected by development which has been abandoned and may be in a derelict condition.
Principle of proximity	Consideration of transport distances between where the waste is produced and where it is treated or disposed of in evaluating the suitability of a site. Acceptable distances will vary according to the waste treatment process involved.
Principle of self-sufficiency	Communities to take more responsibility for their own waste.
Pyrolysis	Pyrolysis is thermal degradation of a material in the complete absence of an oxidising agent (e.g. air or oxygen). In practice, complete elimination of air is very difficult and some oxidation is likely to occur. Typically the process occurs at temperatures in the range 400-800°C. When applied to waste materials, the action of heat breaks complex molecules into simpler ones. This results in the production of gas, liquid and chars. These products can have several uses depending on the nature of the feedstock, however for waste based feedstocks the most likely use is as a fuel for energy generation.
RAMSAR site	Listed under the Convention of Wetlands as areas of international importance especially for waterfowl habitats.
Recovery	The collection, reclamation and separation of materials from the waste stream.
Recovery facilities	A facility that recovers value, such as resources and energy, from waste prior to disposal, includes recycling and composting facilities.
Recycling	The collection and separation of materials from waste and subsequent processing to produce new marketable products.

Restoration	Completion of a landfill site to allow planned after use.
Site of Special Scientific Interest (SSSI)	A site statutorily protected for its nature conservation, geological or scientific value.
Municipal Solid Waste (MSW)	See Municipal Waste
Special Areas of Conservation (SAC)	Designated with the intention to protect habitats of threatened species of wildlife, under the European Community Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora.
Special Protection Areas (SPA)	Designated under the European Community Council's Directive on the Conservation of Wild Birds to protect threatened species.
Trade waste	See Commercial Waste
Transfer Station	A depot where waste from collection vehicles is stored temporarily prior to carriage in bulk to a treatment or disposal site.
Void space	The capacity within a landfill and landraising available for waste, together with cover, construction material, capping engineering and restoration layers.
Waste	Waste is defined in Circular 11/94 and in the Waste Management Licensing Regulations (1994) as 'any substance or object which the holder discards, or intends to discard or is required to discard'.
Waste Arisings	These are wastes generated within the area, derived from waste disposals minus imports plus exports.
Waste Hierarchy	A ladder of waste management principles comprising waste reduction at the top followed by re-use, then recovery and finally landfill as the least sustainable method of waste disposal.
Waste Stream	Waste arising from a particular waste source.