case study

The Energy Saving Trust's recommendations for planning policies: Case studies

Examples from Development Plan Documents

Relevant to: England

Introduction

The Energy Saving Trust works with local authorities across the UK to help develop planning policies and practices that minimise carbon dioxide (CO_2) emissions from new and existing buildings.

The supplement to Planning Policy Statement (PPS) 1 on Planning and Climate Change clearly sets out an opportunity for planning to reduce CO_2 emissions from buildings, through setting high standards in Development Plan Documents (DPDs) such as the Core Strategy, Development Management Documents or Site Allocations.

To help local planning authorities set the right policies, the Energy Saving Trust has produced a set of recommendations for planning policies which form part of a Planners' Support Pack.

To accompany our recommendations, we have produced this document which provides examples of DPDs where similar or identical recommendations have been implemented. In some cases we draw on examples that are included in draft core strategies that have not yet been approved by the Planning Inspectorate. Where this is the case, the distinction is clearly highlighted.

The Energy Saving Trust's recommendations

Full details of our recommendations can be found in the recommendations document. A summary of the Energy Saving Trust's nine recommendations for planners are set out to the right:

Recommendation 1
Develop an evidence base that identifies the opportunity for higher CO_2 and sustainability standards in your area

Recommendation 2
Specify a minimum level of the Code for Sustainable Homes for new domestic development

Recommendation 3
Specify a minimum level of BREEAM for non-domestic development

Recommendation 4
Specify a minimum percentage of CO_2 reductions to be met through renewable energy where high Code or BREEAM levels cannot be shown to be feasible

Recommendation 5
Exemplar developments: specify larger CO_2 emissions reductions in developments where there is particular potential

Recommendation 6
Require the use of combined heat and power (CHP) and district heating for larger developments where feasible

Recommendation 7
Require 'carbon neutral' development in your area, to be met through a combination of on-site CO_2 compliance and payments in to a local carbon offset fund

Recommendation 8
Require high standards for CO_2 emissions when buildings are being refurbished or redeveloped

Recommendation 9
Encourage 'consequential improvements' to the existing building when applications are received for planning permission for extensions, conversions or annexes

Examples of current and emerging good practice in planning policies

Recommendation 1

Develop an evidence base that identifies the opportunity for higher CO_2 and sustainability standards in your area

PPS1 supplement requires that policies are supported by a robust and credible evidence base. This should justify the economic and technical feasibility of proposed policies, be proportionate to the policy and be relevant to the place in question.

Guidance produced by the Planning Inspectorate acknowledges that 'it is not possible to be prescriptive about the content of the evidence base because the evidence required will depend on the content and nature of the DPD… The important principle is that the evidence must have informed the content of the DPD'.

The evidence base for sustainable construction policies will be informed by a number of studies and documents. Some of these may be in place already, whereas some may need to be specially commissioned.

Dover District Council used studies on Housing, Economic Development, Regeneration & Community Involvement, Environment, Infrastructure and Transport, as part of their evidence base. In addition, they commissioned a Renewable Energy and Sustainable Construction study to particularly inform the sustainable construction standards and levels they would require from new development. The full set of studies in Dover District Council's evidence base can be found here.

Other authorities have commissioned joint evidence base scoping projects and studies which can have advantages in terms of spreading costs and gathering and more in-depth thematic evidence.

Regen South West, the sustainable energy agency for South West England, has provided support for local authorities across the region through establishing an evidence base for the Regional Spatial Strategy on sustainable energy.

AGMA (The Association of Greater Manchester Authorities) was established with a key objective of providing functions that need to be undertaken at a metropolitan level. As part of this remit, AGMA has led on a number of evidence base studies for Manchester authorities. For example, AGMA has coordinated the Strategic Flood Risk Assessment across all authorities in the region as well as 'A study to inform spatial planning requirements for decentralised energy and delivery of zero carbon buildings' The full set of studies and reports can be found on AGMA's website.

One of the most comprehensive joint evidence base studies that has been carried out was for the London Plan. The documents contained within this set can be downloaded here and they include an Integrated Impact Assessment, Habitats Regulation Assessment, Regional Flood Risk Appraisal, an Economic Evidence Base and Strategic Housing Land Availability Assessment and Housing Capacity Study.

