December 2005

Briefing

Friends of the Earth Cymru

Cyfeillion y Ddaear Cymru

Tackling climate change at the local level

The role of local development plans in reducing the emissions of new developments in Wales

"Climate change is the greatest international sustainable development challenge we face, and we must play a full part in global efforts to minimise the negative impacts of climate change."

Carwyn Jones, Minister for Environment, Planning and Countryside, 2005

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

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

We want Parliament to pass the Climate Change Bill, which would commit the UK 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. The Welsh Assembly Government has a crucial role to play in setting targets for the reduction of greenhouse gases which would deliver a 3% reduction year on year. **We must act now to make sustained annual reductions in the emissions of greenhouse gases**.

At present, although both major Opposition parties at the UK level have supported the principle of annual targets, the UK Government has not committed itself on either the principle or level of annual targets.

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 Plans 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 Plans were not at least consistent with both the UK's international treaty obligations and climate emissions reduction policy. The Welsh Assembly Government has stated its commitment to reaching these international targets and has started to put in place some measures which will contribute to emissions reduction, such as in renewable energy and energy efficiency. Local authorities must play their part in making emissions reductions and this can partly be achieved through the Local Development Plans.

Introduction

Local Authorities across Wales have a unique opportunity to tackle climate change through the new planning system. Between now and the summer of 2009 the majority of local councils will draft their new Local Development Plans (LDPs). Councils such as Merton and Croydon in England 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 documented[1], and both actual and potential climate change impacts are increasingly well understood[2], 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 will 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 (CO_2) 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 CO_2 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 at the pioneering approach taken by Woking Borough Council in England through its climate action plan. The Welsh Local Government Association (WLGA) has also prepared a climate change declaration for councils, similar to the Nottingham declaration[3]. However, this briefing focuses on just one of the many climate issues that can be tackled through the LDP – 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/syreng/spm.pdf.

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

[3] See, for example, Bridgend Council's declaration on climate change. Also at the WLGA www.wlga.gov.uk

1. What are the UK and Welsh Assembly Governments' responses to climate change?

1.1. The UK Government has set or agreed a number of targets to reduce releases of greenhouse gases[4]. 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 UK Government target in The Energy White Paper (2003)[5].
- 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 The Welsh Assembly Government has reiterated these targets in the Energy Route Map and in Technical Advice Note 8: Renewable Energy (TAN 8). These reduction targets are therefore material to planning decisions. The importance of these targets is reinforced by the UK Sustainable Development Strategy[4], which has been agreed by the Welsh Assembly Government, and is material to the planning process in Wales. The strategy describes a number of initiatives to address climate change including building regulations and energy efficiency (Chapter 4, page 72).

1.3 The Welsh policy framework on climate change is fragmented across several different strategies. The Wales national level strategies which are relevant are the Sustainable Development Action Plan 2004-2007, the Wales Spatial Plan and the Environment Strategy for Wales (draft)[6]. The following are the relevant commitments:

- The Sustainable Development Action Plan 2004-2007[7] sits alongside Wales: A Better Country which describes political priorities, and the Wales Spatial Plan. The Action Plan is where the Welsh Assembly notes its commitment to the targets set at a UK level.

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[4] Chapter 4 of the UK Sustainable Strategy (DEFRA, 2005) reproduces the full range of the UK Governments international and domestic $C0_2$ reduction and renewable energy generation targets. http://www.sustainable-development.gov.uk/publications/uk-strategy/uk-strategy-2005.htm

[5] 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

[6] The draft Environment Strategy is currently being reviewed after consultation. The draft documents are available on www.wales.gov.uk

[7] *Starting to Live Differently* – The Sustainable Development Scheme of the National Assembly for Wales is the overarching strategic framework. http://www.wales.gov.uk/themessustainabledev/content/review/action-plan-final-e.htm

'We have … set a target of having 10% of our energy [sic] from renewable resources by 2010 as part of our contribution to the international goal of reducing emissions by 60% by 2050' (page 9)

- The Wales Spatial Plan[8] commits the Assembly Government to reviewing the mitigation of Wales' contribution to climate change. Local planning authorities must have regard to the Wales Spatial Plan in the production of LDPs and therefore need to have regard to the following commitment:

  Reduce Wales' contribution to climate change, by for example, increasing its share of renewable energy in those areas best suited to provide it and by increasing energy efficiency in industry, housing and transport (page 26)

1.4 Specific guidance in Wales on climate change responses are contained in Planning Policy Wales 2002, Technical Advice Note 8: Renewable Energy, and the accompanying Ministerial Interim Planning Policy Statement: Planning for Renewable Energy.

