



*Dacorum Borough Local Plan
1991 - 2011*

SUPPLEMENTARY PLANNING DOCUMENT

SUSTAINABILITY APPRAISAL

ENERGY EFFICIENCY AND CONSERVATION



July 2005

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1. Introduction

- 1.1 This is the report of the Sustainability Appraisal (SA) of the SPD on Energy Efficiency and Conservation. It is necessary for the report to accompany the SPD in accordance with Regulation 17(a) of the Town and Country Planning (Local Development) (England) Regulations 2004.
- 1.2 The term “sustainability” can be defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (The World Commission on Environment and Development 1987).

Aim and structure of report

- 1.3 The aim of this report is to verify that the SPD, in its production, has properly taken account of the sustainability aim.
- 1.4 It sets out the ways in which the SPD considers social, environmental and economic issues and problems and how it deals with them.
- 1.5 The structure and headings of the report are based on a Government Consultation Paper on Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks (September 2004 – Office of the Deputy Prime Minister (ODPM)).

Summary and Outcomes

- 1.6 The report sets out the overriding sustainability objectives and considers them in relation to the objectives and content of the SPD. It confirms that the SPD is a sustainable document.

Statement on the difference the report has made

- 1.7 The process of preparing this report has helped to identify key sustainability issues on energy efficiency and conservation.

2. Appraisal Methodology

Approach adopted

- 2.1 The appraisal has been put together using the ODPM's Consultation Paper on Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks (September 2004), advice from Hertfordshire County Council's Forward Planning Unit, and the Sustainability Appraisal Report on the Draft East of England Plan (November 2004).
- 2.2 Work began on the Sustainability Appraisal in February 2005. The Development Plans team has carried out the appraisal with advice from The Environment Agency.
- 2.3 The guidance recommends that the SA and plan-making processes should start at the same time. This was not possible in this case due to the advanced nature of the Development Brief.
- 2.4 Given the limited coverage of the SPD and pressure of time, it has not been deemed appropriate to carry out a separate Scoping Report, but rather to proceed directly to the Draft Sustainability Appraisal Report.

Consultation

- 2.5 Consultation of the draft Sustainability Appraisal Report was carried out over a five weeks period from the 6th April 2005 to 11th May 2005. For further information on this consultation process, please refer to the Consultation Statement. This consultation has not resulted in any alterations to the draft Sustainability Appraisal.

Background Sustainability Appraisal

- 2.6 The Deposit Draft Dacorum Borough Local Plan 1991-2011 was the subject of an Environmental Appraisal, which was updated to cover the Inspector's recommendations and new policies including energy conservation, water conservation and sustainable drainage systems, and the sustainable development framework.

SPD

- 2.7 The Dacorum Borough Local Plan 1991-2011 was adopted on 21 April 2004. It is a "saved" plan under the Planning and Compulsory Purchase Act 2004. The plan includes commitments to produce supplementary planning guidance on various topics, and development briefs for Proposal Sites. These are SPD under the 2004 Act.
- 2.8 Since the development brief constitutes a minor addition to the Plan and will not have significant environmental effects, the Council

considers that it does not fall within the provisions of the SEA Directive, and a Sustainability Appraisal is therefore sufficient. The Council sought the view of the key consultation bodies for Strategic Environmental Assessments for confirmation enclosing the relevant draft Sustainability Appraisal. No responses were received.

- 2.9 In addition, the maximum life of the document will be three years; i.e. until the Borough Local Plan loses its “saved” status, so its impact will not be long term.

SPD Objectives

- 2.10 The aim of the SPD is to encourage environmentally sound and sustainable development by maximising energy conservation and efficiency in buildings.

- 2.11 The specific objectives of the brief are to: -

- Maximise energy potential in buildings through:
- The layout and orientation of development;
- Building form;
- Landscaping; and
- Design and materials; and
- Encourage use of renewable energy technologies (e.g. wind, solar, combined heat and power).