The benefits of county wide and regional evidence base work mean that individual authorities have a meaningful set of studies to draw on, freeing up resource for other more locally significant studies. This may enable areas to identify suitable locations for higher standards of efficiency and sustainable energy, with a robust evidence base available to support the economic and technical feasibility of policies.

Bromsgrove District Council has a large library of studies including Planning for Renewable Energy, Climate Change and Water in Worcestershire (conducted by Worcestershire County Council) and heat mapping and decentralised energy feasibility studies, growth assessments and housing needs studies. All studies can be accessed here.

As a result, the Core Strategy has proposed the following climate change policies:

"All developments to use sustainable decentralised zero or low carbon energy generation such as CHP or district heating schemes. Where such a scheme is not viable, a secure, zero or low carbon energy infrastructure or contribution ensuring connection to future district heating schemes is required.

"All major development to incorporate appropriate renewable energy production equipment to provide at least 10% of the predicted energy equipment by 2010 and 20% by 2020. Where on-site provision is not viable, off-site provision or an equivalent contribution is required."

Recommendation 2
Specify a minimum level of the Code for Sustainable Homes for new domestic development

The London Borough of Havering's Core Strategy was found sound and adopted in March 2008. In requiring high standards of construction for major new developments, Policy DC49 'Sustainable Design and Construction' sets out the following timetable for residential developments to attain minimum levels of the Code:

- Code level 3 from 2008 – 2010.
- Code level 4 from 2010-2013.
- Code level 5 from 2013-2016.
- Code level 6 from 2016 onwards.

The justification for this policy is based on acceptance of the Code as a single national standard for sustainability of dwellings, encompassing minimum standards for energy and water consumption, alongside other key aspects of pollution, waste, materials and ecology.

A number of reports informed the evidence base for Havering including a housing capacity study, demographic projections, sites of importance for nature conservation and a strategic flood risk assessment. A Supplementary Planning Document on Sustainable Construction will sit alongside the Core Strategy to support the Code requirements.

Recommendation 3
Specify a minimum level of BREEAM for new non-domestic development

The Borough of Poole had its Core Strategy found sound in January 2009 in which high standards of construction are required for non-domestic buildings. Policy PCS33 requires the following:

- BREEAM 'Very Good' or equivalent for developments up to 1,000m^2.
- BREEAM 'Excellent' or equivalent for developments in excess of 1,000 m^2.

Both of these policies also require the use of on-site renewable sources or to link or contribute to available off-site renewable sources to meet 10% or 20% of predicted energy use respectively.

Recommendation 4
Specify a minimum percentage of CO_2 reductions to be met through renewable energy where high Code or BREEAM levels cannot be shown to be feasible

Sheffield City Council had their Core Strategy adopted in March 2009. In Policy CS 65 Renewable Energy and Carbon Reduction they state that:

"All significant developments will be required, unless this can be shown not to be feasible and viable, to:

a. provide a minimum of 10% of their predicted energy needs from decentralised and renewable or low carbon energy; and
b. generate further renewable or low carbon energy or incorporate design measures sufficient to reduce the development's overall predicted carbon dioxide emissions by 20%. This would include the decentralised and renewable or low carbon energy required to satisfy (a).

The renewable or low carbon energy technologies must be operational before any new or converted buildings are occupied."

The Borough of Poole has slightly different wording in their Policy PCS 32 Sustainable Homes, where it requires that all new residential development (including conversions) contributes to reducing carbon emissions and minimises the adverse impacts of development. The following renewable energy policy is therefore applied to proposals for all new residential development:

"The use of on-site renewable sources or by linking with/contributing to available local off-site renewable energy sources to meet a minimum of 10% of predicted energy use for residential development proposals involving 1-9 dwellings, and 20% for 10 or more dwellings."

Recommendation 5
Exemplar developments: specify larger CO_2 emissions reductions in developments where there is particular potential

At the time of writing, Dover District Council's Core Strategy is still in its final stages of examination. However, it has identified the

Whitfield area as an area of high growth potential and as such is requiring new domestic development to reach Code level 4 and aspire to Code level 5 from the adoption of the Core Strategy. It has also recommended new non-domestic development to reach BREEAM 'Excellent' and schools to be built to zero carbon standards from the adoption of the Core Strategy.

