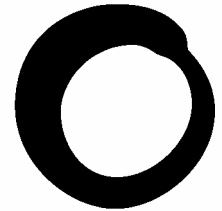


November 2005



**Friends of
the Earth**

Briefing

Tackling climate change at the local level

the role of local development frameworks in reducing the emissions of new developments

“Climate change is the most severe problem we are facing today”

Sir David King, UK Government Chief Scientific Adviser, 2004

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Tackling climate change at the local level

Friends of the Earth's 'Big Ask' Climate Campaign

Earlier this year, Friends of the Earth launched The Big Ask campaign.

We want the Government to pass The Climate Change Bill which would commit the Government to reducing carbon dioxide emissions by 3% every year. The Bill is crucial, because if we are to avoid climate change we must start cutting emissions immediately and sustain those cuts for at least the first half of this century. Carbon dioxide persists in the atmosphere for many years - so it is not the level of emissions *in* the year 2050, but the total emissions *by* that year that will ultimately decide the level of global warming we face. **We must act now to make sustained annual reductions in the emissions of greenhouse gases.**

At present, although both major Opposition parties have supported the principle of annual targets, the Government has not committed itself on either the principle or level of annual targets. Such a decision may not have been made at the time Local Development Frameworks are drawn up. We have calculated that the 3% annual cuts are what is necessary for the UK to play its part in avoiding dangerous climate change, and believe that local authorities should ensure their Local Development Frameworks play their part in delivering such cuts in their area. But while our campaign to convince policy makers of our targets goes on, it would clearly be nonsensical if Local Development Frameworks were not at least consistent with both the UK's international treaty obligations and national climate reduction policy. Local authorities must play their part in making emissions reductions and this can partly be achieved through the Local Development Frameworks.

Introduction

Local Authorities across England have a unique opportunity to tackle climate change through the new planning system. Between now and the summer of 2006 the majority of local councils will draft their new Local Development Frameworks (LDFs). Councils such as Merton and Croydon have already demonstrated good practice in this area, and there is a huge scope for other councils to emulate, and hopefully surpass, these policies.

There is a wide ranging scientific consensus that our climate is changing and that these changes will intensify with potentially catastrophic implications for our economic, social and environmental well being. While the science is well documented¹, and both actual and potential climate change impacts are increasingly well understood², we are not yet meeting the challenge with the urgent and substantive action required.

This is not simply a matter that can be left at a national level. Local Authorities are at the sharp end of delivering on a range of policies that impact on climate change.

Spatial planning in particular has a major and positive contribution to make in meeting this challenge through promoting policies which reduce the threat of climate change by:

- promoting the highest standards of resource and energy efficiency in new development so as to reduce carbon dioxide (CO₂) emissions arising from construction and use
- requiring land-use patterns that reduce the need and the propensity to travel by car
- vigorously promoting small and large scale renewable energy projects
- restricting development which has a major negative impact on CO₂ emissions
- adapting to the harmful impacts of climate change.

It is clear there are many policies that will directly or indirectly have an effect on the greenhouse gas emissions of your locality. There are also other ways that a council can reduce greenhouse gas emissions, such as the pioneering approach taken by Woking Borough Council through its climate action plan. However, this briefing focuses on just one of the many climate issues that can be tackled through the LDF – achieving low carbon emissions from new built developments.

¹ See, for example, the Intergovernmental Panel on Climate Change, Third Assessment Report Synthesis Report - Summary for Policy Makers, 2001. <http://www.ipcc.ch/pub/un/syrenng/spm.pdf>.

² See, for example, the UK Climate Impacts Programme publications available at: <http://www.ukcip.org.uk/>

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1. What is the Government's response to climate change?

