

Model planning policies to deliver improved resource (materials) efficiency in the construction industry

Introduction

Emerging European and UK Government policy is seeking to improve the sustainability of society. One of the key areas to be addressed in improving sustainability is increasing the efficiency with which natural resources are used.

The construction sector and its supply chain exert a major influence on resource use accounting for over 60% of all material resources used in the UK.

This section of the website presents a set of model planning policies which it is intended planning authorities can use in their planning policy documents to encourage improved resource efficiency in the construction industry.

How to use the model policies

The model policies are set out under 6 themes:

- Efficient use and recycling of minerals
- Waste minimisation and recycling
- Natural resources conservation
- Waste management linked to development
- Waste management
- Sustainable construction

Information provided under each theme includes an introduction and explanatory text and, where required, direction to where further guidance or supporting information can be found.

It is intended that planning authorities can use the model policies presented here as the basis for policies to be included in their own planning documents, modified where necessary to suit local conditions. To view the model policies follow the link below:

It should be noted that the policies presented here do not purport to address all the issues associated with increasing resource efficiency but are considered to represent an appropriate level of detail in the context of the full range of policies which authorities need to include in their policy documents.

How the model policies were developed

The model policies presented here follow consultation with all Planning Authorities in England to identify the existence or otherwise of resource efficiency policies in existing planning documents. Responses were received from 86 authorities and a number of examples of good practice were identified.

These policies were reviewed by the project team and consolidated into a single set of model policies which it was considered represented an appropriate level of detail for planning policy documents. Those planning authorities who responded to the initial survey were invited to attend a workshop at which the model policies were examined in detail.

The model planning policies were subsequently modified in the light of the views expressed at the workshop and the revised policies were circulated for further comment. The policies were further revised in the light of the comments received and the policies presented here are the output from that process.

1. WASTE AND MINERALS POLICIES

THEME: EFFICIENT USE AND RECYCLING OF MINERALS

1.1 INTRODUCTION / PREAMBLE OR STATEMENT OF OBJECTIVES

It is proposed that a general preamble or introduction is given in the relevant planning documentation to set the scene for the more detailed resource management policies that follow.

Model Preamble

The Planning Authority will encourage the efficient use of finite mineral resources and alternative materials, where practicable, by encouraging:

(a) the appropriate use of high performance minerals only for end-uses for which that quality is essential;

(b) the minimisation of the production of mineral and other inert waste;

(c) the appropriate reuse and recycling of minerals and their products and the use of alternative aggregates, including those derived from industrial and construction and demolition waste.

The disposal of inert waste, including construction and demolition waste, by landfill of mineral sites will only be acceptable where it can be demonstrated that landfill is the BPEO for restoration of the site. Conditions will be placed on planning permissions to ensure that only residual waste, e.g. the remainder of inert waste that has been subject to sorting or treatment, where this is practicable, is landfilled.

THEME: WASTE MINIMISATION AND RECYCLING

1.2 TARGETS

Targets are considered to be an important tool in encouraging increased resource efficiency and should be set at a level consistent with targets set in higher level (i.e. national or regional) policies.

Model Policy 1a

The Planning Authority will work towards the targets for waste minimisation, the reuse of materials, recycling and recovery set out in the prevailing National and Regional guidance. Initiatives and facilities which will help achieve this will be introduced so as to:

- Minimise waste generated by development schemes*
- Maximise the reuse of recovered and recycled materials in development schemes*
- Provide guidance for the location and siting of waste treatment, recycling and transfer facilities, having regard to the proximity principle.*

Local targets should be established by the appropriate planning authority and set at a level which will require improvements in current practice and are considered to be achievable based on data available regarding current levels of reuse and recycling.

The Symonds Group "Survey of Arisings and Use of Construction and Demolition Waste in England and Wales 2001" reports a national average recycling rate above 50% with the notable exception of the South West (the only Region with recycling levels below 35%) and the 80% registered in London. It is understood that this survey will be repeated periodically to monitor progress towards national targets with an updated report due in September 2004. Authorities should satisfy themselves that they are using the most recent version when setting targets. (Source: http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_606009.hcsp)

Model Policy 1b

The measures described above will be implemented at local level to help achieve the target of XX% reuse and recycling of construction and demolition waste throughout the Plan Area.