Similarly, Ashford Borough Council in its Core Strategy has set higher standards for urban extensions and greenfield sites than for other development over the LDF period (2007 – 2014). This requires that all major development (more than 10 dwelling units or 0.5ha in square area) must attain a minimum of Code level 4, plus a minimum percentage of renewable energy.

The London Borough of Barnet's Area Action Plan (AAP) for Mill Hill East is an example of where a specific site has been identified as suitable for higher design standards for non-domestic buildings, specifying BREEAM 'Excellent' for all commercial and community buildings.

Recommendation 6
Require the use of combined heat and power (CHP) and district heating for larger developments where feasible

PPS1 supplement encourages local authorities to investigate opportunities for CHP and district heating in their area and there is a particular role for local authorities to do this with new and larger developments.

A number of local authorities are actively investigating the feasibility of decentralised energy, with policies requiring a proportion of the predicted energy demand to come from on-site or connected renewable or low carbon energy.

One example is the London Borough of Barnet's AAP for Mill Hill East, which has specified a proportion of the site as being required to provide sustainable infrastructure, and CHP has been identified as one possible use of this site.

Milton Keynes Council in its Preferred Options Policy CS 15 is encouraging utilisation of community energy networks and large scale renewable energy schemes. The following wording has been used to encourage or specify connection for developments of different sizes:

"Developments incorporating over 100 homes are encouraged to utilise community energy networks. Applications for development will be expected to show how the use of community energy networks use has been explored.

The use of community energy networks are to be required in developments over 200 units, unless it can be proven that this is not feasible on technical or economic grounds.

Where an existing local energy network is established, developments will be expected to connect to the network, if feasible.

The delivery of standalone renewable energy schemes will be supported in areas where the social, economic and environmental impacts are acceptable."

Sheffield City Council also requires that:

"Where appropriate, developments will be encouraged to connect to the City Centre District Heating Scheme. Shared energy schemes within large developments or between neighbouring developments, new or existing, will also be encouraged." (Policy CS 65 Renewable Energy and Carbon Reduction).

Recommendation 7
Require 'carbon neutral' development in your area, to be met through a combination of on-site CO_2 compliance and payments into a local carbon offset fund

Ashford Borough Council

Ashford Borough Council in its Core Strategy Policy CS10 has required that carbon neutrality is met, ideally through a combination of energy efficiency and on-site sustainable energy technologies.

The council has set out a matrix against which carbon neutrality should be delivered (see Appendix 1).

However, where this is not feasible 'because of economic viability or technological barriers' developments must deliver carbon neutrality through financial contributions or carbon offsetting.

Para. 9.61 states that this method of achieving carbon neutrality *"will be through a financial*

contribution and/or off-site renewable energy facilities, energy efficiency schemes and tree planting as part of Ashford's Green and Blue Grid."

How this will be administered and delivered will be set out in a future Supplementary Planning Document (SPD) that is being informed by a study assessing the opportunities in the borough alongside approach taken by Milton Keynes and based on the Milton Keynes Carbon Offset Study, 2004.

Milton Keynes Council

Milton Keynes has had a carbon offset fund in operation since 2006 and a case study on how the policy is currently operated can be downloaded from the Energy Saving Trust's website here.

By utilising funds from the carbon offset fund, Milton Keynes saved nearly 570 tonnes CO_2 across the borough between April 2008 and March 2009 through improving the insulation of 508 properties.

The council is currently in the final stages of producing the submission version of its Core Strategy which is being consulted upon for approval to publish it. The new draft Core Strategy contains the below text in relation to the offset fund.

Milton Keynes' objective of carbon neutral growth will continue to require payment into the Milton Keynes Carbon Offset Fund. As set out in Para 9.32 of the draft submission Core Strategy this has the dual effect of:

"ensuring new developments are, in effect, carbon neutral, [as well as providing] the basis by which measures can be taken to address emissions from older, less efficient developments, addressing climate change whilst also tackling problems such as fuel poverty".

To administer this, all developments over 5 dwellings or 1,000sqm will be expected to make a contribution into the Milton Keynes Offset Fund. These contributions will be secured through the use of Section 106 agreements at a rate of £200 per tonne CO_2 emitted over one year. These contributions will then be used to offset carbon emissions in existing developments through measures including improved insulation and contributions towards renewable energy.

This publication will be updated to reflect future developments on the above proposals as contained within Milton Keynes' LDF.