- 1.1. The government has set or agreed a number of targets to reduce releases of greenhouse gases³. They include:
- Reduction of greenhouse gas emissions by 12.5% below 1990 levels by 2008-2012 (Kyoto Protocol).
 - Putting us on the pathway to reduce carbon dioxide emissions 'by some 60 per cent by about 2050 with real progress by 2020', as recommended by the Royal Commission on Environmental Pollution, and as accepted as a Government target in The Energy White Paper (2003)⁴.
 - Producing 10 per cent of electricity from renewable sources by 2010 and 15 per cent by 2015, with an aspiration of 20 per cent by 2020 (Renewables Obligation).
- 1.2 As well as setting targets, the Government has sought to address climate change through a number of policy initiatives. In particular, tackling climate change is identified as a priority in Planning Policy Statement (PPS) 1: Delivering Sustainable Development, and Planning Policy Statement 22: Renewable Energy. PPS 1 states:
- 'local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change'* (paragraph 13 ii).
- 1.3 In addition to the general requirement in PPS 1 for planning bodies to deal with climate change the government also gives standing to the UK Sustainable Development Strategy as material to the planning process. Paragraph 13 (i) of PPS 1 states, *'Development plans should ensure that sustainable development is pursued in an integrated manner, in line with the principles for sustainable development set out in the UK strategy.'* In understanding the implications of sustainable development for local planning, Planning Authorities must fully consider the UK strategy which in turn reflects our international and national treaty and policy obligations on climate.

³ Chapter 4 of the UK Sustainable Strategy (DEFRA, 2005) reproduces the full range of the UK Governments international and domestic CO₂ reduction and renewable energy generation targets. <http://www.sustainable-development.gov.uk/publications/uk-strategy/uk-strategy-2005.htm>

⁴ The Energy White Paper 'Our energy policy – creating a low carbon policy' (DTI, 2003) Page 4, Section 1.10. <http://www.dti.gov.uk/energy/whitepaper/index.shtml>

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1.4 Despite these clear intentions, current policy is failing to deal effectively with climate change because:

- There is a failure at regional and local level to recognise that climate change is a 'special' consideration for the planning system which may often need to take a pre-eminent place in policy and development control decisions. In this sense climate change should be the 'first amongst equals' of considerations in the planning system.
- There has been an over-emphasis in local planning policy on adaptation rather than avoidance and reduction. Spatial policy must ensure that while proper measures are taken to deal with adaptation, the first priority must be to avoid worsening climate change by making decisions which actively reduce carbon dioxide emissions.

2. So what can our LDF do about climate change?

2.1 A lot. The LDF is the key spatial response to climate change at the local level. The LDF should contain an overarching policy to reduce carbon dioxide emissions. Spatial policy at the local level should acknowledge the cross cutting impact of climate change, affecting specific areas such as housing, energy, transport, agriculture, forestry and waste. Local Authorities must make sure that LDFs prioritise action to reduce the threat of climate change in line with PPS 1 by ensuring that policies:

'reduce energy use, reduce emissions (for example, by encouraging patterns of development which reduce the need to travel by private car, or reduce the impact of moving freight), promote the development of renewable energy resources, and take climate change impacts into account in the location and design of development' (PPS 1 section 13 (ii) ODPM 2005.)

2.2 We believe that the most important thing is for local authorities to introduce simple measures and policies (that are possible now and do not require significant investments) through the LDF that will help to reduce greenhouse gas emissions of new developments. We outline our suggested policy in more detail below.

2.3 Should the LDF contain an emission reduction target?

Where the RSS sets a clearly defined reduction target, then the LDF must reflect that target. In the absence of a regional target, a local authority should consider the introduction of its own target. This is a vital component that will allow the authority to monitor its progress.

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The Strategic Environmental Assessment (SEA) process provides a mechanism for local authorities to understand baseline conditions on climate, and provides an opportunity to collect comprehensive data on greenhouse gas emissions. Government guidance explicitly identifies the Kyoto Protocol as of key importance to the SEA process⁵. The SEA should therefore explicitly identify climate change as the single most important issue in the scoping process. The LDF Annual Monitoring Report should make clear what progress there has been on climate change reduction and recommend policy where necessary.