3. Sustainability Objectives, Baseline and Context

Identification of relevant objectives

- 3.1 The Council has used 23 of the 25 sustainability objectives identified by Hertfordshire County Council as being relevant to Dacorum (see Annex 1). Those omitted from the County Council's list are: "Spread economic growth more evenly to benefit deprived areas" and "Adhere to environmental standards and management principles". 9 of these objectives have been selected as being particularly relevant to the SPD and are compared with the SPD objectives in Annex 2.

The Environmental/Sustainability Baseline Characteristics

- 3.2 We do not currently have a baseline figure for energy, which could focus on electricity / gas consumption per head. We aim to follow advice from regional and national guidance produced.
- 3.3 The UK target is to achieve 10% of all energy resources to come to renewable resources by 2010 and 20% by 2020.

Existing Sustainability Issues relevant to SPD

Environmental

- 3.4 The current energy consumption in Hertfordshire is unsustainable and we are over reliant on fossil fuels to provide heating, lighting, cooling, power and transport needs which is increasing the effects of climate change.

Links to other relevant policies, plans, programmes and sustainability objectives.

- 3.5 These documents are listed in Annex 3.

Sustainability Appraisal Framework

- 3.6 A set of objectives relating to the sustainability issues identified has been defined
- 3.7 Progress will be measured against the indicators and targets set out in Annex 4.

4. Assessment of options

Options considered

- 4.1 The only suitable alternative to preparing the SPD is the 'do nothing' option, which would not have been suitable because the Plan commits the Council to produce the SPD under Policy 122 and the List of Further Work.

Comparison of Options

- 4.2 The SPD is a good practice guide for developers, encouraging consideration to be given to energy efficiency and conservation at the outset of proposed developments. It draws on the importance of conserving energy as highlighted at the national level to reduce the overall level of energy consumption. Without these guidelines consideration may not be given to encouraging development proposals which make the most efficient use of natural energy sources and reducing energy consumption in buildings.

5. Assessment of SPD

Significant social, environmental and economic effects of SPD

- 5.1 The current wasteful use of energy leads to a variety of adverse environmental, social and economic impacts. Fossil fuel consumption results in the releases of greenhouse gases, which is the main course of climate change. The production of energy efficiency and conservation guidelines has a number of environmental, social and economic benefits.

ENVIRONMENTAL

- 5.2 Minimising the need for energy and increasing energy efficiency reduces greenhouse gas emissions by using natural resources efficiently, by re-use and recycling where possible.
- 5.3 Some renewable energy technologies may have a detrimental impact if located within conservation areas or other areas of historic interest or on listed buildings. The SPD must ensure that the appropriate technologies are used or sited in the most appropriate locations.

SOCIAL / ECONOMIC

- 5.4 Most households can save a substantial amount on fuel bills by using energy in an efficient way, and can be warmer and healthier as a result. This will reduce fuel poverty, which is currently associated with cold damp homes and leads to a variety of health problems.
- 5.5 Reducing energy running costs for businesses and homeowners can also improve profitability and increase property values.

6. Implementation and monitoring

- 6.1 Progress on reducing energy consumption will be monitored through the Hertfordshire Environmental Forum State of the Environmental Reports and energy conservation measures should be taken into consideration as part of Sustainability Checklist within the Plan.
- 6.2 The numbers of planning applications which incorporate energy conservation measures or applications for solar panels and wind turbines for example can be monitored.