Reigate and Banstead Borough Council

Reigate and Banstead Borough Council has set a carbon neutrality policy in its draft Core Strategy.

Similarly to Ashford, this should first be achieved through a combination of energy efficiency standards, as set through the Code for Sustainable Homes or BREEAM, and on-site renewable energy technologies, at no less than 10% for all new developments.

Where this is not achievable, the council states that:

"subject to negotiation and agreement by the Council, any residual emissions may be offset by financial contributions to the Borough's Carbon Reduction Fund."

Where carbon neutrality is not achieved on-site, the council requires that contributions are made to a Local Energy Fund in mitigation. This is set out in policy CS10 of Reigate and Banstead's Core Strategy which has been consulted upon and submitted for its Pre-Hearing Meeting on 6th November 2009.

Recommendation 8
Require high standards for CO_2 emissions when buildings are being refurbished or redeveloped

Ashford Borough Council has also required higher standards during the refurbishment of dwellings, in particular specifying Ecohomes 'Very Good' for the current LDF period 2007-2014.

The London Borough of Richmond has included a policy to improve the condition of their existing stock in policy CP1 'Sustainable Development'. In this policy, it is required that, as well as conforming to the Sustainable Construction checklist, all conversions must reach Ecohomes 'Excellent'.

Recommendation 9
Encourage 'consequential improvements' to the existing building when applications are received for planning permission for extensions, conversions and annexes

Uttlesford District Council has successfully been implementing a consequential improvements policy for since 2005. This was introduced in a Supplementary Planning Document (SPD) and requires cost effective energy efficiency improvements to be made to an existing dwelling as a condition of planning permission. The condition applies to properties undergoing loft and garage conversions as well as those where annexes are being built, even when separate from the main house. A case study with full details of the policy can be found on the Energy Saving Trust's website here.

The success of this policy is in part due to good communication and joint working between Planning and Development Control departments, where Development Control surveyors apply their expertise through Building Regulations and Planners enforce the condition.

Uttlesford has made upholding the condition practical by providing comprehensive advice and guidance on how to meet the condition, measures required, the costs and savings inherent in the measures as well as grants for loft and cavity wall insulation.

The council is currently preparing its Core Strategy and is hoping to include this policy so that it is not subject to future appeal, through being found sound at Inspection.

In the submission version of Dover District Council's Core Strategy the council has included wording in Policy CP 5 which encourages the improvement of existing buildings when other construction work is undertaken. The requirement is set out as follows:

"Residential and non-residential extensions and conversions should incorporate energy and water efficiency measures that are designed to achieve no net increase in energy or water demand from the whole building."

South Bucks District Council is also looking at the feasibility of requiring a consequential improvements policy and is currently working on providing the evidence base to support this.

The Energy Saving Trust will keep up to date with developments on how this policy is viewed by Planning Inspectors and will update this publication accordingly.

The Energy Saving Trust offers a free enquiries service via our dedicated Practical help team – the team will undertake to answer any query regarding sustainable energy or sustainable road transport within a maximum of three working days.

Abbreviations used

AAP	Area Action Plan
AGMA	Association of Greater Manchester Authorities
BREEAM	Building Research Establishment Environmental Assessment Method
CHP	Combined Heat and Power
CO_2	Carbon dioxide
DPD	Development Plan Document
LDF	Local Development Framework
PPS	Planning Policy Statement
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance

At the time of publication and to the best of our knowledge, the information contained in this case study was correct. This case study was first published in October 2009.

Practical help cannot vouch for any of the organisations involved.

Practical help
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Appendix 1 – Ashford Borough Council carbon neutrality matrix

Ashford LDF 2007 – 2014						
			(CS3) Town Centre & (CS4) Brownfield Urban Sites	**(CS5) Urban Extensions & (CS4) Greenfield Urban Sites**	**(CS6) Tenterden, the Villages**	**Existing and refurbishment**
(A)	**BREEAM**	**Residential**	**Code level 3**	**Code level 4**	**Code level 2**	**Ecohomes 'Very Good'**
		Overall level	Very Good	Excellent	Good	Very Good
		Energy credits	Excellent	Excellent	Excellent	Excellent
		Water credits	Maximum	Maximum	Excellent	Excellent
		Material credits	Excellent	Excellent	Very Good	Very Good
(B)		**Minimum carbon dioxide reduction**				
			20%	30%	10%	10%