2.4 But shouldn't targets for carbon dioxide reduction be set at the regional level?

In order to implement PPS 1, the Regional Spatial Strategy (RSS) should include emissions reduction targets and details of how these targets will be met. If your RSS reflects this 'best practice' and includes emissions reductions targets, this will help to support strong emission reduction policies in your LDF. However even if specific targets are not included, the RSS will still stress the importance of tackling climate change, and such a statement, backed-up by the text of PPS1 and the UK sustainable development strategy, will mean that Local Authorities are required to take action. It is therefore vital that the LDF includes policies that will reduce the greenhouse gas emissions of the locality.

3. Promoting low and zero carbon development principles

3.1 In order to assist in the achievement of carbon reduction targets the LDF should promote a range of policy measures to achieve low carbon developments, and wherever possible, zero carbon developments. Much of the building stock that exists today has poor energy and resource efficiency, yet will still be in use in 2050 and beyond. While the planning system can insist on high standards of energy efficiency when buildings are converted we acknowledge that this will only deal with the minority of existing buildings. New build therefore presents itself as the key opportunity to affect change on climate emissions reductions.

3.2 LDFs offer a significant opportunity to promote the development of resource efficient homes through the inclusion of policies which specify acceptable levels of resource efficiency for all new developments. The Energy Performance of Buildings Directive requires the setting of minimum standards of energy performance for new-build and buildings undergoing major renovation. The Government is committed to implement this Directive by 2006⁶. While aspects of this agenda are dealt with under Part L of the

⁵ A Practical Guide to the Strategic Environmental Directive (ODPM, 2005). Appendix 2, Page 47.
http://www.odpm.gov.uk/embedded_object.asp?id=1143290

⁶ UK Sustainable Development Strategy (DEFRA, 2005). Page 87.
<http://www.sustainable-development.gov.uk/publications/uk-strategy/uk-strategy-2005.htm>

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new Building Regulations, the LDF has a major role in setting strategic policy and driving up standards. Energy and resource efficiency must become key considerations in permitting new development or the re-use of existing buildings.

- 3.3 The London Borough of Merton is currently one of the leading local authorities on tackling climate change using the Local Development Framework. Their present planning policy says:

“All new non-residential development above a threshold of 1,000 sqm will be expected to incorporate renewable energy production equipment to provide at least 10% of predicted energy requirements.”

However, now that times have moved on, they are aiming to get the following text agreed in their forthcoming Local Development Framework:

“The Council will require all developments, either new build or conversion, with a floor-space of 500 m², or one or more residential unit, to incorporate on-site renewable energy equipment to reduce predicted CO₂ emissions by at least 10%.”

- 3.4 The Merton policy demonstrates current best practice. As such, there is no reason why other councils should not be following suit, and implementing such a policy in their LDFs.
- 3.5 However, a recent survey by Friends of the Earth of local authorities showed that only a small minority (11 out of 65) were intending to include a Merton style target. This is clearly disappointing.
- 3.6 Local authorities are bound by PPS1 to take responsibility for reducing greenhouse gas emissions. So, whilst the aims of the Merton policy are laudable, it is clear that they do not go far enough – because new developments will continue to add to the overall carbon emissions.
- 3.7 Low carbon development can be achieved using a range of existing, well-recognised standards, which provide developers with a kind of ‘toolkit’ of options, from which they can select the most relevant, depending on the development project.

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- 3.8 We suggest that LDFs should contain a policy, similar to the one shown below in Box 1. A brief explanation of two of the standards mentioned in the policy are shown in Annex 1 of this document.
- 3.9 To aim for low carbon standards, and ultimately zero net carbon standards, may be regarded as a radical step. However, the policy is technically achievable, falls inside the remit of spatial planning and is the clear and logical extension of the Government's national policy and international obligations on climate change.

The Council is committed to addressing and reducing the causes of climate change.

To achieve this objective all new development, either new build or conversion, will be required to demonstrate that it does not add any net carbon dioxide emissions over the life-cycle of its operation. Developers may adopt a range of technological approaches to achieve this objective, including:

- 1) A zero waste, zero carbon standard (based on the Z-squared approach) for any large scale housing development.**
- 2) A minimum of EcoHomes 'Excellent' or equivalent recognised standard for any housing development of one unit or more.**
- 3) A minimum of BREEAM 'Excellent' for any commercial development.**
- 4) The development of on-site renewable energy generation capacity.**

It will be for the developer to decide which approach is the most appropriate to deliver a zero net carbon standard in their specific proposal. The applicant must demonstrate, through a development appraisal, if the adoption of such an approach results in an undue burden on the viability of the scheme.