- Planning Policy Wales 2002 (PPW 2002) sets out the following guidance on addressing climate change:

  2.3.2 Planning policies and proposals should:

  Promote resource-efficient settlement patterns that minimise land-take (and especially extensions to the area of impermeable surfaces) and urban sprawl, especially through preference for the re-use of suitable previously developed land and buildings, wherever possible avoiding development on greenfield sites (Sections 2.6, 2.7).

  Locate developments so as to minimise the demand for travel, especially by private car (Section 2.5, Chapter 8).

  Contribute to climate protection by encouraging land uses that result in reduced emissions of greenhouse gases, in particular energy-efficient development, and promoting the use of energy from renewable sources (Section 2.5, 2.9.2 and Chapter 12).

- The Ministerial Interim Planning Policy Statement: Planning for Renewable Energy (MIPPS) is in addition to PPW 2002 and sets out the Welsh Assembly Government's guidance to local authorities for renewable energy in the context of addressing climate change.

  '*… local planning authorities should take into account the contribution that can be made by the area moving towards carbon emission reduction and renewable energy production targets; and recognise that different approaches will be appropriate for the deployment of the different renewable technologies and energy efficiency conservation measures.'* (Paragraph 12.9.2)

[8] The *Valuing our Environment* section of The Wales Spatial Plan states the Assembly Government's commitment to addressing climate change through a variety of different policies.

- Technical Advice Note 8: Planning for Renewable Energy July 2005 states:

  Local Development Plans should promote high standards of energy efficiency, energy conservation and the use of renewable energy as part of the national and international response to climate change, and this should be reflected in the strategy of development plans. (Section 5 Implications for Development Plans)

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

- There is a failure in Wales to understand the vital importance of climate change, and to recognise it as a 'special' consideration of 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 LDP do about climate change?

2.1 A lot. The LDP is the key spatial response to climate change at the local level. The LDP 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 LDPs prioritise action to reduce the threat of climate change in line with Welsh Assembly Government guidance by ensuring that policies promote resource-efficient settlement patterns, locate developments so as to minimise the demand for travel, especially by private car and contribute to climate protection by encouraging land uses that result in reduced emissions of greenhouse gases, in particular energy-efficient development, and promoting the use of energy from renewable sources.

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 LDP that will help to reduce greenhouse gas emissions of new developments. We outline our suggested policy in more detail below.

2.3 **Should the LDP contain an emission reduction target?**

The Welsh Assembly Government is committed to the UK's CO_2 reduction targets set out in paragraph 1.1 and these should be reflected in LDP policy. Local Authorities may adopt interim milestone targets which reflect the need to achieve the right trajectory of reduction in order to meet the 2050 target contained in the Energy White Paper[9].

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. The UK Government guidance explicitly identifies the Kyoto Protocol as of key importance to the SEA process[10]. The SEA should therefore explicitly identify climate change as the single most important issue in the scoping process.

The LDP Annual Monitoring Report should make clear what progress there has been on climate change reduction and recommend policy where necessary.

3. Promoting low and zero carbon development principles

3.1 In order to assist in the achievement of carbon reduction targets the LDP 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 LDPs 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 UK Government is committed to implement this Directive by 2006[11]. While aspects of this agenda are dealt with under Part L of the new Building Regulations, the LDP 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 in England is currently one of the leading local

[9] UK Government's Energy White Paper http://www.dti.gov.uk/energy/whitepaper/index.shtml

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

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

authorities on tackling climate change using the Local Development Framework (equivalent to LDP in Wales). 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 m^2, or one or more residential unit, to incorporate on-site renewable energy equipment to reduce predicted CO_2 emissions by at least 10%."