1.3 REDUCTION, RE-USE AND RECYCLING DURING DEMOLITION AND DESIGN, AND CONSTRUCTION OF NEW DEVELOPMENTS

There are a number of initiatives and activities that can be taken to reduce the demand for new materials, reduce waste arisings and encourage the reuse and recycling of materials on development sites.

However it is acknowledged that it is not practicable to implement these on all development schemes, particularly smaller schemes. Accordingly it is proposed that Authorities set thresholds for development below which it is left to the discretion of the applicant as to which measures they implement. Developers working on smaller sites should still be encouraged to consider resource efficiency in their activities.

The definition of this threshold is left to the Authority. An example, which focuses on the likely impacts of the development rather than just the physical size, is given below:

Large schemes are defined as:

- *Developments of more than 5 houses*
- *Commercial and industrial developments of more than 235 sqm*
- *Car parks with more than 200 spaces*
- *Developments which attract large numbers of visitors, and*
- *Any other development which the Authority considers to have important waste management implications.*

The standard definition of major sites used in the General Development Control Return (PS2) to the ODPM is reported here for reference.

For residential developments, a major site is one where 10 or more dwellings are to be constructed or, if this is not known, where the site area is 0.5 hectares or more. For other types of development, a major site is one where the floorspace to be built is 1,000 square metres or more, or the site area is 1 hectare or more. A minor site is a development which does not meet the criteria for major development nor the definitions of Change of Use or Householder Development.

Model Policy 2

All large development proposals shall have regard to the need to minimise, re-use and recycle waste generated during the demolition and/or construction phase, and shall demonstrate that:

- *the development maximises the re-use of existing buildings and new buildings are designed and constructed so as to maximise the life-span of the development; and*
- *the developments incorporates construction practices which minimise the use of raw materials and maximise the use of recycled and secondary aggregates and recycled materials where practicable; and*
- *waste materials generated by the proposal are minimised and re-used or recycled where appropriate on site to optimise the value gained or removed from the site to facilities which can reuse or recycle the materials; and*
- *where appropriate, the development includes the provision of temporary facilities on or adjacent to the site during the demolition/construction phase to sort the waste produced in order to minimise the amount of waste that will need to be removed from the site for final treatment or disposal.*

Initiatives to reduce waste generation and disposal will be encouraged throughout the Planning Area through additional requirements implemented at planning application stage. The Planning Authorities will promote and support partnerships between Local Authorities and the construction industry to utilise waste materials from public construction work

This policy should lead to the introduction of a waste audit/management plan, checklist or report, as outlined in the following policies.

1.4 FACILITIES FOR CONSTRUCTION AND DEMOLITION WASTE RECYCLING AND RECOVERY

Model Policy 3

Facilities for the recovery and recycling of construction and demolition waste materials will be permitted, subject to other policies of the plan where relevant, in the following type of locations:

- *On land that is located within permitted or allocated industrial or waste management sites; or*
- *On other suitable previously developed land; or*
- *Within or adjacent to an existing permitted waste disposal site or mineral working site, provided that the operation is for a temporary period commensurate with the life of the waste disposal or mineral working operation and it does not unduly prejudice the agreed restoration proposal for the site; or*
- *Adjacent or in close proximity to a demolition and/or construction site provided that the operation is for a temporary period commensurate with the demolition construction phase of the development.*

Proposals will be permitted where it can be demonstrated that:

- *The site is close to the source of waste and/or the market for the reused/recycled material*
- *The site is well situated in relation to appropriate parts of the transport network, located where the number and length of journeys is likely to be minimised.*

2. SPATIAL DEVELOPMENT POLICIES

2.1 AIMS AND OBJECTIVES: SUSTAINABILITY

THEME: NATURAL RESOURCES CONSERVATION

STATEMENT OF OBJECTIVES

It is proposed that a general preamble or introduction is given in the relevant planning documentation to set the scene for the more detailed natural resource management and sustainable construction policies that follow.

Model Preamble – Natural resources

The prudent use of natural resources is one of the UK Government's objectives for Sustainable Development. It is therefore the objective of the following policies to:

- *reduce the demand for, and make the most efficient use of, natural resources*
- *promote the use of alternatives to natural resources*
- *optimise the reuse and recycling of waste resources, including quarry, industrial and construction and demolition wastes.*

Model Preamble – Sustainable development

The planning authority will work with the developers to reduce the resource consumption (materials and energy) of new development throughout its life from construction through occupation and maintenance to eventual decommissioning.