ANNEX 1

SUSTAINABILITY OBJECTIVES – SELECTION FOR SPD ON ENERGY EFFICIENCY AND CONSERVATION

SUSTAINABILITY OBJECTIVES	RELEVANT TO SPD
ECONOMIC	
<i>Improve economic performance and competitiveness consistent with environmental constraints</i>	<ul style="list-style-type: none"> ▪ <i>Integrating environment and economic goals</i>
<i>Create a vibrant local economy</i>	<ul style="list-style-type: none"> ▪ <i>Promoting the environmental economy</i>
<i>Maintain high and stable levels of employment</i>	
<i>Promote lifelong learning and skills development</i>	
<i>Maintain the vitality and viability of existing centres</i>	
SOCIAL	
<i>Tackle the causes of poverty and social exclusion</i>	<ul style="list-style-type: none"> ▪ <i>Encouraging development that recycles income and wealth within local communities</i>
<i>Improve physical and mental health of population and reduce health inequalities</i>	<ul style="list-style-type: none"> ▪ <i>Promoting issues and raising awareness of quality of life issues to residents and community partners</i>
<i>Ensure everyone has the opportunity for a decent home</i>	
<i>Reduce crime and create safe environments</i>	
<i>Maximise the opportunities for leisure and a healthy lifestyle for all</i>	
<i>Improve access to services and community facilities for all</i>	
<i>Empower all sections of the community to participate in decision making and local action</i>	
ENVIRONMENTAL	
<i>Improve the sustainable use of resources</i>	<ul style="list-style-type: none"> ▪ <i>Purchasing and encouraging others to purchase recycled and renewable products</i>
<i>Reduce pollution</i>	<ul style="list-style-type: none"> ▪ <i>Mitigating the production of greenhouse gases</i>
<i>Ensure the sustainable supply and use of energy</i>	<ul style="list-style-type: none"> ▪ <i>Applying the energy hierarchy in building design and management i.e. minimising energy requirements, using energy efficiently, wherever possible using energy from renewable resources, minimising the use of fuel</i> ▪ <i>Encouraging the use of passive solar design</i>
<i>Move away from waste disposal to</i>	

<i>minimisation, reuse, recycling and recovery</i>	
<i>Ensure the efficient use of water and safeguard water resources</i>	
<i>Plan for the impact of climate change</i>	
<i>Protect and enhance biodiversity</i>	▪ <i>Encouraging tree planting</i>
<i>Protect and provide green spaces</i>	
<i>Ensure the efficient use of land and buildings</i>	
<i>Protect landscape and townscape character</i>	<ul style="list-style-type: none"> ▪ <i>Ensuring that development conserves the historic environment in accordance with policies</i> ▪ <i>Promoting high quality design</i> ▪ <i>Integrating any new development within the existing landscape</i>
<i>Improve the choice of sustainable transport modes, encourage their use, and reduce the need to travel by car</i>	

ANNEX 2. COMPARISON OF SPD OBJECTIVES WITH RELEVANT SUSTAINABILITY OBJECTIVES

	SPD objectives	
	Maximise energy potential in buildings through: -The layout and orientation of development; - Building form; - Landscaping; and - Design and materials	Encourage use of renewable energy technologies (e.g. wind, solar, combined heat and power).
Sustainability objectives		
Improve economic performance and competitiveness consistent with environmental constraints	Positive Compatible	Positive Compatible
Create a vibrant local economy	Positive Compatible	Positive Compatible
Tackle the causes of poverty and social exclusion	Positive Compatible	Neutral
Improve physical and mental health of population and reduce health inequalities	Positive Compatible	Neutral
Improve the sustainable use of resources	Positive Compatible	Positive Compatible
Reduce pollution	Positive Compatible	Positive Compatible
Ensure the sustainable supply and use of energy	Positive Compatible	Positive Compatible
Protect and enhance biodiversity	Positive Compatible	Neutral
Protect landscape and townscape character	Neutral	Neutral