3.4 The current 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 LDPs.

3.5 However, a recent survey by Friends of the Earth of local authorities showed that only a small minority (11 out of 65 LPAs surveyed in England, none of the 22 unitary authorities surveyed in Wales[12]) were intending to include a Merton style target, although several are already doing work on setting BREEAM and EcoHomes standards in public buildings (including schools)[13] and for new developments, and in setting targets for renewable energy and energy efficiency.

It is clearly disappointing that more however is not being done.

3.6 Local authorities in Wales are required by PPW 2002 and TAN 8 to '*contribute to climate protection by encouraging land uses that result in reduced emissions of greenhouse gases'*. If land uses are to reduce the emissions of greenhouse gases, then it follows logically that new developments should not be adding to the overall burden of emissions. Even progressive policies, such as the Merton policy outlined above, do not yet achieve this aim, because they only helps to **slow** the growth of emissions, rather than **reducing** the overall emissions. Local Authorities therefore need to adopt policies that implement low carbon standards and ultimately zero net carbon standards (see box 1).

3.7 Low carbon development can be achieved using a range of existing, well-recognised approaches, which provide developers with a kind of 'toolkit' of options, from which they can select the most relevant, depending on the development project.

3.8 We suggest that LDPs should contain a policy, similar to the one shown overleaf in Box 1. A brief explanation of two of the standards mentioned in the policy are shown

[12] Telephone survey of LPAs conducted in October & November 2005.
[13] Caerphilly, for example, includes some of these initiatives in their corporate energy policy.

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 UK and Welsh Assembly Governments' national policy and international obligations on climate change.

Box 1 – Zero net carbon standards

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.

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'*[14], 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

[14] 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

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…'

The Welsh Assembly Government itself is committed to the BREEAM[15] standard in specific contracts:

'…specify in all contracts for new or refurbished public buildings procured by or for the Welsh Assembly Government, that the design achieves as a minimum, the BREEAM 'very good' standard, or equivalent and the BREEAM 'excellent' standard wherever possible. We will work with Local Authorities to help them achieve similar standards for new and refurbished public buildings for which they are responsible.' (Sustainable Development Action Plan 2004-2007).

TAN 8 also specifically promotes the use of EcoHomes and BREEAM standards (section 4.4), referencing the work by WWF and CRiBE (Cardiff University) on 'Building a Future for Wales: A Strategy for Sustainable Housing'.

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

The EcoHomes standard and Z-squared approach has 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?"***

The UK Government has proposed changes to Part L of the building regulations (which apply to England and Wales) for both new build and conversion of buildings. These rules will come into force in April 2006 and the UK Government has claimed

[15] BREEAM – the BRE Environmental Assessment Method www.bre.co.uk, EcoHomes – The Environmental Rating for Homes – www.bre.co.uk

they will produce some 40 per cent CO_2 savings.

It is important to note that the proposals in this briefing paper do not seek to replicate the building regulations, but instead to implement the guidance set out in PPW 2002, TAN 8 and the MIPPS on Renewable Energy.

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 that relates to the use and development of land.

In fact, the UK Government and Welsh Assembly Government now require 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 LDP, 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 Excellent[16].

Centre for Alternative Technology, Machynlleth
The Centre for Alternative Technology (CAT) in Wales has been a leader for many years on developing green building and homes. It has some of the world's most energy efficient and water-efficient buildings, including its new £600,000 environmental information centre, which produces more energy than it consumes and achieves energy standards 20 times better than official definitions of best practice. CAT has championed ultra-low energy construction and super-insulation. Its 20-year old Wates building is still the best insulated building in the country.[17]

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

Not so. Design guidance in TAN 8 specifically states that:

'Development briefs for major development should also incorporate requirements regarding renewable energy, energy efficiency and conservation.' (Section 5.7)

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

[17] CAT – Centre for Alternative Technology www.cat.org.uk

Ministerial Interim Planning Policy Statement 01/2005 – Planning for Renewable Energy states further that:

'In determining applications for any form of development local planning authorities should encourage developers to integrate energy efficiency and conservation measures as part of the design of new development' (Reference Technical Advice Note 12 – Design 2002)

4.5 ***"It is not possible for our Council to undertake this, as we don't have the relevant 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.