THEME: WASTE MANAGEMENT LINKED TO DEVELOPMENT

STATEMENT OF OBJECTIVES

It is proposed that a general preamble or introduction is given in the relevant planning documentation to set the scene for the more detailed waste management policies that follow.

Model Preamble – Waste Management

Waste management and disposal should adopt the sustainable principles of the:

- *Best Practicable Environmental Option*
- *Regional and local self sufficiency*
- *Proximity principle*
- *Waste hierarchy*

New development and land use will require the provision of appropriate and necessary facilities for the recycling, storage, treatment and removal of waste likely to be generated during their whole life.

2.2 IMPLEMENTATION POLICIES AND MONITORING

The planning authority can require applicants (either just for large developments or for all developments) to demonstrate how they propose to improve resource efficiency through the use of supplementary documentation, to be presented together with the planning application documents. These may include:

- A waste management plan (prepared by the developer)¹
- A waste audit (prepared by the developer)
- A sustainable design and construction checklist (form designed and provided by the planning authority)
- A sustainability report (prepared by the applicant and based on nationwide standard assessment tools such as Ecohomes, BREEAM or SAP).

The aim of these documents is to ensure that the impact in terms of resource use of the whole life of the development is considered, starting from the design, through construction and use to decommissioning, i.e. change of use or deconstruction/demolition.

The designers can choose materials and practices which maximise the efficiency of resource use through, for example, the specification of recycled materials, flexible space planning (to facilitate future changes of use) and modular construction (which would enable decommissioning through deconstruction with enhanced potential for reuse of construction materials).

Good working practices and site management can minimise the amount of waste produced and maximise reuse and recycling at the construction stage. Occupation and use of the building, including any repair will generate waste and therefore measures and facilities for the sustainable management of this waste must be included. At decommissioning stage, including for pre-existing buildings on the site of the new development, every effort should be put into reusing the building, and where there is not possible, good demolition practices can significantly improve the level of reuse and recycling.

It is proposed that the decision on what information/which document to require will be taken by the Planning Authority. However, care should be taken to make sure that resource efficiency will have an appropriate weighting with other sustainability issues if, for example, a broad sustainability assessment is chosen. This balance could be achieved by, for example, stating the minimum scoring requirements in the assessment of relevant aspects of the building design and construction (i.e.: use of recycled/recyclable materials, waste generated etc.).

For clarity and transparency, the Planning Authority should indicate the criteria to be used in assessing the documents, e.g.: minimum score or pass grade for Ecohomes and BREEAM. Adequate guidance should also be made available to the applicants through relevant Supplementary Planning Statements or similar, or reference to relevant guidance if a standard tool is chosen.

The control over the enforcement of those measures should be exerted through collaboration with the Building Control department and follow similar procedures (e.g.: spot checks on building sites).

An appropriate monitoring mechanism should be introduced to assess the progress towards the targets set. So, for example, during the above mentioned spot-checks, an estimation of the waste produced, reused or recycled or leaving the site for landfill disposal could be made and recorded, to aid in comparing with waste produced etc. in other comparable sites and/or

¹ The Dti has published a Voluntary Code of Practice providing guidance on how a Site Waste Management Plan can be prepared. This can be found at http://www.dti.gov.uk/construction/sustain/site_waste_management.pdf

producing an estimate of the waste produced in a given period in an area. Site waste benchmark data are available for each type of construction site as a result of work undertaken by BRE through their SmartWaste tool.

THEME: WASTE MANAGEMENT

2.2.1 WASTE MANAGEMENT PLAN REQUIREMENT FOR NEW DEVELOPMENTS.

Model Policy 4

The planning authority will only grant planning permissions for large developments which minimise construction industry waste arisings. Developers should satisfactorily demonstrate through a waste management plan that in the design, demolition of existing buildings, construction, operation and occupation of the new development, the requirements of **model policy 2** have been followed, namely:*

- *Consideration has been given to the re-use of existing buildings*
- *Sites are selected and schemes designed to balance the amount of excavation and fill required*
- *Appropriate construction wastes have been incorporated into the new construction and/or refurbishment, namely waste construction materials arising on site are reused or recycled, to contribute towards the minimisation of waste leaving the site*
- *Other appropriate secondary and recycled construction materials have been used in the new building and/or refurbishment*
- *On-site facilities for sorting waste arising from the construction will be provided so that the waste leaving the site will be more easily reused and recycled elsewhere, contributing to the minimisation of waste landfill. Where on-site facilities can not be provided, suitable facilities nearby will be used.*
- *The pollution potential of unavoidable wastes has been minimised*

*The requirement for a waste management plan constitutes (one of) the instrument(s) for implementing the core strategies on resource efficiency. The Authority will introduce a mechanism to monitor on a periodic basis the progress towards the prevailing target(s) set out at as detailed in **model policies 1a & 1b**.*

* For observations regarding the definition of large developments, please refer to section 1.3.