ANNEX 3. ANALYSIS OF RELATED PLANS, PROGRAMMES AND SUSTAINABILITY OBJECTIVES

Other plan/programme	Objectives and/or requirements	Implications for SPD
<ul style="list-style-type: none"> ▪ Dacorum Borough Local Plan 1991-2011 		
<p><i>This Local Plan was adopted in April 2004.</i></p>		
<p>Policy 1 'Sustainable Development Framework'</p>	<p>Seeks to ensure that development within the Borough is carried out consistently with the aims of the framework for sustainable development set out in Policy 1 of the Hertfordshire Structure Plan Review 1991-2011. In order to demonstrate that full account has been taken of these aims in the design of new development, applications for planning permission will normally be required to submit a sustainability statement as part of their application. This will be assessed against the Sustainability Checklist listed in Appendix 1. Appendix 1 requires developers to maximise energy conservation in buildings and generate power efficiency such as renewable energy.</p>	<p>Should ensure that the principles outlined in Appendix 1 relating to energy efficiency and incorporated in the SPD.</p>
<p>Policy 122 'Energy Efficiency and Conservation'</p>	<p>New developments should incorporate energy efficient measures through building design, site layout and landscaping. It may be appropriate in larger developments to incorporate combined heat and power plants.</p>	<p>The SPD will supplement this policy and should therefore develop these principles.</p>

	The production of supplementary guidance on Energy Efficiency and Conservation is also specified in the background text.	
Policy 123 'Renewable Energy'	Proposals for appropriately sited renewable energy sources are supported.	Consideration will be given to renewable energy technologies.
<p>▪ Planning Policy Statement 1 – Creating Sustainable Communities</p> <p><i>Sustainable development is the core principle underpinning planning</i></p>		
Para 13	<p>Key Principles</p> <p>“Local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change”</p>	Ensure that this principle is addressed in the objectives of the SPD
Para 20	<p>Planning For Sustainable Development</p> <p><i>Protection and Enhancement of the Environment</i></p> <p>“Development should take account of environmental issues such as:</p> <ul style="list-style-type: none"> - mitigation of the effects of, and adaptation to, climate change through the reduction of greenhouse gas emissions and the use of renewable energy; air quality and pollution; land contamination; the protection of groundwater” 	Ensure these environmental issues are reflected in the content of the SPD.

Para 22	<p><i>Prudent use of resources</i> “Local planning authorities should promote resource and energy efficient buildings; community heating schemes, the use of combined heat and power, small scale renewable and low carbon energy schemes in developments”</p>	Encourage issues are reflected in the content of the SPD.
Para 27	<p>Delivering Sustainable Development <i>General Approach</i> Planning policies should seek to:</p> <ul style="list-style-type: none"> - “Enhance as well as protect biodiversity, natural habitats, the historic environment and landscaping and townscape character. - Address, on the basis of sound science, the causes and impacts of climate change, the management of pollution and natural hazards, the safeguarding of natural resources, and the minimisation of impacts from the management and use of resources” 	These objectives should be reflected in the SPD.
Para 28	<p><i>General Approach</i> Planning authorities should integrate the various aims of sustainable development and should seek to achieve objectives, which enable social, environmental and economic objectives to be achieved together.</p>	This reinforces the need to consider economic, social and environmental factors with equal weighting.

Para 36	<i>Design</i> Planning authorities should, through design policies, ensure that developments are sustainable, durable and adaptable and make efficient and prudent use of resources.	The SPD should ensure that references are made to techniques for energy conservation by design and incorporate these into developments at an early stage.
<ul style="list-style-type: none"> • Planning Policy Statement 22 – Renewable Energy 		
<p><i>Renewable Energy Policies in this statement cover technologies such as on shore wind generation, hydro, photovoltaic, passive solar energy, biomass and energy crops and energy from waste. PPS 22 advocates the use of renewable energy techniques and energy conservation methods in development proposals.</i></p>		
<ul style="list-style-type: none"> ▪ Regional Planning Guidance 9 (The South East) (March 2001) 		
<p><i>The purpose of this guidance is to provide a regional framework for the preparation of local authority development plans. It has a vision of encouraging economic success throughout the Region, ensuring a higher quality of environment with management of natural resources, opportunity and equity for the Region's population, and a more sustainable pattern of development.</i></p>		
Para. 10.23	Improved Energy Efficiency should be a key component of all types of development	Take into account.
Para. 10.34	Combined Heat and Power (CHP) as part of a local community heating scheme can optimise reductions of carbon dioxide and contribute to urban renaissance. This needs to be considered at the earliest stage of development because the infrastructure is required.	Encourage the use of CPH.
Policy INF4	Further development planning of the region and activities within it should give priority to energy conservation and to maximising the use of renewable energy sources as an alternative to fossil fuel.	Take into account.