5. Conclusion

Local authorities have an opportunity in the preparation of the first LDPs to address the challenge of climate change. This briefing paper presents one of the ways in which to reduce climate change emissions which is effective and supported by existing guidance in Wales, and will help to achieve UK targets.

Local development plans have a very important part to play in the reductions of climate change emissions in Wales.

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'[18].

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 that[19]: "*EcoHomes 'Very Good' standard produced a 32 per cent reduction in CO_2 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 CO_2, 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."

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

[19] One Million Sustainable Homes Brief (WWF, 2004). http://www.wwf.org.uk/filelibrary/pdf/OMSHbrief.pdf

Further Reading

Planning Policy Wales
Welsh Assembly Government, 2002
http://www.wales.gov.uk/subiplanning/content/planningpolicy/final/contents-e.htm

Ministerial Interim Planning Policy Statement 01/2005: Planning for Renewable Energy
Welsh Assembly Government, 2005. Replaces section 12.8 – 12.10 of PPW 2002
http://www.wales.gov.uk/subiplanning/content/tans/tan08/newtan8/mipps-e.pdf

Planning Policy Statement 1: Delivering Sustainable Development
Office of the Deputy Prime Minister, 2005
http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_035506.hcsp

Technical Advice Note 8: Renewable Energy
Welsh Assembly Government, 2005
http://www.wales.gov.uk/subiplanning/content/tans/tan08/newtan8/tan8-e.htm

Planning Policy Statement 22: Renewable Energy
Office of the Deputy Prime Minister, August 2004
http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_030334.hcsp

The Planning Response to Climate Change. Advice on Better Practice
CAG Consultants, on behalf of the Office of the Deputy Prime Minister, Sept 2004
http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_032088.pdf

Starting to Live Differently – The Sustainable Development Scheme of the National Assembly for Wales
The overarching strategic framework on sustainable development.
http://www.wales.gov.uk/themessustainabledev/content/review/action-plan-final-e.htm

Securing the Future – delivering the UK's sustainable development strategy
HM Government, March 2005
http://www.sustainable-development.gov.uk/publications/uk-strategy/uk-strategy-2005.htm

The Wales Spatial Plan
Welsh Assembly Government, 2004
http://www.wales.gov.uk/themesspatialplan/content/spatial-plan-e.htm

Building a Future for Wales: A Strategy for Sustainable Housing'
WWF and CRiBE (Cardiff University), 2005
http://www.wwf.org.uk/filelibrary/pdf/building_future_0205.pdf

WWF
One Million Sustainable Homes reports
http://www.wwf.org.uk/sustainablehomes/reports.asp

Bioregional
This site gives more information on Bioregional's Z-squared initiative
http://www.bioregional.com/programme_projects/opl_prog/zsquared/bz_zsquared.htm

Climate Change Strategy
Woking Borough Council, March 2003
http://www.woking.gov.uk/environment/climatechangestrategy/climatechange.pdf

BREEAM
Overview webpage
http://www.breeam.org/

Local Government Authority, Energy Savings Trust and the **Energy Efficiency Partnership for Homes**
Leading the way: how local authorities can meet the challenge of climate change
http://www.lga.gov.uk/Documents/Publication/leadingtheway.pdf
Climate Change Research

Intergovernmental Panel on Climate Change
The international body of scientists responsible for summarising research into climate change and reporting to the UN Framework Convention on Climate Change. The 2001 summary for policy makers can be found here:
http://www.ipcc.ch/pub/spm22-01.pdf

UK Climate Impacts Programme
The UK Climate Impacts programme has many publications, including a breakdown of how climate change will impact on each region. The website is a bit unwieldy, as you have to give your details and then log in, but once that is done, you can search their publications database and download all their reports.
http://www.ukcip.org.uk

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

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