2.2.2 WASTE AUDIT REQUIREMENT FOR NEW DEVELOPMENTS.

Model Policy 5

Larger schemes must be accompanied by a waste audit at the planning submission stage. The audit shall comprise an estimation of the type and volume of waste that the development will generate during its construction (including demolition of pre-existing buildings and/or site preparation), occupation and, if possible, decommissioning (either change of use or deconstruction/demolition), and the waste management options to be employed to manage this waste.

Waste audits will be assessed against the following criteria:

- *Reduction in the amount of waste produced*
- *Re-use of waste on site without significant processing*
- *Recycling and/or composting of waste on-site*
- *Recycling and/or composting of waste off-site*
- *Disposal of waste on-site*
- *Disposal of waste off-site*

All such planning applications shall also include facilities for the storage, collection and

recycling of waste.

*The requirement for a waste audit constitutes (one of) the instrument(s) for implementing the core strategies on resource efficiency. The Authority will introduce a mechanism to monitor on a periodic basis the progress towards the prevailing target(s) set out at as detailed in **model policies 1a & 1b.***

THEME: SUSTAINABLE CONSTRUCTION

2.2.3 SUSTAINABLE DESIGN AND CONSTRUCTION ASSESSMENT CHECKLIST.

Various Authorities have devised or are in the process of preparing their own sustainability checklists with accompanying guidelines.

The London Borough of Enfield has conducted a survey within the London Authorities to assess how Sustainable Construction has been introduced in the relevant plans. The London Boroughs of Brent, Enfield, Haringey, Merton and Westminster, have introduced sustainability checklists as requirement of a specific policy. Brent and Westminster sustainability checklists or assessments apply to certain type and size of buildings. Merton's relates to large scale development proposals. Enfield and Haringey sustainability assessment applies to all scales: householders, minor and major applications. Examples of such checklists can be found on the Boroughs' websites.

Outside London, the postal survey conducted by Viridis identified other similar examples (Brighton and Hove, Dacorum Borough Council) and evidence of many other planning authorities being in the process of producing a similar checklist.

Model Policy 6

Applicants for planning permission must ensure that the design and construction of their proposed development have regard to the principles of sustainability, especially those relating to the built and natural environment. Applicants are required:

- To demonstrate this by means of a Sustainability Assessment checklist accompanying their proposals, the details required varying according to the scale and nature of the development, and*
- To show, in the Sustainability Assessment checklist, that they have taken appropriate account of matters contained in the supplementary guidance issued by the Council.*

The Sustainability Assessment checklist and relevant supplementary guidance detailing the scoring criteria and sustainability measures which could be adopted to maximise the score are available from the planning authority.

*The Sustainability Assessment checklist constitutes (one of) the instrument(s) for implementing the core strategies on resource. The Authority will introduce a mechanism to monitor on a periodic basis the progress towards the prevailing target(s) set out at as detailed in **model policies 1a & 1b.***

2.2.4 SUSTAINABILITY REPORT.

Model Policy 7

The Planning Authority will require that proposals for new developments or for the conversion or reuse of sites or buildings demonstrate, in a sustainability report, how various aspects of sustainability including energy conservation, efficient use of resources, and recycling and minimisation of waste have been taken into account.

The sustainability report should be compiled by using BREEAM, the EcoHomes standard or an equivalent acceptable to the Authority.

Permissions may be refused for proposals which the Authority believes do not do enough for conserving natural resources such as materials, energy and water, e.g. do not score respectively "good" or "very good" (BREEAM) (or equivalent in other standards) in each of the relevant sections.

*The Sustainability report constitutes (one of) the instrument(s) for implementing the core strategies on resource efficiency. The Authority will introduce a mechanism to monitor on a periodic basis the progress towards the prevailing target(s) set out at as detailed in **model policies 1a & 1b**.*