In addition, there will be a presumption against any development which results in a significant net increase in carbon dioxide emissions.

Box 1 – Zero net carbon standards

4. Countering the arguments

4.1 **'Low carbon standards – that's just wishful thinking from a bunch of hippies!'**

Actually, the Local Government Association, the Energy Savings Trust and the Energy Efficiency Partnership for Homes are all calling for similar measures. In a joint document '*Leading the way: how local authorities can meet the challenge of climate change*⁷', they say:

'There is no technical reason why all new housing built in the UK should not achieve a zero net carbon standard within a few years. There are already examples of housing in the UK which achieve zero net carbon emissions through combinations of higher energy efficiency and renewable sources for the remaining power. BedZED is particularly significant in showing how zero energy can be achieved in a high-density urban pattern...'

4.2 **"But it will all cost too much"**

The EcoHomes standard and Z-squared approach have been shown to be economically viable. The WWF report, *One Planet Living in the Thames Gateway*, states that:

'...in terms of capital costs and personal expenditure related to the building, purchase and running of a home, the cost of developing to EcoHomes 'Very Good' and Z squared standards would be comparable to, or even cheaper than, the cost of developing to current building regulations. This is because any additional build cost (estimated at 2 per cent for EcoHomes 'Very Good' and 10 per cent for Z squared) could be offset partly by planning gain (a mechanism whereby developers can increase development in exchange for meeting environmental targets), and partly by residents paying slightly more for their homes. Savings on residents' energy and water bills would offset any increase in mortgage repayments. In fact, if all household expenditure were considered, living in sustainable homes would be cheaper for residents as well as offering significant environmental benefits.'

In addition, the costs of embedded micro-renewables are usually offset against the price paid for the land. This may have the marginal effect of suppressing land prices in some areas. Conversely there are huge economic benefits of embedded micro-generation. Merton council have estimated that if 250 boroughs had a 10 per cent policy then the annual market for solar thermal, solar photovoltaics and micro wind would be around £732 million.

4.3 **"Alright, but shouldn't this be dealt with in building regulations? After all, PPS1 makes it clear that local policy must not replicate building regulations"**

Government has proposed changes to Part L of the building regulations for both new build and conversion of buildings. These rules will come into force in April 2006 and Government have claimed they will produce some 40 per cent CO₂ savings.

⁷ Leading the way: how local authorities can meet the challenge of climate change (LGA, 2005). Page 36. <http://www.lga.gov.uk/Documents/Publication/leadingtheway.pdf>

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It is important to note that our proposals do not seek to replicate the building regulations, but instead to implement PPS 1, Para 22, which states: *'local authorities should promote resource and energy efficient buildings; community heating schemes, the use of CHP, small scale renewable and low carbon energy schemes in developments; the sustainable use of water resources...'*

Also, building regulations will not deliver zero net carbon standards and are focused on construction standards. In contrast, the planning system has the power to make policy on any issue which relates to the use and development of land. In fact, the government now requires local planning policy to consider broader cross-cutting policies rather than narrow land use issues. Global warming should clearly be regarded as part of this broader approach and dealing with climate change must be considered a fundamental part of planning policy.

Brighton & Hove Case Study

While Friends of the Earth believes that policies should be adopted in the Core Strategy of the LDF, some Local Authorities have already demonstrated the lawfulness of incorporating particular building standards into local planning policy. Brighton and Hove City Council, in their Supplementary Planning Guidance, require developments to meet BREEAM or EcoHomes standards of Very Good or Excellent⁸.