<p>▪ Draft Regional Spatial Strategy 14</p>		
<p><i>This document provides a framework for local authorities to set out the strategy for future development of the East of England. It is based on the principles of sustainable development including effective protection of the environment and the prudent use of natural resources.</i></p>		
<p>Policy ENV8 Renewable Energy and Energy Efficiency'</p>	<p>Developers will be required to maximise energy efficiencies to be gained from sustainable design and construction, community heating and combined heat and power schemes, and encourage developers to strive to achieve energy efficiency standards to exceed minimum standards.</p>	<p>Incorporate these principles within the SPD</p>
<p>▪ Hertfordshire Structure Plan Review 1991-2011</p>		
<p><i>This Structure Plan was adopted in April 1998.</i></p>		
<p>Policy 1 'Sustainable Development'</p>	<p>This policy seeks to enable activities and development in Hertfordshire to be carried out consistently with the principles of sustainable development. These sustainability principles overarch all other policies within the plan.</p>	<p>Ensure these principles are reflected in the SPD.</p>
<p>Policy 2 'Design and Provisions of Development'</p>	<p>States that the design and provisions of development will be expected to help achieve the sustainability aims and objectives of the Plan.</p> <p>This policy can be seen as a focus for integrating energy conservation into development design, such as through:</p> <ul style="list-style-type: none"> ▪ Combined heat and power; ▪ Minimising the energy needs of buildings; ▪ Siting and orientation of new buildings (passive 	<p>Ensure principles are incorporated in the SPD.</p>

	<p>solar design);</p> <ul style="list-style-type: none"> ▪ Enhancement of micro-climates through landscape design; and ▪ Use of active solar energy technology in new buildings. 	
Policy 54 'Energy Generation'	Priority will be given to development to promote renewable energy and the use of combined heat and power.	The SPD should explore renewable energy technologies, which may be appropriate and feasible to incorporate in development proposals.
<p>▪ Energy White Paper (Feb 2003) 'Our Energy Future – creating a low carbon economy'</p> <p><i>The Energy White Paper lays out the Government's new energy policy to create a low carbon economy by tackling environmental (climate) change, security of supply, competitiveness and social issues. It recognises that energy efficiency can make a big contribution to carbon cuts and proposes actions to tighten Building Regulations, improve product standards and encourage greater energy efficiency in homes and offices.</i></p>		
<p>▪ Hertfordshire Sustainable Development Guide: Draft (March 2003)</p> <p><i>The Hertfordshire Sustainable Development Guide supports efforts to improve the sustainability of all new development including supplying and using energy sustainably.</i></p>		
HE1 'Supplying and using Energy Sustainably'	Aim to promote energy conservation, energy efficiency and the use of renewable energy as well as supporting the adoption of new and more benign technologies.	Take into account.

ANNEX 4. SUSTAINABILITY APPRAISAL FRAMEWORK

Objective and indicators:	Dacorum data	Hertfordshire data	Regional data (East of England)	National data	Notes
Social					
Economic					
Environmental Reduce energy consumption through energy efficiency and conservation					
Ensure maximum solar potential through layout and orientation, building form and design and materials.	Incorporating energy efficiency through building design, site layout and landscaping.	State of Environment Reports			
Environmental Ensure the efficient use of renewable energy technologies					
Encourage the use of solar panels, wind turbines and CHP	Combined heat and power may be appropriate in large scale developments Planning applications including these measures	State of the Environment Reports	All developments above a threshold of 1000 sq m or 50 dwellings should incorporate equipment for renewable power generation so as to provide at least 10% of their predicted energy requirements.	10% of all energy sources should achieved through renewable energy sources by 2010.	