4.4 ***"It is illegal to force developers to build to certain design standards or incorporate renewable energy generation through planning policy"***

Not so. Planning Policy Statement 22 (Renewable Energy) states:

Section 8: *'Local planning authorities may include policies in local development documents that require a percentage of the energy to be used in new residential, commercial or industrial developments to come from on-site renewable energy developments. Such policies:*

(i) should ensure that requirement to generate on-site renewable energy is only applied to developments where the installation of renewable energy generation equipment is viable given the type of development proposed, its location, and design;

(ii) should not be framed in such a way as to place an undue burden on developers, for example, by specifying that all energy to be used in a development should come from on-site renewable generation. Further guidance on the framing of such policies, together with good practice examples of the development of on-site renewable energy generation, are included in the companion guide to PPS22.'

Section 18: *'Local planning authorities and developers should consider the opportunity for incorporating renewable energy projects in all new developments. Small scale renewable energy schemes utilising technologies such as solar panels, biomass heating, small scale wind turbines, photovoltaic cells and combined heat and power schemes can be incorporated both into new developments and some existing buildings. Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents.'*

⁸ Brighton and Hove Sustainability Checklist, Supplementary Planning Guidance 21. Page 5
http://www.brighton-hove.gov.uk/downloads/bhcc/localplan2001/SPHBH21_Sustainability_checklist.pdf

4.5 ***'It's not possible for our council to undertake this, as we don't have the expertise'***

Merton council have demonstrated that the implications of embedded renewable technology planning policy can be simply and effectively controlled through the development control process. It does not need a staff member to be a professional renewable energy expert.

This briefing is available to download at:

http://www.foe.co.uk/resource/briefings/ldf_climate_briefing.pdf

Annex 1 - An explanation of the standards

A. Zero waste, zero carbon approach

BioRegional, one of the organisations involved with the BedZED development in South London, has teamed up with WWF to formulate the One Planet Living initiative. This takes a zero waste, zero carbon approach. Zero carbon communities can be defined as maximising the energy efficiency of buildings (and appliances) and ensuring that any residual energy demand is met from new renewable energy capacity, either from within or outside the development area.

The proposed Z-squared development in the Thames Gateway is a *'2000 home mixed-use, and mixed-tenure development which takes tried and tested technologies and integrates them to achieve zero carbon emissions from the energy required for heating, cooling and electricity and close to zero waste for landfill.'*

For more information see *'Enabling One Planet Living in the Thames Gateway'*⁹.

Friends of the Earth believes that pioneering development projects of this kind must move into the mainstream.

B. BRE EcoHomes Standard

The Buildings Research Establishment (BRE) have an environmental impact assessment method for new and existing domestic buildings called EcoHomes. Whilst not perfect, EcoHomes does provide a national recognised standard on best practice in environmental design. Because it is nationally recognised the EcoHomes standard can be used by planners to specify the sustainability performance of buildings.

The WWF and BioRegional One Planet Living report compared the impacts of developing 200,000 homes to different building standards, including those outlined above, and found that¹⁰: *"EcoHomes 'Very Good' standard produced a 32 per cent reduction in CO₂ emissions, a 39 per cent saving in water use and up to a 25 per cent reduction in household waste sent to landfill, compared to current building regulations. Z squared standard could achieve a 99 per cent reduction in CO₂, a 65 per cent reduction in water use and 76 per cent reduction in household waste sent to landfill."*

The EcoHomes and Z-squared standards are also economically viable. The WWF report shows that: *"...in terms of capital costs and personal expenditure related to the building, purchase and running of a home, the cost of developing to EcoHomes 'Very Good' and Z squared standards would be comparable to, or even cheaper than, the cost of developing to current building regulations... Savings on residents' energy and water bills would offset any increase in mortgage repayments. In fact, if all household expenditure were considered, living in sustainable homes would be cheaper for residents as well as offering significant environmental benefits."*

⁹ Enabling One Planet Living in the Thames Gateway (BioRegional and WWF, 2004).
<http://www.wwf.org.uk/filelibrary/pdf/z-squared2004.pdf>

¹⁰ One Million Sustainable Homes Brief (WWF, 2004).
<http://www.wwf.org.uk/filelibrary/pdf/OMSHbrief.pdf>